

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION

The Development and Use of Manpower

**PROCEEDINGS OF THE TWENTIETH
ANNUAL WINTER MEETING
Washington, D.C.
December 28-29, 1967**

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Proceedings of the Twentieth Annual Winter Meeting

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EDITED BY GERALD G. SOMERS

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PREFACE

The Association's Twentieth Annual Winter Meeting, devoted to papers and discussions on "The Development and Use of Manpower," came at an especially propitious time, just prior to President Johnson's proposal that there be a 25 per cent increase in appropriations for federal manpower programs.

The sessions included reports on "basic" research in the labor market field (inter-plant and intra-plant mobility, the peripheral labor force, problems of statistical measurement); the motivation of manpower; federal manpower policies, their evaluation and their relationship to private programs; racial discrimination in employment; and lessons from abroad.

The Presidential Address by Professor Neil Chamberlain related the basic subject-matter of the meetings to the concept of human capital, providing a critique of this concept as an evaluative measure of manpower development programs.

A session on invited papers offered an opportunity for younger members of the profession to report on their research. In keeping with the overall theme, the papers dealt with labor supply, unemployment, Negro employment and technological change.

As in previous years, one of the sessions was held jointly with the American Economic Association, and this year, joint sessions were also held with the American Statistical Association and the Association for Comparative Economics. All of the papers are included in this volume.

The IRRA is grateful to President Chamberlain, the session chairmen and the Washington local committee for their arrangement of this fruitful meeting; and to those presenting papers and discussions, for their able participation and prompt submission of manuscripts for these Proceedings.

GERALD G. SOMERS, *Editor*

Madison, Wisconsin

February, 1968

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PRESIDENTIAL ADDRESS

SOME SECOND THOUGHTS ON THE CONCEPT OF HUMAN CAPITAL

NEIL W. CHAMBERLAIN
Columbia University

The subject of manpower, with which our meetings deal this year, has followed a shifting and sometimes shifty path. Without trying to chart its twistings, turnings, and switchbacks, I shall confine my remarks to one aspect which is freighted with considerable consequence. If, considering the range of disciplines and interests represented in our Association, I speak too much like an economist, I hope you will forgive me for pursuing the specialization I know best. In any event, the aspect I propose to deal with has implications broader than are encompassed by one profession.

I am concerned with the effects of trying to make "scientific" (by which so many today seem merely to mean quantitative) the search for understanding of social problems, including manpower problems, with an accompanying disposition to disdain forms of analysis which do not precipitate numbers and even to disregard problems which do not lend themselves readily to some system of accounts. The result has been to move the field of economics along lines that reflect a preoccupation with measurement and to deflect it from the more fundamental, often elusive, and always difficult conceptual problems with which the field tried to come to grips, however sloppily, in the past. No greater opprobrium can be cast on an economist today than to label him philosophical and speculative, as though the problems with which economists wrestle can be adequately dealt with on a nonphilosophic and nonspeculative basis.

But I am getting ahead of myself and anticipating my closing remarks. Let me back up a bit to take a quick and admittedly superficial look at some of the developments in the manpower field which

are related to my theme. I shall go back no farther than fifty years or so, to remind you first of the fight by the American Federation of Labor to have incorporated in the Clayton Act of 1914 a declaration by the United States Congress that the labor of a human being is not a commodity or an article of commerce.

Economists have been inclined to snigger over that episode as one betraying the naivete of a paranoid labor movement. No one ever suggested, they commented then and have commented since, that workers were a commodity. But the labor services which they offer are a factor in the production process, like capital, and there is a market for such services, out of which arises a price or set of prices attaching to them. The worker sells his services without selling himself, and no political body can by fiat alter the commodity-like nature of that transaction. If economists speak, abstractly, of labor as a factor of production, and of markets for labor, they do not equate the disembodied labor with very much embodied workers. Their theoretical analysis is not intended as a doctrine supporting what has sometimes been referred to by unionists as "wage slavery."

Behind the misunderstanding that persisted as professional economists and professional unionists spoke past each other (no one could accuse them of engaging in a dialogue!) was a genuine issue which has never been wholly resolved. Granting that the economist's abstract formulation was not intended to *describe* a state of affairs (for one thing, that would have reduced them to being institutionalists, which to the representative economist meant something on a par with a poor sociologist), its effect *was* to render familiar, and ultimately acceptable by familiarity, the very thing that workers protested—that the sale of services to an employer involved in some unmeasurable degree the sale of the worker himself. How can labor services be disembodied from the person supplying them except by a construct of the imagination? The conception of labor as a factor of production did carry with it all the connotations and consequences of an impersonal market for people that Karl Polanyi portrayed so vividly in *The Great Transformation*. The unionist's view of the process that turned him from a craftsman producing a whole product which he sold for a price—not his time, but his product—as a form of wage slavery becomes more understandable despite the hyperbole of the phrase.

Actually, it was specialization of labor carried to the point of

fragmenting the craftsman's art which was responsible—a technological matter. When a worker performed only a piece of a job he no longer had a product to sell, but only his time, spent in ways which someone else determined for him.

But all this is familiar territory, and there is no point in dwelling on it further. Suffice it to add that the Clayton Act declaration came towards the close of this conversion of labor into a "commodity" for sale, when its words could serve only as an epitaph for a lost cause. We are all wage workers now, or most of us, anyway, managers and professionals as well as production and clerical employees, selling ourselves with our services. In this respect we do not differ at all from the Communist countries which weep copious ideological tears over our condition.

With a leap of the mind—a species of acrobatics at which we have all become adept—let us now skip over three decades or so and place ourselves in the midst of World War II. The armed forces have drained off ten million persons at the same time that the economy is operating under a forced draft such as it had never previously experienced. A new sense of the importance of manpower potential and of manpower development follows naturally. People can be trained to do work which they—and others—would never have believed themselves capable of. Rosie the Riveter becomes a national figure, both actually and symbolically.

Partly as a consequence of this experience, and even more as a reflection of the increased postwar interest of economists in the processes of economic growth, a new concept began to make its way into the professional parlance—education as an investment in human resources. Whether the concern is over the means by which a backward economy can achieve and accelerate a forward movement, or over the requirements if an already advanced economy is to retain its vigor rather than stagnate, the quality of the contribution of its people is a—indeed, *the*—critical factor, and one which need not be taken as given. If, to be fair to the past, the idea was not spanking new, it nevertheless came with a fresh impact that made it novel and intriguing to the present generation of economists. I suppose that Professor Theodore Schultz of the University of Chicago, as much as any one person, can be credited with sparking this conception through his presidential address at the American Economic Association meetings in 1960.

The truth that expenditures on human beings are productive of something more than personal satisfaction or a sense of personal completeness is an important one. An outlay on education can also increase the economic productivity of those instructed, giving rise to a stream of returns higher than what they would otherwise have been. Who would dispute what everyone now accepts as self-evident? Education is thus a form of investment, just like an investment in improved capital equipment. In fact, human beings represent a species of physical capital, just like the machines with which they collaborate. Each gives rise to an ongoing stream of productive services. The value of that stream can be modified by improving the quality of both. In the case of human capital—manpower—such improvement need not be restricted to education: health and environmental conditioning for example are also likely to play their part.

The basic insight of this approach, as long as it is confined to picturesque analogy, recommends it to anyone concerned with the very important problems of helping individuals to improve their material productivity and societies to expand their GNP. These are worthy aims which require no subtle justification. Material wealth can be instrumental and is often essential in achieving a satisfying life, the “good” life. On the whole, people and societies of affluence are more likely to be liberated in spirit than people and societies frustrated with poverty.

But when the analogy of human capital to other forms of capital is pressed too far, not only does it break down on purely logical grounds but it invites conclusions which are both dangerous to social welfare and demeaning to the economics profession. It carries the abstract conception of the disembodiment of labor one stage further than where the Clayton Act controversy left it. If workers are not only suppliers of current services but also capital equipment from whom issue a stream of services whose value depends in part on how they are “tooled up” (educated), then the value of such an investment can be compared directly with the value of other investments. Appropriate—that is, economic—choices can be made depending on relative rates of return on competing investments. Expenditures on education can be laid alongside expenditures on road systems, irrigation projects, public housing or baseball stadia to determine which provides the higher payoff. Social choice can then be governed by the

maximizing principle in its simplest form, that more is to be preferred to less.

Some advocates of the investment-in-human-capital approach consider this comparability a victory on the side of human welfare conceived in its broadest, not only material, terms. Aha, they say, if we can induce legislators and city councilmen, and businessmen and other taxpayers, to recognize that education can pay dividends no less than a postal system or power project, or for that matter than a factory or farm, the chances are improved for getting appropriations for schools. Education becomes not only a matter of social welfare but a business proposition.

This use of the analogy as a kind of legislative ploy has a certain appeal because of the undeniable core of truth which the analogy reveals. But there is another side of the matter which is a darker side. As soon as one talks about investments, he invites a consideration of any one investment with the alternative possibilities. And as soon as he speaks of returns on investment the comparison among these runs in terms of relative rates. It is difficult to get away from the accountants' logic. Even Professor Schultz, who in addition to being the pioneer is one of the most sophisticated in this field, has lent his support to this next step. Although he expresses some reservations because not all of the more important forms of capital have been identified, he nevertheless believes that "thinking in terms of the rate of return is fundamental."¹

Understandably, then, within the last few years there has emerged a series of research studies attempting to measure the rate of return on investment in education, both from the standpoint of an individual making such an investment and from that of a society. In doctoral dissertations the subject has steadily moved up the popularity ladder. There has been able exposition of some of the difficulties encountered in making such estimates, just as the accounting literature over the years has offered excellent analyses of some of the subtleties involved in calculating the actual or expected returns on more traditional forms of business investment. In both cases the user of the resulting measures is put on notice as to their deficiencies, but there is no suggestion that there is anything wrong with the concept itself. If investment occurs, it obviously has, or is intended to have, some return. The

¹ T. W. Schultz, "The Rate of Return in Allocating Investment Resources to Education." *Journal of Human Resources*, Summer 1967, p. 295.

return is the measure of its value. In weighing competing investments, one can only weigh competing returns, calculated as rates. How else?

And so, in adopting as we have the conception of human capital, and education as investment in human capital, not as analogy but as categorical identity, we put education in the position of having to *defend* its value in the form of a rate of pecuniary return. We may recognize and allude to certain incommensurable values which it also has, but if it *is* investment in capital we cannot evade the accountants' justifiable insistence that while the incommensurables may be held in mind and may even be allowed to tip the scales, they come on top of the rate of return, which is the fundamental base and basis for decision. Economists have responded to the challenge by turning accountants, and have produced the desired measures—admittedly crude at this stage but hopefully to be refined later. In a way that the calculation of rates of return on business and industrial capital never managed to do, the measurement and refinement of rates of return on human capital have aroused the ardor and zeal of numerous members of the economics profession.

In part, I suspect, the phenomenon is traceable to the fact that the concept of human capital has come into vogue at precisely the period when the profession at large had been swept into a strong current of quantification. Here was something to be measured, a rate to be calculated, and moreover the subject was one to which social welfare overtones attached. The conjuncture was fortuitously perfect.

It is against this contemporary trend that I would like to raise two objections, one based on an old-fashioned—or may I say time-honored?—philosophical conviction, the other on purely logical grounds. They are more closely related than they may at first appear. Let me take the philosophical issue first, though I will be returning to it later.

The fact that economic resources must of necessity be allocated to a variety of purposes if they are to be achieved does not automatically invoke an economic calculus, PPBS to the contrary notwithstanding. There are some allocations we make on faith rather than by rational calculation. To weigh on a pecuniary scale whether the benefits are equal to the costs, or to calculate what constitutes the rate of return, of an investment in democratic government, racial non-discrimination, a healthy human environment, and let me include education as well, is to look at all values through money-colored

glasses. It is no justification to say that these become economic matters because we could conceivably put all our resources into any one of these ends, and therefore we must make decisions of degree—an allocation problem. The use of scarce resources carries with it no license for the economist to reshape articles of faith into rationalist maximizing decisions.

Admittedly the line is not clear that divides objectives which we might call ends from those we refer to as means. The inextricability of ends and means poses a philosophical question as old as the Garden of Eden. But to resolve that question by treating all choices as means, convertible on measurable terms, is to make a mockery of the human story. I can more readily accept a social accountant's effort to value secretarial schooling than I can his attempt to estimate the worth of education generally. Some values come with a moral content that preclude—or should preclude—our putting them on the same scale with groceries, to see where the marginal trade-off lies, or to measure the value of one in terms of the other. By the *indiscriminate* application of his pecuniary measuring rod the economist can belittle both himself and his profession. To reduce human beings, whose good is the ultimate end of all society if there is any ultimate end, to forms of capital earning returns is indiscrimination rampant.

But to calculate a rate of return, it is said, is not the same thing as to make a choice on the basis of comparative rates. It simply provides additional and pertinent information. If it is found that graduate education, for example, gives a comparatively low yield, this does not mean that society cannot invoke any other values it wishes and still invest in graduate education. On the other hand, if it is found that graduate education has a high rate of return, this is either economic reinforcement for a decision which still might have been made on other grounds or possibly persuasive of an investment which might otherwise not have been made.

The logic is a little loose. If the calculated rate has some persuasive effect when it is high, it can equally have a persuasive effect when the yield is "demonstrated" to be low. Why else are rates of return computed? Is investment in human resources the same as investment in inanimate plant and equipment, or is it not? If it is (which seems to be the direction of current thinking, seeking to establish a generic concept which will embrace all forms), then the economic calculus should be expected to have its influence, and

the fears I express are justified. If it is not the same thing, then it stands revealed as analogy rather than identity, with all the dangers of analogical reasoning, including those I have suggested.

But let me pass, for the moment, from this point, which might leave us unprofitably arguing the extent to which values are economic or noneconomic, to one which seems to involve no such classificatory problem. Assuming for the moment that expenditures on education *can* be regarded as an investment, I am concerned with the now widespread notion that a rate of return can then be calculated. Here we are dealing with a matter that can be appraised on purely logical grounds or analytical feasibility.

As I have already noted, perhaps the most frequently cited reason for estimates of rates of return, as for cost-benefit analysis quite generally, is that it contributes to an efficient allocation of resources. The sums which are spent on education are already so great that we should know what we are getting for our money, it is said, or on the other hand it is sometimes held that we might well be investing more in education or at least certain forms of education if we were aware of the high returns deriving from such expenditures. The weighing of one outlay against competing outlays involves a judgment in efficiency of resource use which has been the economist's stock in trade for many generations.

But that preoccupation has always been premised on a stability of tastes and resources and an exclusion of exogenous forces, which is to say, change-creating forces. When one deals with social investments which not only are made under conditions of uncertainty but which are themselves intended to be change-creating, there is no firm basis for calculating their payoff. In the face of futurity and purposiveness (to use two favorite terms of one of our intellectual forebears, John R. Commons) calculations which are geared to the past, however refined analytically, make little sense.

There are two elements here which are distinguishable. Let me first consider the uncertainty elements, based on the inscrutability of the future. Since none of us is gifted with prophetic vision, we cannot foretell whether the future will prove economically wise the decisions we made today. We can only look to the future, keeping the past in mind, and conjecture as to the spectrum of likely effects which may issue from present actions. If judgments of this sort involve efficiency, it is in a very special and peculiar sense, certainly not the traditional

marginalist meaning. Any implication that such an exercise leads to efficiency in resource allocation is crudely misleading.

The future value of investment in educated citizenry, whether one is speaking in terms of marginal or total expenditures, will depend, among other things, on the kind of a world in which such educated individuals will live—a world which will be partially, though not wholly, of their own making but the outlines of which are at best conjectural and speculative. The future values to which these pieces of human capital will give rise individually and collectively cannot in fact be known at the time of the investment in their education.

If the uncertain future of a society turns out to be composed largely of making or resisting war, the future value of a present educational system which stresses extended work in the arts will be quite different—and perhaps significantly less—than the future of a type of education emphasizing discipline and physical culture, chauvinistic ideology, and applied science and technology. If a society invests in the education of an elite leadership, the future value of that education will depend, among other things, on whether the future society will accept that leadership, or, as in the case of the Belgian Congo a few years back, exterminate it.

These are matters which are not now predictable, in any scientific sense, and they cannot be made predictable by the expedient of adopting a “most likely” set of assumptions. For one thing, there seldom exists any agreement even among the experts as to the appropriate assumptions concerning the future, and there is certainly no objective basis for isolating such assumptions. The uncertainty element is inherent in futurity insofar as it relates to human affairs.

In this respect, investment in education is of course subject to the same limitations as other forms of investment. All are subject to the uncertain impact of a changing environment, ruling out the measurability of their returns, in any meaningful sense of that term, and leaving them conjectural no matter how refined the effort at quantification.

But there is a second respect—the element of purposiveness—which afflicts investment in education (and certain other types of public investment, as well) more severely than it does traditional investments in producer goods.

This element of purposiveness may take the form of a conscious effort by those responsible for the investment to change the social

environment in which the investment comes to fruition, in ways which are designed to augment the value of the stream of services issuing from it. The public and its political representatives may have a vision of a future which differs from the present, and which the social investment in question is in part intended to help realize, thus itself creating the context which is controlling of its value.

To take a specific example, educational patterns which are aimed at achieving less invidious discrimination among races will add to the stream of values flowing from a better educated Negro population. In the absence of such an influence (whether from education or some other source), the same investment in improved education for Negroes is almost certain to have a lower value, though how much lower is a matter of conjecture which is not rendered any more certain by quantification.

Here we are dealing with a future whose speculative characteristics are due not only to unpredictable exogenous events but also to the unpredictable effects of change-inducing actions by the resource-users themselves, those who are endogenous to the system. Indeterminacy is not only environmental to the decision-makers but embedded in their decisions. The very investment decisions which are made, or related decisions, may modify—perhaps unconsciously but often purposively, and sometimes at cross-purposes—the environment in which those investments come to fruition and which will be partially determinative of their value.

But the purposive element of social investment has an even deeper significance. It may involve not simply an effort to change the environment in ways which uncertainly affect the value of the stream of services to which the investment gives rise. Purposiveness may render literally unmeasurable the values from an investment in a way which has nothing to do with uncertainty, and in this respect the very concept of investment in human capital is especially vulnerable.

A society, or some sector of a society, through its agents, may will to change its characteristics not because this is expected to increase the return from its investment but because a change is wanted for its own sake. Educational expenditures aimed at eradicating invidious inter-racial discrimination may be made not because this is expected to improve the returns on educational investment in minority groups but because the public has come, for other reasons, to want that kind of a society. And how does one measure the rate of return on that kind

of investment in education? How does one measure the satisfactions or utilities people derive from one social environment in contrast to another?

The value of an educated citizenry—national income accounting notwithstanding—is not given solely by the bricks and mortar which a society produces but by the institutions which it creates with the bricks and mortar. If the education provided by a people leads to a more productive economic machine but it comes to fruition in a hierarchic, technocratic, militaristic society, to which it has in some indeterminable but realistic sense contributed, the value of the education must be calculated differently than if the end product is equally productive but along lines which are humanistic and permissive. One does not have to make value judgments to call attention to the existence of such differential values, but he does have to make value judgments if he wishes to “measure” them.

I hope that no one misconstrues that what I am saying is that economists *should* make estimates of the pecuniary value of future states of society which education contributes to making. I hope equally that no one construes that I am suggesting that economists should sell short their major accomplishments in the field of public economic policy by substituting murky philosophizing and shallow sociology for “rigorous” analysis. My concern is rather that the admitted successes which economics has enjoyed may illadvisedly encourage more ambitious adventures which purport to be “hard,” realistic, and rigorous but which in fact incorporate implicit, murky, and shallow assumptions as to social values without an appreciation of that fact.

If economists want to be “scientific” and therefore quantitative, they are obliged to stick to a short enough run for the phenomena with which they work to stay relatively fixed—where changes are so moderate or incremental as not to invalidate logic based on a continuity of circumstance. If economists want to deal with a farther future, which increasingly involves not only change but change which is planned for, they are obliged to work with other standards than efficiency and with methods that are judgmental and strategy oriented rather than scientific.

In my own judgment, both approaches are desirable. We need efficiency-based decisions to help us achieve as much value as we can from a present which we can reasonably regard as having a steady

state, and for such decisions quantitative analysis growing out of the recent past acts as a more reliable guide than guesswork. But we also need strategic decisions anchored in a future which is planned to be different from the present, towards which we draw ourselves by purposeful action. For this latter category of decisions, including many investment decisions, no amount of quantitative analysis will ever suffice, and guesses—if by that we mean informed judgment—are a better guide than econometrics.

I hope that you will grant me that this is not an anti-intellectual or obscurantist point of view. It is simply a recognition that everything does *not* have its calculable price or value, in any accounting sense, and that choice problems must proceed in the face of that difficulty. Preoccupation with accounting calculations of a discounted stream of future values as a basis for deciding whether or not educational investment or expenditures on manpower should be made, or in what form, is simply misguided. We must always, of course, question the value of specific programs and estimate their likely results, but we need the courage and intellectual honesty to make such assessments rest, in the final analysis, on our own best judgments. We cannot escape that uncomfortable necessity by taking refuge in numbers which—whatever the relevance of their underlying logic to the past—are uncertainly relevant to the future but are nevertheless supposed, somehow, to be influential over society's allocative choices.

This is perhaps doubly so in the case of education, which, like health, is a consumer as well as a producer goods. In private conversation and correspondence Professor Carl Stevens has repeatedly called my attention to the fact that education is a peculiarly important kind of consumer good, again like health, in that in addition to being appreciated in its own right it has the synergistic effect of influencing the utility to be had from many other consumer goods. Moreover, in the case of education, once again like health, the categories of consumer and producer utilities are not necessarily competitive, so that more utility on one account does not necessarily mean less on the other. Consumer satisfaction may go hand in hand with producer gain. Both these characteristics contribute to the problem of attaching meaningful values to the end product of the investment, and both these characteristics are responsive to the unceasing flow of cultural and technological change.

I come back to the intuitive wisdom that the naive labor leaders

fought to incorporate in the Clayton Act. If labor is not a commodity because it cannot be separated from the human being who markets it, or, more precisely, if it is not *only* a commodity, neither is it an investment good, for the same reason. It is the tastes—the vision—of the “human capital” itself which guides the investment in itself. Economists, as well as others, can assist the human capital to see its own potentials, singly and collectively, and to make choices, within the framework of basic social values, which are rooted in an uncertain but hopeful future rather than constrained by some past performance. That future, because it is uncertain, is not to be determined by how some factitious rate of return on some marginal social investment compares with the rate derivable from competing public works projects.

And so, on this second ground, as well as on the first, I would like to register one protest against the implicit but prevalent view that the ultimate in economics is to put a number on everything, to derive equations which will yield determinate solutions. There is a place, and an important place, for such an approach, but it is not coextensive with the field. There is also a fascination in working with problems which are no less real because indeterminate, and no less demanding of choice because there is no efficient solution.

NEIL W. CHAMBERLAIN

MANPOWER AND ITS EDUCATION AND TRAINING

THE TRAINING AND EDUCATION OF TOOL AND DIE MAKERS

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OBJECTIVES ON METHODOLOGY

Workers in any single occupation seem to acquire their skills in a variety of ways, and our society has produced a wide range of education and training programs to meet the demands of industry.¹ Nevertheless, we have little information about how workers in specific skilled occupations acquire sufficient know-how to perform the required work satisfactorily. And even when such information is available, we have no basis for evaluating the effectiveness of the various alternative paths of skill acquisition.

Under contract with the Manpower Administration, U.S. Department of Labor, we are engaged in a pilot study that is seeking to answer these questions for a single occupation, that of the tool and die maker, in just one area, Metropolitan Boston.

The objective of the first phase of our study was to develop and test a methodology which would help determine the combination or combinations of education, training and experience which were most

* This paper is based upon the tentative findings of research sponsored by the Manpower Administration of the U.S. Department of Labor. Points of view or opinions stated in this paper do not necessarily represent the official position or policy of the U.S. Department of Labor.

¹ See, for example, U.S. Department of Labor, Manpower Administration, *Formal Occupational Training of Adult Workers: Its Extent, Nature and Use*, Manpower/Automation Research Monograph No. 2, December 1964.

likely to produce highly qualified workers. We were also interested in determining the time requirements of the various combinations.

Our methodology consisted of three parts. The first was to collect information on the actual paths of skill acquisition used by current tool and die makers. This was done by interviewing in 1966, 400 tool and die workers employed in randomly selected tool and die units in the Boston Standard Metropolitan Statistical Area. Our interviewers gathered from each worker details on his education and training, his work history, as well as pertinent demographic information.

The second part of our methodology involved interviews with the foremen of each of the units sampled. From a standardized list of criteria submitted to him by the researchers, each foreman first had to choose those he considered most important for effective work performance as a tool and die maker. Using these criteria,² he then assigned an overall ability rating to each of his tool and die makers, on a five-point scale ranging from "well below" to "well above average."³

The last part of the methodology consisted of comparing the foremen's evaluations of their men with the combinations of education, training and work experience they had reported. We also tested for relationships between the foremen's ratings and various other variables that we considered relevant.⁴ Our approach, in summary, was first to learn how the men had been trained; then to learn how well they performed on the job; and finally to examine the relationship between training and performance.

Various criteria can be used to evaluate the different training paths by which a worker learns his craft. We limited ourselves in this phase of our study to two criteria: (1) the ability (i.e. work performance) of the workers who had had different training paths, and (2) the duration of each training path. Other, perhaps equally important, criteria also could have been used. These are the costs of

² The criteria included such factors as ability to meet close tolerances, breadth of work performed, time needed to complete assignments, and ingenuity.

³ We also had the men choose the top two tool and die makers in their unit. These choices tended to confirm the foremen's ratings.

⁴ We sought to relate workers' ability to age, educational attainment, length of training, amount of job shop experience, and years in the trade. All may be important but we have not completed the statistical analysis to test our initial impressions.

training, the breadth of the training, and the occupational mobility of workers with different training backgrounds.

FINDINGS

This section gives some of the pertinent personal characteristics of the men interviewed, and summarizes our tentative findings about their training and its effectiveness.

Characteristics of tool and die makers in the sample

A majority of the sample were mature workers who had begun their training before the 1950's and who had been practicing the trade for a decade or more. The median age was 45.6 years. The average sample member had worked at the trade for about 14 years, excluding training time, and was generally well educated. Almost 75 percent had at least 12 years of schooling.

Most of the men were native-born New Englanders. A majority were long-service employees, and most of their jobs had been in Massachusetts. A relatively large number of their fathers had been skilled workers, many of them tool and die makers, and machinists.

Definition of Training Paths

We were able to identify six mutually exclusive training paths. These were: apprenticeship (Apprentice), vocational high school followed by apprenticeship (VHS + Appr), on-the-job training (OJT), vocational high school (VHS), vocational high school followed by on-the-job training (VHS + OJT), and "picking up the trade" (Picked Up). The abbreviations are used to designate those *paths* in the tables in this paper. Seventeen workers in the sample acquired their training in a variety of methods which would not fit any of our six training paths. These seventeen are put into a "miscellaneous" category.

We classified training as on-the-job training if it arranged for specific instruction in the shop by company personnel, even though it had no scheduled content or predetermined length. In contrast, the apprentice method followed a predetermined schedule, had a fixed duration of at least two years, and included related classroom instruction.⁵ Shorter programs were classified as on-the-job training.

⁵ Our definition differs from that used by the U.S. Bureau of Apprenticeship and Training for registered apprenticeship. We did not find it practical to ask workers the details necessary to determine if their apprenticeship met the requirements of a registered program.

“Picking up the trade” involved watching other workers and imitating them, and asking other workers or the foreman for instruction or help. Picking up the trade usually required experimentation on the job at the risk of the worker, and represented the gradual accumulation of skill by progressively moving from machine tool operator to machinist and then to tool and die worker.

In practice, all training paths incorporated large doses of “picking up the trade,” whether or not the path explicitly arranged for some kind of instruction by designated individuals. Proficiency as a machinist and as a tool and die maker usually was achieved informally on the job after formal training had been completed.

The two most common training paths were on-the-job training by itself, and vocational high school by itself, each with somewhat over a fifth of the men. The next most important paths were picking up the trade and apprenticeship. About 15 percent of the men had followed each one. (See Table 1).

TABLE 1. Percentage Distribution of Tool and Die Makers by Training Paths

Training Path	Total	
	Percent	Number
Apprentice	14.3	57
VHS + Appr	9.8	39
OJT	22.5	90
VHS	22.3	89
VHS + OJT	11.3	45
Picked Up	15.5	63
Miscellaneous	4.3	17
Total	100.0	400

The popularity of paths shifted over time, apparently responding to social and economic conditions. For men who began their training before 1930, apprenticeship and vocational high school were important paths. In the 1930's, however, use of the former declined and use of the latter grew. During World War II, on-the-job training and picking up the trade expanded in their turn, displacing the others in importance. After the war there was a partial return to prewar patterns. In general, since 1930 there has been a moderate shift to less formal paths such as on-the-job training and picking up the trade.

Three points need emphasizing. The first is the diversity of paths used, with no one or two predominating. The second is the informality of even formal methods. For example, men with formal in-plant training often spoke of the importance of work experiences during which they taught themselves or learned by discussing difficult assignments with more experienced men. Such experimentation and consultation were significant aspects of the learning process. The third point is that this trade is not acquired casually. Over 80 percent of the men had some sort of formal training, either in school or at work.

Effectiveness of Training

This section examines training paths in terms of their ability to turn out able workers, and to train workers in a short time.

Ability Ratings by Training Paths. Only 10 percent of the men were rated below or well below average. Most foremen explained that they would neither hire nor keep inferior men.⁶ As a result, most of the men in the sample fell into one of three groups: average (43.2 percent), above average (27.3 percent), and well above average (18.7 percent). Men rated below and well below average were combined as the fourth group and designated below average.

Nearly all the training paths produced substantial minorities of above and well above average workers. However, two paths had an edge over the others. These were (1) vocational high school combined with apprenticeship, and (2) vocational high school alone. Some 56.4 percent of the men in the former, and 52.3 percent in the latter were rated above or well above average. Each of the other paths had somewhat over 40 percent. (See Table 2).

Some training paths also seemed to do better than others in minimizing the number of below average workers. Here vocational high school plus apprenticeship again held the edge, with just one man rated inferior. However, vocational high school by itself did not do as well as vocational high school combined with on-the-job training or possibly as well as picked-up-the-trade.

Training Paths and Time. This section examines two measures of training time. The first is the time spent in, or duration of, the formal training program. It also includes the length of time spent picking up the trade if a man had no other training. The second measure is the time each worker estimated he needed in training and

⁶ Unfortunately there was no way of knowing how these inferior men, not employed in our sampled firms, had been "trained."

TABLE 2. Distribution of Workers by Training Paths and by Ability Ratings

Training Path	Percentage of Distribution				Total ^a	Total Workers
	Below Average	Average	Above Average	Well Above Average		
Apprentice	16.1	41.1	25.0	17.9	100.0	56 ^b
VHS + Appr	2.6	41.0	35.9	20.5	100.0	39
OJT	14.6	42.7	27.0	15.7	100.0	89 ^b
VHS	11.4	36.4	28.4	23.9	100.0	88 ^b
VHS + OJT	6.7	48.9	24.4	20.0	100.0	45
Picked Up	9.7	48.4	27.4	14.5	100.0	62 ^b
Miscellaneous	5.9	58.8	17.6	17.6	100.0	17
Total	10.9	43.2	27.3	18.7	100.0	396

^a May not total 100.0 percent because of rounding.

^b One ability rating not available.

work experience, after secondary school, to attain the level of an all-around craftsman able to do any job assigned to him.⁷

Duration of Training. The training times of paths differed, and some of the differences were substantial. The three shortest paths were vocational high school, on-the-job training, and apprenticeship, each by itself; the longest was picked-up-the trade. There was a large gap between the three shortest paths and a second group of three paths of intermediate length; and even a larger gap between this intermediate group and picked-up-the-trade. Note the following figures:

Average Number of Years in Training by Training Path

VHS	2.8
OJT	3.1
Apprentice	3.5
Miscellaneous	5.4
VHS + Appr	5.7
VHS + OJT	6.2
Picked Up	12.0

Time spent in training depended to a large extent on the number of elements in a training path. The three shortest paths were those

⁷ We also used a third measure, not reported here, namely, the length of time needed to be first classified or employed as a tool or die maker, after beginning training. This measure has one drawback. Men were classified as toolmakers or diemakers while still in training; other men did tool work or die work without being classified as tool or die makers.

with only one element such as vocational high school, or apprenticeship.

Time Needed to Become an All-around Craftsman. Regardless of the particular path or paths followed, a certain minimum number of years of work experience appeared to be necessary before a man felt he was a competent craftsman. Men rarely considered themselves all-around craftsmen immediately after they had finished a formal program.

Training paths required different amounts of time to develop someone with an all-around craftsman status, but in some cases the differences were not large. The shortest path for toolmakers averaged 3.8 years fewer than the longest; for diemakers, the difference was 3.6 years.

Average Number of Years Spent in Training and Work Experience, after Secondary School, before Individuals Considered Themselves All-around Craftsmen

Toolmakers		Diemakers	
	<i>Years</i>		<i>Years</i>
VHS + Appr	9.3	VHS + Appr	9.7
Apprentice	10.0	VHS + OJT	11.1
OJT	10.2	Apprentice	12.3
VHS + OJT	11.9	OJT	12.3
VHS	11.8	Miscellaneous	12.7
Picked Up	12.0	Picked Up	12.9
Miscellaneous	13.1	VHS	13.3

Our data reflected the fact that toolmaking normally is a prerequisite for diemaking. It took longer in all but one path to become an all-around competent diemaker than an all-around competent toolmaker.⁸ The difference was least for men who had had vocational high school in conjunction with either apprenticeship or on-the-job training and greatest for men who had only apprenticeship, on-the-job training, or vocational high school.

The shortest path for toolmakers and diemakers was vocational high school combined with apprenticeship (9.3 years and 9.7 years, respectively). Vocational high school by itself and picked-up-the-trade were relatively long paths for both toolmaking and diemaking.

⁸ These are not necessarily the same people. Some men considered themselves toolmakers only, some diemakers only, and others both.

Summary of the Effectiveness of Training. We have examined the effectiveness of each training path in three ways: (1) the ability ratings of workers who followed it, (2) the length of time spent in training and (3) the amount of time workers estimated they needed to become all-around craftsmen.

Differences in ability among paths were not large; only two paths, both including vocational high school, stood ahead of the others. Perhaps more apparent were differences with respect to the duration of training and the length of time men estimated they needed to achieve craftsmen status. Looking at four of the six paths, the longer the average training time, the shorter the average time needed to achieve craftsman status. Here, apparently, there is a trade-off between formal training and work experience.

No path was superior on all three counts. However, vocational high school by itself, and vocational high school combined with apprenticeship scored well on two counts. Both paths had high proportions of better than average men; and in addition, the former had the shortest training time and the latter the shortest time to achieve craftsman status.

One cannot conclude that additional training elements or extra time spent in training contributed to ability. One of the two paths cited in the previous paragraph had just one element and took the least time in training, while the other had two such elements and took the fifth longest time in training.

Similarly, one cannot conclude that men rated better than average needed either more or less time than others to attain craftsman status. One of the two paths with a high proportion of better-than-average men took the shortest time to reach craftsmen status, while the other path was one of the longest.

Consequently, it is hard to see a clearcut relationship between ability and training time, measured either as time in training or time to become a craftsman.

CONCLUSIONS AND IMPLICATIONS

Our conclusions deal first with our approach and secondly with our findings about tool and die makers.

Comparing workers' training with ratings of ability (or of job performance) is a useful way to help determine the effectiveness of particular types of training, provided the following problems are kept in mind:

(1) It is essential to probe the nature of a man's training. We found that men used the term "apprenticeship," for example, to cover a multitude of training programs, a number of which did not seem much different than picking up the trade or on-the-job training. Failure to obtain a detailed description of a worker's training could lead to misclassification of training methods.

(2) A sample of workers currently in an occupation automatically omits former members. These former members may or may not be workers of exceptional ability. A case can be made either way. Moreover, the distribution of former member by training path may not be the same as that of their contemporaries still in the trade. These problems could be circumvented by a longitudinal study that followed a man's work career from the day he began training.

Now for conclusions drawn from our findings, bearing in mind their provisional nature:

(1) Factors other than training probably are important determinants of ability as a tool and die maker. Two factors frequently mentioned by foremen and the men themselves were innate talent, and the amount and variety of work experiences in the trade.

(2) There are large differences in the quality or effectiveness of training bearing the same name. It is our impression that there are as many differences within training paths as among them.

Differences in quality and effectiveness may be related, for example, to the selection process, the variety of work in the shop, or the willingness of experienced men to help him. If our impressions are correct and these relationships valid, then encouragement of a particular path is not enough. Selection procedures must bar the untalented or disinterested, relationships among workers must be conducive to training, and work opportunities must exist to provide a rounded experience in the trade.

(3) A particular path may not be responsible for the ability ratings of its trainees, except insofar as it can exclude some untalented men and include talented ones. Different paths may have more effect on the speed with which men reach peak capacity than on the peak they finally reach.

(4) Support should be given paths that include vocational high school. In Massachusetts these paths were associated with a relatively large number of exceptionally able workers. If the pattern in

this state holds true elsewhere, much can be gained from expanding vocational education in secondary schools and beginning training at this level. Machine shop programs could provide early screening and counseling.

They also could shorten training by offering courses now taken after graduation as related classroom instruction, by giving students a strong background in machine shop work, and by introducing them to simple tool and die work. Since at least twelve years of school is the today's norm, time spent in vocational high school would be spent in school anyway. In Massachusetts there still are too few places in vocational high schools. The number of applicants to these schools exceeds the number of openings. The excess are shunted to general studies programs, which provide neither vocational nor college preparation.

(5) The comparatively good showing of most paths also justify support of a variety of competing methods attuned to the needs of individual workers and individual employers.

(6) The needs of individual workers argue for flexible training programs that can accommodate differences in talent and learning ability. In general, flexibility in training may save on training costs.

(7) Completing high school, particularly a vocational one, seemed an advantage. However, failure to finish high school did not automatically bar one quarter of our men from becoming successful tool and die makers. High school dropouts, if properly selected for aptitude, probably could be trained by various paths to become competent tool and die makers.

The name of the particular training method is insufficient either to endorse or condemn it. It is not a training path per se that is significant but training that incorporates the appropriate relationships between the trainee and the shop environment.

VOCATIONAL RETRAINING PROGRAMS FOR THE UNEMPLOYED

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The most recent amendments to the Social Security Act include a major program of vocational retraining for public welfare recipients. Score another legislative victory for the principle of retraining. Starting from a position near zero at the beginning of this decade, the Federal government has now called upon retraining to help solve the problems of depressed areas (A.R.A., 1961), unemployment (M.D.T.A., 1962), foreign trade expansion (1962), poverty (O.E.O., 1964), and the growing relief rolls.

At the same time, the traditional system of vocational education has come under heavy fire. A panel of consultants urged that courses be geared more realistically to the needs of the labor market and to the needs of the disadvantaged,¹ and the Vocational Education Act of 1963 incorporated their recommendations. However, there is little evidence, as yet, of a marked response to these demands on vocational education, and the traditional system is being increasingly bypassed in the newer vocational retraining programs for the disadvantaged.²

Have the retraining programs of the 1960's achieved their legislative goals? It is the purpose of this paper to review what we know and what we do not know in the evaluation of retraining for the unemployed. Although the emphasis is on our state of knowledge, our area of ignorance covers more ground.

Much has been written about the conceptual problems and the methodological requirements of evaluation research in the training field. We have contributed to that literature elsewhere³ and will not do so here. However, it is necessary to establish a few fundamental ground rules. To be accorded weight in a summary evaluation, a study need not include a full-blown cost-benefit or regression analysis. We are willing to settle for much less, but the following would appear to be a bare minimum:

- (1) The legislative goals, i.e., the hoped-for benefits, of the program must be established.
- (2) In attributing benefits to the program, the investigator should provide some evidence that these benefits would not have occurred in the absence of the program and that they would not have been achieved more efficiently in some alternative way.

Although these evaluative criteria seem to be basic, they are seldom met. The goals of the retraining programs have given rise to lengthy debate in some quarters, but here we can simply agree that the goals of the retraining programs are to obtain jobs for the unemployed, and to move them to higher levels of self-supporting income and job satisfaction. Even though the legislation is often couched in terms of increased employment and income for the economy as a whole, rather than for particular individuals, the attainment of such national benefits through retraining is difficult to establish in an analytic model and almost impossible to estimate empirically. We can only follow the lead of most of the evaluators in making the sometimes questionable assumption that improved employment, income, and satisfaction for the trainee redound to the benefit of society as a whole.

Are We Reaching the Disadvantaged Unemployed?

In spite of the provisions of the Vocational Education Act of 1963, there is little evidence that the traditional vocational education system is yet reaching many of the disadvantaged or those with serious unemployment problems. Unfortunately, no accurate measure is available. Only 59,376 (1.0% of the total enrollment) were reported as being in classes for those with "special needs" (roughly, the disadvantaged) in 1966; but the number is expected to rise to 155,000 in 1967, 375,000 in 1970 and 750,000 in 1975, at which time those in special classes will represent 5.4% of the total enrollment.⁴ Since hard-core unemployed may be enrolled in regular courses as well, data on those with "special needs" may underestimate the total enrollment of persons with serious unemployment problems.

The established system of vocational-technical education has not been called upon to train the unemployed and disadvantaged in the past, and in spite of the projections for the future, significant growth in their enrollment will require a marked reorientation in the

thinking of local school authorities, spurred by liberal increases in Federal funds earmarked for this purpose.

The MDTA has had a great impact on the vocational education system, and its courses, often held in vocational schools, remain the principle hope for retraining the unemployed. Since those in charge of selection have been accused in the past of "creaming the unemployed"—persons most likely to obtain employment without subsidized retraining—an evaluation of MDTA must include an appraisal of the changing characteristics of its enrollees.

An examination of trends in enrollment data indicates that MDTA has still a considerable distance to travel in reaching the announced goals for training the disadvantaged, especially in conjunction with expanded on-the-job training. In 1966 the Manpower Administration stated that it would be the future aim of MDTA to ensure that up to 65% of the trainees were drawn from the disadvantaged.* At the same time recognition was given to the benefits to be derived from on-the-job training, and it was announced that the little-used OJT provisions of MDTA would be expanded so that this type of training might approach 50% of the total enrollment.

Even though progress has been made in enrolling the disadvantaged in institutional MDTA programs, as late as September 1967, only 17.4% of all institutional trainees had 8 or less years of education, 11.4% were over 44 years of age, and 42.5% were nonwhite (Table 1). The combination of these factors in the same enrollee, a more accurate reflection of disadvantaged status, undoubtedly represents an even smaller percentage of the total. Although the percentage of nonwhites has grown continuously (from a low of 27% in 1963), the enrollment of older workers has shown little increase over the years (1963: 10.2%), and the percentage with only an elementary education has similarly failed to increase since 1964.

* Although this term has no fully accepted definition, it is generally associated with unemployment, low incomes, low levels of education, non-whites, older workers and other labor-market handicaps. If the definition provided by the Manpower Administration is used, the "disadvantaged" constituted approximately two-thirds of the institutional trainees and 40 percent of the OJT enrollees in the first half of fiscal 1968. The disadvantaged are defined as having any two of the following characteristics: racial minority, less than 12 years education, over 15 weeks unemployment, handicapped, under 22 or over 45, welfare recipient.

TABLE 1
Percentage Trends in MDTA Enrollee Characteristics, 1963-1967

Characteristics	1967	1966	1965	1964	1963
<i>INSTITUTIONAL</i>					
Sex:					
Male	56.6	57.8	58.7	60.2	60.3
Female	43.4	42.2	41.3	39.8	39.7
Color:					
White	57.5	60.3	64.0	69.4	72.8
Nonwhite	42.5	39.7	36.0	30.6	27.2
Age:					
Under 22	39.2	37.9	43.1	39.6	30.9
Over 44	11.4	11.1	9.8	10.5	10.2
Family Status:					
Head of Family	54.1	54.0	51.3	52.9	55.8
Education:					
8 years or less	17.4	17.0	17.1	17.2	10.6
9 to 11 years	40.0	37.1	35.5	33.1	31.3
12 years or more	42.6	45.8	47.4	49.7	58.1
<i>ON-THE-JOB</i>					
Sex:					
Male	67.8	70.4	72.5	75.3	73.5
Female	32.2	29.6	27.5	24.7	26.5
Color:					
White	73.4	76.5	81.9	78.6	85.1
Nonwhite	26.6	23.5	18.1	21.4	14.9
Age:					
Under 22	37.1	34.8	36.8	33.5	36.1
Over 44	9.8	9.5	11.5	9.6	7.0
Family Status:					
Head of Family	48.9	50.7	49.1	54.9	46.3
Education:					
8 years or less	12.7	13.5	14.2	14.4	11.5
9 to 11 years	30.1	28.6	26.6	27.1	28.9
12 years or more	57.3	57.9	59.2	58.5	59.6

NOTE: Data are for calendar years. The 1967 data are cumulative through September 1967 and are preliminary. Numbers may not add due to rounding.

SOURCE: Derived from data provided by the Manpower Administration, U.S. Department of Labor.

The enrollment in MDTA's on-the-job training programs have expanded sharply in the last two years. Although OJT enrollees still represented only 47% of all MDTA trainees as of September 1967 (Table 2), this achievement is more notable when viewed against the fact that OJT trainees represented 7% of the total in 1963, 10% in 1964 and under 30% in 1965.

The disturbing aspect of the OJT programs is not its failure to reach higher totals, but rather its failure to enroll more of the disadvantaged. Trends in the characteristics of OJT enrollees lead to the inference that the announced goals of great expansion in

TABLE 2
Trends in Institutional and On-The-Job Training under MDTA, 1963-1967

Year	Number of Enrollees					
	Total		Institutional		On-The-Job	
	No.	%	No.	%	No.	%
1963	62,000	100.00	58,400	94.19	3,600	5.80
1964	116,600	100.00	102,500	87.91	14,100	12.09
1965	173,100	100.00	140,900	81.40	32,200	18.60
1966	230,300	100.00	162,500	70.56	67,800	29.44
1967* (to 9/30)	226,000	100.00	119,000	52.65	107,000	47.35

* Data are for calendar years. The 1967 data are cumulative through September 1967 and are preliminary.

Source: Derived from data provided by the Manpower Administration, U.S. Department of Labor.

training the disadvantaged and in training on-the-job may be incompatible under current financial incentives. Although nonwhite OJT enrollees have increased steadily from 15% in 1963 to 26.6% in 1965, the latter proportion is still below the percentages of nonwhites in institutional MDTA programs in the first full year of its operation in 1963 (Table 1). The percentage of older OJT enrollees (9.8% over 44 in 1967) is below those in institutional programs and shows no increase in the past three years. The percentage of OJT trainees with only an elementary school education (12.7% in 1965) has actually declined during this period.

These percentages of the disadvantaged in MDTA programs are more illustrative when they are measured against the characteristics of the country's total long-term unemployed. In 1966, nonwhites represented 21.8% of the long-term unemployed, fewer than those enrolled in both institutional and OJT programs. This constitutes a major achievement of the training program. However, 39% of the long-term unemployed were over 44 years of age, and 37.8% had only an elementary school education. These latter proportions are considerably higher than the counterpart proportions of MDTA trainees, and they indicate the gap still to be filled in enrolling the disadvantaged. Whereas the deficiency is partially corrected by the MDTA's experimental and demonstration projects and by the Job Corps and NYC, under O.E.O., these are directed primarily to disadvantaged youth and they continue to bypass many of the long-term unemployed with age and educational disadvantages.

Are We Helping the Unemployed?

Many of the efforts to evaluate the benefits of vocational retraining are plagued by methodological deficiencies. The follow-up studies conducted by vocational educators seldom go beyond a count of the percentage employed approximately a year after graduation, and, occasionally, the percentage employed in training-related jobs.⁵ Only a few recent studies include detail on earnings, and fewer still provide costs, benefits and rates of return.⁶ The reports by Eninger and Kaufman cover extensive geographic areas but do not purport to be cost benefits analyses. The studies by Corazzini, Ihnen and Carroll and Taussig offer a more detailed comparative evaluation but are centered on single localities. Hopefully, a combination of breadth of coverage and detail of evaluation will emerge from studies of vocational education graduates now under way at Pennsylvania State University and at the University of Wisconsin.

Although these follow-up studies and evaluations of vocational education provide useful comparisons between types of vocational programs and between vocational and academic high school education, they throw little light on the principal concern of this paper—the value of vocational training for the unemployed. The respondents in these surveys have generally been high school students or those who have gone directly into post-secondary vocational and technical institutions. The relative paucity of vocational school enrollees drawn from the unemployed reduces the value of these studies for the purpose at hand. As yet there has been no evaluation of the labor-market experience of those in “special needs” courses.

The most useful evaluations of training programs for the unemployed have stemmed from institutional MDTA programs and similar programs established earlier by state governments and by the Federal government under the ARA. Evaluations based on operating data of the MDTA fall short of the methodological ideal, but they far surpass the data made available by the vocational education institutions or most O.E.O. programs. A wealth of data on MDTA training has recently appeared in a report issued by Senator Clark's Subcommittee on Employment, Manpower and Poverty.⁷ Included are follow-up data on employment status three-months after training and income data for brief periods before and after training. These benefits are cross-classified by the trainees' demographic characteristics and previous employment experience.

The data present the benefits in a favorable light. In 1964 and 1965 the trainees had a post-training employment rate of 75% and 62.5% were in training-related jobs. OJT trainees had an employment rate of over 90%. The median earnings were 21% higher after training than before, and through January 30, 1967, the median post-training earnings were \$1.74; these results were cross-classified by trainee characteristics, and it was found that the level of post-training economic status of the disadvantaged was below average, but the improvement over their pretraining status was greater.

Although these "benefits" of retraining may be questioned because of the absence of a comparable control group (other than national changes in general employment and income), they are supported by a Labor Department Study of the post-training experience of 784 trainees and a comparable control group of 825, with significant similarities in pretraining employment. Those who completed training had significantly better employment rates, stability of employment and improvement in income as compared with the control group.

Although these officially-sponsored evaluations are somewhat rough and ready, confidence in the findings is buttressed by an impressive number of more sophisticated cost-benefit and regression analyses of specific MDTA and MDTA-type training programs for the unemployed. Studies by Borus in Connecticut, Page in Massachusetts and Somers and Stromsdorfer in West Virginia⁸ found favorable benefit-cost relationships for trainees relative to control groups and other studies sponsored by the University of Wisconsin's Ford Foundation project (including those by Borus, Cain, Somers and Stromsdorfer) produced similarly favorable findings. Thus, regression analyses by Solie in Tennessee and Stromsdorfer in West Virginia found retraining to be a major explanatory variable in the improved income of formerly unemployed workers. Chesler in Massachusetts, Weber in Illinois and Missouri and Gibbard and Somers in West Virginia all found a variety of indications of the benefits of retraining for the unemployed.⁹

In a more recent nation-wide evaluation of 1,200 MDTA trainees and 1,060 other persons who were unemployed about the time the training courses started, Earl Main of the National Opinion Research Center, found that the employment rate of "completers" was 78% compared with 55% for nontrainees and, when numerous other variables were controlled in a multiple regression analysis, that the net

effect of completing training was about \$10 per week in family income.¹⁰

These significant results are even approached by evaluative studies of retraining programs for the seriously disadvantaged. Cain and Somers found that welfare trainees were more successful in leaving the relief rolls than a control group of nontrainee welfare recipients,¹¹ and in a more recent detailed evaluation, Cain found a positive benefit-cost ratio for the Job Corps.¹² Regis Walther has just reported employment gains for those in NYC programs relative to a control group.¹³

Vocational retraining even fares well when related to other human resource programs. Ribich and Hansen, Weisbrod and Scanlon have found that retraining may bring about greater improvements in income than general education, especially for the disadvantaged.¹⁴ And McKechnie has found that retraining when coupled with geographic mobility, enhances income beyond the level reached through retraining or mobility alone.¹⁵

Some Questions and Partial Answers

The recorded benefits of retraining programs are impressive. Their worth would seem to be well established. But there are still some nagging questions. One question is whether on-the-job training would provide even better benefit-cost ratios and whether methods can be found for encouraging on-the-job training of the disadvantaged. There is some limited evidence that (OJT) benefit-cost ratios are higher than those for institutional trainees.¹⁶ Another question is whether non-training job development and human resource programs might do as well for the disadvantaged without the higher costs of vocational training courses. There are currently only inferences that such may be the case in the short-run. Full answers will have to await further study.

One final question relates to the factor of time. The studies cited are constrained by a relatively short time-period of follow-up. Are the benefits of retraining, relative to control groups, retained over longer time periods? Our earlier West Virginia surveys indicated favorable results for the trainees two years after the first interviews (see findings cited above). Preliminary data and rough analysis is now available as a result of a final follow-up in July 1966, 4-5 years after training had been completed. More sophisticated analyses, including data on income and costs, are now under way.

At these meetings three years ago,¹⁷ a report was presented on the 1963 results of a multivariate analysis of the effects of training and other factors on the percent of time employed in the 12-month period following the end of training. In Table 3 comparable results

TABLE 3
Impact of Socio-Economic and Retraining Variables Upon
the Percent of Time Employed¹

	n	\bar{R} ^a	Std. Error	Constant
1963	1065	.1605**	47.58	.6288(.0811)
1966	728	.2423**	35.50	.6982(.0599)

Variable ²	F-Statistic	
	1963	1966
1. Age	2.10	3.29*
2. Sex	1.72	30.95**
3. Race	2.41	4.92*
4. Education	2.44	17.38**
5. Marital Status	0.24	1.67
6. Labor Force Experience Prior to Retraining	17.25 **	4.05**
7. Regular Occupations	2.11 *	1.75
8. Labor Market Area	2.94 *	2.22
9. Previous Training ³	1.18	0.08
10. Mobility of Respondent ⁴	2.95 *	0.63
11. Year Training Ended ⁵	1.48	0.55
12. Quarter Training Ended	0.30	(⁶)
13. Training Status ⁷	10.85 **	5.79**

* Significant at .05 level.

** Significant at .01 level.

¹Dependent variable for the 1963 study was 12-month period following the end of retraining; for the 1966 follow-up it was the time period between April 1964 and July 1966.

²The breakdown of variables is omitted in this table.

³The presence or absence of formal training at any time prior to government training period.

⁴Geographic distance of out-migrant move.

⁵Year the government training ended (for those who completed training only).

⁶Not available for 1966 follow-up.

⁷Trainee, Dropout, Reject, Did Not Report, or Nonapplicant.

NOTE:

The independent variables in this study are all of a binary nature. That is they assume a value of *one* or zero, depending on whether or not a respondent falls into a particular category in question. Thus, the range of this variable is constrained between the limits of 0 and 100. One must bear both facts in mind when interpreting the tests of significance.

For the 1966 follow-up the partial regression coefficients and their standard errors (in parentheses) for the four training statuses relative to those who completed training (Trainee) were as follows: Dropout—.0450 (.0435); Rejects—.1029 (.0544); Did Not Report—.0654 (.0711); Nonapplicants—.1820 (.0389). These regression coefficients are all smaller than in 1963, indicating an improvement in the employment of Nontrainees relative to Trainees.

are presented for the period ending July 1966. In the latter follow-up, the dependent variable is the percent of time employed in the preceding two-year period.

It is seen that training status (i.e., whether the respondent completed training, dropped out, was rejected, did not report, or did not apply for a training course) continues to be a significant variable in explaining post-training employment success. However, in 1966, as compared with 1963, training status is of less importance and demographic variables are more important as explanatory factors. There appears to be some indication, then, that the advantages gained by retraining may begin to wash out after years of general employment expansion. Michael Borus' contrary conclusions, presented in this session, can be attributed to differences in dependent and independent variables and, especially, by a different choice of control group. Clearly, more work is called for on this question.¹⁸

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18. We are grateful for the assistance of James Morlock, graduate student at the University of Wisconsin.

TIME TRENDS IN THE BENEFITS FROM RETRAINING IN CONNECTICUT

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To date, the critical need of the operating agencies for immediate evaluations has prevented researchers from waiting to see the long run effects of retraining. Consequently, the published research has examined only the average impact of retraining over a short period, usually one year to two years after the end of the courses. In order to calculate the present value of the benefits of retraining these studies have had to project the average gain in earnings which occurred during that short period. The projections which were made assumed that the average benefits of retraining remained unchanged for future years. This assumption, however, was not the result of any empirical findings, but rather was adopted because of the lack of a better alternative.

This paper seeks to discover the actual trend in average retraining benefits and also to determine if this trend differs significantly depending on the characteristics of the trainees. To accomplish these goals the best available indication of society's benefits, the gains in earnings which result from retraining, will be examined over a five year period.

THE DATA

This study is based on two sets of information for individuals who participated in or qualified for retraining in Connecticut under A.R.A. and state sponsored courses. Demographic data were collected by personal interview and mail questionnaire, between November 1962, and April 1963. The interview schedule, questionnaire and collection techniques have been discussed elsewhere.¹

The second source of data was earnings histories provided by the Social Security Administration. The information provided included :

* This project was supported by an All-University Research Grant from Michigan State University. Certain data used in this publication were derived from statistics furnished by the Social Security Administration. The author assumes full responsibility for the analysis and interpretation of these data.

¹ Michael E. Borus, *The Economic Effectiveness of Retraining the Unemployed* (Boston: Federal Reserve Bank of Boston, 1966) and "A Benefit-Cost Analysis of the Economic Effectiveness of Retraining the Unemployed," *Yale Economic Essays*, Vol. 4, No. 2 (Fall 1964) pp. 371-429. Cost data were also presented in these sources.

the amount of covered earnings from 1960 through the third quarter of 1966,² an indication of the quarters in which there were covered earnings, and the number of quarters in self-employment and agriculture during each of the years.

Several problems were involved in the use of these data. First, coverage under the Social Security Act has not been universal. Of particular importance to this study were the exclusion of federal employees, employees of government and non-profit organizations whose employers did not volunteer for coverage, and railroad employees. In addition, wages paid to domestics and on "odd jobs" often may not have been reported either because the worker did not earn the \$50 per quarter minimum from the employer or because both the employer and employee were ignorant of the law. The extent to which these factors influenced the sample data probably was not great. What error was introduced, however, would probably overestimate the benefits of training. The training examined was for major industrial occupations covered by the Act while the non-trainees were provided with no specific occupational goal.³

Next, for the years prior to 1966 only the first \$4800 of covered earnings were taxable. In 1966, the taxable limit was \$6600. No employer was required to report more than these amounts for an employee. Consequently, when reported earnings were equal to the taxable limits, actual earnings were usually greater. Therefore, the reported earnings had to be extrapolated. The method used assumed the limit amount was reached at the midpoint of the last quarter for which the earnings were reported. Moreover, average earnings were assumed to be equal throughout the year. Thus, to estimate actual earnings the limit amount was divided by the proportion of the year prior to the midpoint of the "limit quarter." For example, if the earnings limit was reached in the fourth quarter of 1965, actual earnings were assumed to equal $(\$4800) / (7/8)$ or \$5485.71.

Some individuals, however, had reported earnings in excess of the limits. These higher reported earnings could have been caused by "over-reporting" of employers. While employers were required

² The fourth quarter data were unavailable when the information was supplied in May 1967. A lag of approximately ten months exists between the end of a quarter and the posting of nearly all earnings. In 16 cases the fourth quarter earnings were posted.

³ Training was for employment as power sewing machine operators, general machine operators, pipefitters, and shipfitters.

to report earnings only up to the taxable limits, some chose to report earnings beyond those required. In this case the relationship of the recorded to actual earnings would depend on how much the employer chose to report. Alternatively, recorded earnings above the maximum might also have been due to employment in more than one job covered by Social Security during the year. In this situation the individual may not have earned the taxable limit on either of the jobs, or he might have reached the taxable limit on one or more of the jobs. In the first situation the amount recorded would equal actual earnings while in the second, actual earnings would be understated in approximately the same manner as when the limit amount was reported. Believing the second situation occurred more often for the sample members, earnings in excess of the taxable limits were extrapolated with the same method as was used when the limit amount was recorded.⁴

Finally, because only three quarters of 1966 earnings information were secured for most of the sample members, the data had to be extrapolated for the fourth quarter. The assumption was made that earnings in the fourth quarter would equal the average of the preceding three quarters and this amount was added to calculate total 1966 earnings.

THE SAMPLE

Three hundred and seventy-three persons who had been retrained (trainees) or who qualified for but did not enter courses (non-trainees) in Connecticut between May 15, 1961, and March 16, 1962, were contacted for the original study. Two hundred ninety-nine of the individuals interviewed signed forms authorizing the Social Security Administration to provide me with their earnings histories. Social Security records of three of these persons were not used because they had self-employment in 1965 but no recorded earnings in 1966. Eight other people were eliminated because information was not available on one or more of their demographic characteristics. Information for the present study was based on the records of the 288 remaining persons. Table 1 indicates the characteristics of this sample.

The courses examined were all very short by present standards.

⁴An alternative extrapolation method was also used. This second method assumed that the limit amount was reached or exceeded on the last day of the last quarter in which earnings were reported. This highly conservative extrapolation did not alter the results markedly.

TABLE 1
 Characteristics of the Sample at Time of Training

Characteristic	Trainees	Nontrainees	Total Sample
Male (%)	89.8	64.1	81.6
Married Living with Spouse (%)	43.9	60.9	49.3
Age (%)			
16-19	29.1	21.7	26.7
20-29	41.8	30.4	38.2
30-39	17.3	23.9	19.4
40-49	9.7	19.6	12.8
50 and over	2.0	4.3	2.8
Average	26.4	31.1	27.7
Nontrainees Who Did Not Enter Training Because of Employment		52.2	16.7
Number of Years of School Completed (%)			
8 or less	7.7	6.5	7.3
9-11	28.6	32.6	29.9
12	56.1	48.9	53.8
More than 12	7.7	12.0	9.0
Average	11.2	11.3	11.2
Number of Dependents Including Self (%)			
1	47.4	35.9	43.8
2	22.4	17.4	20.8
3	9.2	20.7	12.8
4	9.7	12.0	10.4
5 or more	11.2	14.1	12.2
Average	2.2	2.6	2.4
Average Earnings 1960	\$1952.73	\$1744.16	\$1871.27
Average Length of Course for Which Applied, in Hours	171.4	165.2	169.4
Number	196	92	288

None lasted for more than eight weeks. The average course length was about 170 hours and the training was of a type referred to as "vestibule training." The trainee was familiarized with the basic machinery and techniques of a trade but was not a trained craftsman at the conclusion of the course. The purpose of the training course was to provide the trainee with enough knowledge to allow him to "get into the door." He then was expected to become proficient through on-the-job experience.

THE METHOD

The method used in this study was quite simple. A basic regression equation was used to explain earnings in each of the years from

1962 to 1966. The equation had four binary and six continuous explanatory variables.⁵ These were:

1. Sex where male = 1, female = 0
2. Marital status where married and living with spouse at start of training = 1, other = 0
3. Job status of nontrainees where did not enroll in training because had a job or job offer = 1, did not enroll for other reasons or trainee = 0
4. Age of trainee at start of training
5. Squared age of trainee
6. Years of school completed at start of training
7. Number of dependents at start of training
8. Extrapolated 1960 earnings reported by the Social Security Administration
9. Length of training course for which applied, in hours
10. Training status where enrolled in training (trainee) = 1, did not enroll (nontrainee) = 0

An explanation of Variable 3, job status of nontrainees, may be useful. It was felt that the nontrainees were composed of two distinct groups. One group was made up of persons who did not enter training because they had secured employment. These persons obviously had an alternative to the training and chose this alternative. If we assume that they were at least partially motivated by economic considerations they would have made this choice only if the expected earnings in the employment were greater than those anticipated if they entered training. That economic criteria were used in making this decision is demonstrated by the fact that the group who refused training for employment reasons had significantly higher earnings in the five years after training.

The other nontrainees and the trainees, on the other hand must be assumed to have not received equally lucrative offers of employment. For, unless they were irrational or unable to accurately calculate the benefits of these job offers, they too would have accepted

⁵In an attempt to improve the basic equation, course length in hours was replaced by course length in weeks, the date that the class started and the date that the class ended. These changes reduced the R^2 of the equation. Next, the year in which the class ended and its interaction with training status were added to the basic equation. Finally, race as a binary variable, using a subsample of 261 observations for whom these data were available, was also added to the basic equation. None of these variables was significant at $P = .05$.

them. Thus, we must conclude that there was a basic difference between the nontrainee who did not enter training for job reasons and the other sample members. Variable 3 is designed to account for this difference.⁶

Table 2 presents the regression coefficients of the variables in the basic equation for each of the years 1962-1966 and for the total period. Sex, marital status, reason for being a nontrainee, previous earnings and training status were all important determinants of earnings level. Age and course length were significant factors during the first year and two years after training, respectively, but their influence declined. Educational level and number of dependents did not appear to affect earnings.

The coefficient of training status (Variable 10) was not only statistically significant in each of the years, but its absolute magnitude was also quite large. The total increase in earnings for the five year period was \$5,834 and the average annual gain from training was \$1,166.70. There was also an irregular but noticeable increase in the gains as the period progressed. Benefits rose from \$1,070 to \$1,350 during the period, a gain of \$280 or 26.1 per cent. Thus, the average gain from training increased at an annual rate of six per cent.⁷

Next to determine if training affected everyone in the same manner or whether an individual's characteristics led to differential gains, interaction variables were added to the basic equation. These variables were the product of the training status variable and a characteristic variable. For example, to determine if there was a different effect

⁶ Unfortunately, this method may overestimate the benefits from retraining. For, the nontrainees who remain were those who lacked the motivation or ability to enter the training. Thus, they too may not be fully comparable to the trainees. Ideally, in a controlled experiment trainees would be selected randomly. In the absence of such a control group it was felt that removing the influence of the job offer led to the best estimate of training benefits. To estimate the effect of this assumption, calculations were also made where this variable was omitted.

⁷ To test the importance of the differentiation between nontrainees the reason for being a nontrainee was removed from the equations presented in Table 2. The average annual benefit from retraining was only \$295.85 and training status was not statistically significant at $P = .05$ except in 1965. There was, however, an increase in the size of the regression coefficient for training from \$112.47 in 1962 to \$301.31 in 1966.

The Table 2 equations were also calculated using the more conservative method of extrapolation presented in footnote 4. Here the average annual benefit was \$987.67. The gain in benefits over the period using this method also was not as great; the annual increase was four per cent.

TABLE 2
Equations Estimating Earnings for Years 1962-1966

Variable	Regression Coefficients					
	1962	1963	1964	1965	1966	1962-1966
0 Constant	2,524.46 ¹	2,419.72	141.11	1,175.19	4,251.01	10,511.49
1 Male	2,768.15 ^a	2,796.29	2,225.48 ²	2,258.40 ²	2,532.19 ²	12,580.51 ²
2 Married, Spouse Present	598.96 ^a	709.31 ¹	893.70 ²	1,203.76 ²	1,390.78 ²	4,796.52 ²
3 Nontrainee for Job Reasons	1,701.94 ^a	1,431.49 ^a	1582.61 ²	1,154.90 ²	1,863.24 ²	7,734.18 ²
4 Age	-149.69 ¹	-131.50	-9.28	-98.11	-245.25	-633.83
5 Age Squared	2.13 ¹	1.88	0.21	1.01	2.98	8.22
6 Education in Years	41.46	56.99	86.86	160.32	89.48	435.11
7 Dependents	20.83	-23.38	-142.19	-66.50	-91.97	-303.20
8 1960 Earnings	0.176 ^a	0.252 ²	0.294 ²	0.271 ²	0.296 ²	1.29 ²
9 Course Length in Hours	-7.36 ^a	6.97 ²	-3.58	-2.51	-1.13	-22.05
10 Trainee	1,070.64 ^a	996.28 ²	1,166.44 ²	1,249.86 ²	1,350.30 ²	5,833.52 ²
R ² of Equation	.5088	.4064	.3197	.3379	.2876	.4510

¹ Significant at $P \leq .05$.

² Significant at $P \leq .01$.

from training men instead of training women, a variable was added which multiplied training status by sex. The coefficient of this variable gave any difference in the benefits of training received by the men and women in the sample.

Variables which were added singly to the basic equation were the interaction of training status with sex, marital status, race, age and the square of age, education, number of dependents, 1960 earnings and course length in hours. With the exception of the age variables, none was significant at the .05 level. This was interpreted to mean that none of these variables led to significantly increased or decreased benefits to be derived from training persons with the particular characteristics.

Training status did interact significantly at the .05 level with age and age squared in the equations for the years 1964, 1965, and 1966 and for the total five year period. The significant interactions indicated that individuals of different ages received different benefits from retraining in those years.

Table 3 presents the earnings equations when the age interaction variables were added to the basic equation. From these equations the annual gains in earnings for trainees of different ages were calculated for the years 1964, 1965, and 1966, and for the 1962-66 period. As can be seen from the resulting Table 4, for the third, fourth and fifth years after the course the annual benefits of retraining rose as the age of the trainee at the start of the training course increased to about age 33. After age 33 the annual benefits of retraining began to decline, at first slowly but with major declines after age 40. Retraining workers 50 years old led to only nominal gains in earnings in the third, fourth, and fifth years following their training. It is important to note, however, that during the first two years after training, age was not a statistically significant determinant of the gain from training. Consequently, trainees of all ages had substantial gains in earning for the total five year period.⁸

⁸ It was interesting to note that the addition of the age interactions led to marked changes in the equations when the reason for being a nontrainee variable was omitted. The training status variables became significant at $P \leq .06$ for the years 1964, 1965, 1966 and the total 1962-1966 period. The gain in benefits reached its maximum for trainees about age 35 and the declines in benefits for trainees below or above this age were somewhat steeper than when the reason for being a nontrainee was taken into account. There were, however, substantial gains from retraining especially among the workers in the prime age group 25-45.

TABLE 3
Equations Estimating Earnings for Years 1962-1966

Variable	Regression Coefficients					
	1962	1963	1964	1965	1966	1962-1966
0 Constant	3,156.77 ¹	4,349.16 ¹	2,542.25	3,851.06	7,731.41 ¹	21,636.64 ¹
1 Male	2,759.73 ²	2,755.29 ²	2,160.33 ²	2,188.05 ²	2,442.92 ²	12,306.32 ²
2 Married, Spouse Present	604.16 ²	730.77 ²	925.59 ²	1,238.47 ²	1,435.13 ²	4,934.12 ²
3 Nontrainee for Job Reasons	1,615.66 ²	1,348.92 ²	1,646.69 ²	1,199.88 ¹	1,893.52 ²	7,704.68 ²
4 Age	-175.67	-256.28 ¹	-206.57	-311.31 ¹	-515.91 ²	-1,465.74 ²
5 Age Squared	2.37	3.57 ¹	3.22	4.22	7.01 ¹	20.40 ¹
6 Education in Years	39.60	69.88	120.06	194.60 ¹	131.24	555.37
7 Dependents	21.95	21.99	-142.35	-66.38	-91.49	-300.26
8 1960 Earnings	0.174 ²	0.246 ²	0.288 ²	0.263 ²	0.286 ²	1.26 ²
9 Course Length in Hours	-8.00 ²	-6.95 ²	-3.18	-2.12	-0.693	-20.95
10 Trainee	393.89	-2,191.22	-3,836.60	-4,161.41	-5,524.19 ²	-15,319.53
11 Trainee · Age	28.08	201.31	357.27 ¹	381.23 ¹	478.60 ¹	1,446.50 ¹
12 Trainee · Age Squared	-0.185	-2.81	-5.58 ¹	-5.89 ¹	-7.32 ¹	-21.79 ¹
R ² of equation	.5103	.4110	.3308	.3482	.2981	.4594

¹ Significant at $P \leq .05$.

² Significant at $P \leq .01$.

TABLE 4
 Estimated Gains from Training at Different Ages for Years 1964-1966
 and the Entire 1962-1966 Period

AGE	1964	1965	1966	1962-66
20	\$1,076.80	\$1,107.19	\$1,119.81	\$4,894.47
25	1,607.65	1,688.09	1,865.81	7,224.22
30	1,859.50	1,974.49	2,245.81	8,464.47
35	1,832.35	1,966.39	2,259.81	8,615.22
40	1,526.20	1,663.79	1,907.81	7,676.47
50	76.90	175.09	105.81	2,530.47
Age of Maximum Gain	32	32	33	33

SUMMARY

Five basic findings were presented in this analysis.

1) "Vestibule retraining" of the nature conducted in Connecticut was shown to yield substantial average benefits over a longer period than had previously been studied. The average gain in earnings for the five year period was \$5,834. In addition, the gains were substantial in each of the five years after training. This indicates that the benefits from retraining are not only of a short term nature, but continue to accrue for at least five years after the end of the courses. Moreover, since the benefits were so large in the fifth year after the courses it is unlikely that the gains would not continue in subsequent years. Thus, the data presented here justifies the extrapolation of the benefits observed in the immediate post-training period which has been the practice in earlier studies of retraining.

2) The average earnings gain from training increased at an annual rate of approximately six per cent during the five years following the training course. Therefore, benefit-cost analyses should not only extrapolate the immediate post-training benefits, but they should also project increases in these gains when calculating the average benefits of retraining.

3) The average gain from retraining for the five-year period was not influenced by the sex, race, marital status, education, number of dependents and prior earnings of the persons selected for retraining. These factors also did not affect the benefits of retraining in any year of this period. Consequently, criteria other than economic benefits may be applied when selecting trainees. These other criteria might include giving preference to heads of households, public assistance

recipients, Negroes and other groups whose income it is socially desirable to increase.

4) The gain in earnings did vary over the five year period, however, depending on the age of the trainees. Retraining led to the greatest increases in earnings during the five years after training among trainees between 30 and 35 years old. Individuals 25 to 30 and 35 to 40 also received very high increases in annual earnings. For trainees under 25 or over 40, however, the gains from training for the period were considerably less, although still sizable.

5) Finally, the influence of age on the benefits of retraining did not become statistically significant until the third year following the courses. This illustrates the limitations of benefit-cost analyses which focus only on short-term gains. Variables which significantly affect the benefits may not be operable in the immediate post-retraining period. Consequently, continuing and long term evaluations of manpower programs are necessary if we are to accurately judge their true worth.

DISCUSSION

WOODROW GINSBURG

IUD, AFL-CIO

My comments on the papers presented will be confined, as agreed with fellow discussants, to the Horowitz and Hernstadt study of "The Training and Education of Tool and Die Makers." Based on my experience with a number of programs which unions have sponsored, I have some observations on the overall direction and emphasis of government manpower training and development efforts.

In their research, Horowitz and Hernstadt did embark upon the worthwhile project of studying how workers achieve their skills and which paths of learning and training were most effective.

Unfortunately, the research so far gives few firm answers to these important questions. It does suggest some methods for further, hopefully more fruitful, investigations.

The biggest gap—one which the authors recognize but were unable to fill at this point—was caused by the lack of any information on those who had either not been employed or had not remained long as tool and die makers. With no data on the kind of training and job experience such workers had, we can gain little insight into which educational and job experiences produce more qualified tool and die makers.

According to the authors themselves, the foremen involved in their study claimed they did not "hire nor keep inferior men." The record provides substantial evidence that the personnel procedures did, in fact, result in a highly qualified, long-term work force. Of the workers surveyed, 8 out of 10 had been working at their trade for 10 years or more. As for ability, the foremen rated close to half of the men above, or well above, average. Only a very small group, 11 percent, were considered below average.

With this rather homogeneous group of capable, veteran skilled workers, what kinds of judgments were possible about their various learning and work paths?

Here, again, there were certain deficiencies in the data that made solid conclusions elusive. More than that, some problems of definition and methodology complicated the researchers' task.

The study's respondents used identical terms to describe sharply different training—both as to methods used and content covered. While noting this, and therefore calling for a "careful description" of

the actual training while it was being received, the authors could not use such a procedure in this study of men who had completed their training a decade or two ago.

Some similar questions must be raised relative to the training path labelled "picking up the trade." This was considered the route by which some 62 of the workers (about 15 percent of the total) became fullfledged tool and die makers. Can this training path be considered truly "mutually exclusive" from all other paths? Particularly when, as the authors state, "In practice, all training paths incorporated large doses of picking-up-the-trade. . . ."?

The authors conclude from their study that factors other than training are key in determining who will become a proficient tool and die worker. Which factors? "Innate talent" and the character of the work experience in terms of "amount and variety." But doesn't this really sidestep the questions of the original research design? Weren't the authors seeking to learn which path of training is most productive? How does the worker acquire the so-called "innate talent"? Does wide variety of work experience offset a lesser degree of "innate talent" or is that factor a *sine qua non* for a skilled tool and die maker? Do home, friends, immediate neighborhood, community, or general environment and culture play decisive roles in creating the ability? In the absence of the "innate ability," what training routes most efficiently provided the worker with the necessary skills to perform his job well?

There are two other aspects of the research which might well be examined further—when vocational training was received and what union participated in the training process. During the past few years particularly, as well as over the past two decades generally, vocational education has been undergoing major revisions. With over 45 percent of the workers surveyed getting their formal training prior to 1940, 30 percent during the 1940's, and the balance receiving theirs in the post-war period, it would be instructive to know whether the success of the vocational education training path is significantly related to when it was given.

Union involvement in joint labor-management apprentice programs has been extensive for many years. In what way did the presence of a union-management committee influence the eligibility requirements, the training procedures, and the standards of performance?

Turning to the question of national manpower and training policies, I would note the following points:

In evaluating programs aimed at improving the capabilities of our work force, we must recognize that there are widely different training needs at different skill levels. Typically, American management has hired the untrained or unskilled worker for the simpler, manual jobs and provided, itself, whatever on-the-job training was necessary. This has been readily feasible, for a heavy proportion of jobs throughout American industry, particularly at the entry level, require minimal skill, education and experience.

This fact supports the view that there should be a distinct separation of programs involving job training for upgrading employed workers to higher rated occupations from those involving placing unemployed in entry occupations.

In 1966, the MDTA programs were structured with the aim of allocating 65 percent of their resources and efforts to the hard-core unemployed. It was hoped that, as the other segment of the programs gave sufficient training to employed semi-skilled and skilled workers to enable them to advance, unemployed disadvantaged workers would move into the occupations vacated. (Manpower Report of the President, April 1967, p. 51.)

The emphasis on placing the hard-core unemployed is sound public policy. Perhaps no greater challenge faces American society. But meeting the problems of the poorly qualified unemployed worker requires a broad range of supportive programs such as guidance, counselling, basic education, orientation to work and health information.

A number of the employers contacted in union-administered training programs have indicated that such factors as reporting on time, regular attendance, and adjustment to work disciplines and the plant environment were far more crucial in determining the ability to hold a job than were a worker's skills. For it was recognized that training necessary to bring the worker up to the level of skills demanded by the beginning job was brief and relatively simple, and could be handled easily by the company itself.

The job program recommended by the Automation Commission—500,000 public service jobs financed by the federal government—was based on a similar concept. The main idea was to provide an opportunity for unemployed workers to engage in meaningful work

and at the same time receive the education and training which would facilitate their finding jobs in the private sector.

But helping equip workers with the education and orientation required of a productive employee is not enough. The key follow-through must be placing him on a job with decent conditions and adequate pay.

In a number of situations, lack of good public transportation is a major obstacle. Employers with the job openings are frequently located in suburban communities and reaching their plants from the central city's slum and ghetto areas by public transportation is inconvenient and too time-consuming. The alternative, private car transportation, is both difficult to arrange and too costly for the low income workers involved.

The policy position which dictates that, as each semi-skilled worker moves up the job ladder, his place will be filled by a worker from among the hard-core unemployed makes good manpower sense. Unfortunately, it is often not carried out. Firmer commitment should be required of employers who receive government training grants to insure that the policy becomes practice.

Also acting as impediments to the fuller utilization of our manpower are the company tests and qualifications for employment. When measured against the job requirements, they are unreasonable and irrelevant. Typically, they discriminate, for no job-related reason, against the person who is poorly educated, poorly trained and with little work experience—the very person most desperately in need of gainful employment so he and his family can live in decency and dignity.

Today, even in relatively tight labor markets, we find firms which continue to use tests which screen out these disadvantaged workers. For example, one company required that job seekers pass a test involving a knowledge of geometry for a simple assembler-type job.

Not only do unrealistic educational standards bar the way for many of the disadvantaged but minor law violations similarly disqualify applicants. In one case, a firm, at the urging of a union which was sponsoring a training program, hired 20 persons whom it normally would have rejected on the basis of minor police records. The soundness of the company's decision is clear—now, several months after being hired, these workers are still employed and doing well.

DISCUSSION

EDWARD A. ROBIE

The Equitable Life Assurance Society

There is no question about the need to know where and how we should direct our efforts in attempting to solve the problems of employability. And there is no question that sound evaluation techniques utilizing appropriate controls and criteria of effectiveness need to be applied to our efforts in order to narrow down the range of possible alternatives to those which make the best use of our resources. Yet, I must admit to having an uneasy feeling that our concern for finding the right approaches may tempt us to evaluate those we try before they have had a chance to get off the ground—before they have been developed to the point where we can say, with reasonable confidence, that we have done the best we can to put the basic ideas behind the approaches into practice.

This is not meant to be a criticism of the research papers presented at this session. The investigators of these studies have given a reasoned explanation of what lies behind the quantitative data they collected, and they have been careful to point out the limitations to their conclusions. I mention my concern to reinforce their reservations and, further, to stress the fact that many attempts in educating and training for employability are still germinal in conception and implementation—that the innovative spirit moving us in these new directions needs to be nourished by vigorous experimentation incorporating the kind of feed-back that fosters rather than inhibits full development of our ideas.

To illustrate, I would like to tell you about an experience we have had in my company, the Equitable Life Assurance Society of the United States. We have made an attempt over the past few years to deal, in a small way, with the question, “What can and should be done to help the growing number of our nation’s unskilled, untrained, and unemployed youth, many of whom face the additional handicaps of coming from poverty-ridden households and racial minorities?” I believe you will see in this example an idea that needs to be given further development although, at this point, it would be judged a failure from a good many points of view, including a normal cost-effectiveness standard.

The Equitable is the third largest life insurance company in the country. We have approximately 12,000 salaried employees; 7,000

of these employees work in our Home Office located in New York City. In addition we have more than 6,500 commissioned agents who sell our insurance.

Our concern about the employment of youth grows out of two separate circumstances: one, a deep conviction that employers have a social responsibility to do what they can to solve the problems of unemployment among America's youth; two, the fact that we are a major employer of young men and women in their teens, particularly in New York City where, for instance, we hired about 1,100 June high school graduates last summer. We are, therefore, interested in knowing more about matching what is most readily available in the labor market and the lowest levels of work we have available.

Because we employ so many young people, we are naturally interested in the special problems they face. Our concern is heightened when we find we must adjust to a changing labor pool caused by the flight of the middle class to the suburbs, when we see the quality of education deteriorating among the urban high school graduates who apply for jobs with us, when we note that many of our least skilled jobs, which were formerly filled by young high school graduates, are being displaced by automation, and when we hear statistics like the one which tells us that there are about 100,000 youths between 16 and 21 out of school and out of work in New York City.

Several years ago we decided to do something about a particular segment of this population—the high school dropout. In 1961 the Equitable started a special program for the employment of some of these so-called unemployable youngsters who did not meet our normal employment standards. We were interested in seeing if these youngsters could do Equitable's beginning-level jobs, and if they could be prepared, like the hundreds of inexperienced high school and college graduates we hire each year, for positions with greater responsibility and higher earnings.

By 1965 we had employed over 80 of these young men and women. The youngsters who came with us started as general clerks, inside messengers, mailroom attendants, addressograph clerks and Xerox machine operators. Promotions to more demanding work were available for those who proved themselves reliable and capable.

As you might suspect, we have had problems as we have sought

to help the youngsters adjust to our work environment. We have encountered difficulties in instilling an appreciation for the importance of punctuality and attendance, for many of these youngsters came from homes in which there were no established routines, often no one to see that they left mornings on time or at all. In some cases they were actually being criticized at home and by their friends for even attempting to hold down a regular job. Many of them had a kind of perpetual attitude of anger, frustration, and fatalism. With all of this, it probably should surprise no one that few of the youngsters were able to meet our usual performance standards on the normal time schedules with normal training routines.

Thanks to a specially selected group of sensitive and understanding supervisors, by 1962 and 1963 we began to appreciate more fully and combat more specifically the pressures that these youngsters were encountering. We decided special counseling help was necessary for many of the youngsters, and so secured the services of a young man on work leave from the Union Theological Seminary to give them support and guidance.

Along with the problems we encountered we also had our successes. In view of the difficulties encountered, the termination rate for this group does not compare unfavorably with the turnover rate we have generally averaged over recent years with the rest of our younger employee population. Several of the youngsters have advanced to second and third level jobs. It is our hope that, with increased experience and training, a few will move to technical or supervisory level jobs. We are also encouraged by the fact that several returned to evening school in an effort to retrace their steps and pick up the high school diploma they had missed.

In late 1966, contrary to our earlier thinking, but building upon our experience, we decided to include a requirement for supplemental basic education aimed at preparing a group of newly hired dropouts, through formal classroom preparation, for their high school equivalency diploma. Up to this time we had assumed that any kind of formal education would be heavily resisted. It was our plan to select 20 young men from a larger number who were to be screened and referred to us by J.O.I.N. (Job Orientation in Neighborhoods), an agency of the City of New York which works primarily with dropouts. At the same time we entered into an agreement with the Board for Fundamental Education, a non-profit organization

that provided education and training for the disadvantaged, which called for them to provide a curriculum, instructors, and materials to prepare this group, through formal classroom instruction to pass the New York State High School Equivalency Tests.

On October 13, 1966, we had 20 young men scheduled to begin work on regular, full-time jobs with the understanding that they would be attending class on their own time for two hours each night, four nights a week, for about one year. It was surprising to us, and here perhaps there is a lesson to be learned, that in spite of three screenings—by J.O.I.N, to determine the extent of their interest in getting equivalency diplomas, as well as general suitability for the work which the Equitable had to offer, by the Board for Fundamental Education, to again gauge their level of motivation and importantly to determine the extent of their verbal and arithmetic skills so that the curriculum could be tailored to the group, and by the Equitable for the standard pre-employment interview—three of the 20 young men did not appear on their first day of employment.

We later determined that one young man received his induction notice and chose not to report, one decided he needed a job which paid more money, and one literally disappeared and we were unable, after repeated tries, to locate him. We continued to interview and screen applicants in the weeks to follow, had two early terminations, and 30 days after the original group began we closed the program to new entrants with 17 young men at work and attending class.

Of the 17 boys who entered the program in October, 1966, 8 were still employed and performing satisfactorily on the job a year later. Three of these boys have earned an equivalency diploma and two have been promoted to a higher level job. More of the boys might have qualified for the equivalency diploma had they been permitted to take the examination, but New York State requires applicants to be at least 18 years old and out of school for two years.

Twelve of the boys did not complete a full year of employment with us. Five dropped out because they continued to lack the motivation or ability for disciplined study. Only two were unable to maintain an acceptable standard of job performance and they were dismissed. The remaining five were performing acceptably, but they resigned to take jobs at higher pay with another company

or because they were called up for military service.

A group of 20 girls referred by J.O.I.N. also began employment with us in October, 1966, but unlike the boys, the objective did not include high school equivalency. The girls came with very low typing ability and our aim was to bring them up to a skill level where they would qualify for beginning typist jobs. They met after working hours for standard typing instruction under a commercial high school teacher who was paid by our company.

Five of the girls were still with us a year later and performing satisfactorily, three as typists. Fifteen did not last the year, and of these 15 girls, 10 had to be dismissed because they failed to meet standards, usually in attendance. The other five who left were unable to succeed in training or did not care for after hours instruction, particularly since we offered typing instruction to our regular employees during the work day. A more compelling reason for our lack of success with the girls may be the fact that no attempt was made to explore alternate methods of instruction or to recruit a teacher trained to the special needs of this group.

To recapitulate, we now have spent six years in this special effort to prepare so-called hard-core unemployable youth—school dropouts—for our clerical positions. We started with the basic idea that some of these young people could immediately do certain of our simplest jobs and then move on to more demanding work. First we assumed that they would want to complete their high school studies on their own by going to night school, but we soon found that this assumption was naive. The motivational problem required a supportive environment unlike the high school environment they had already rejected. We found few who met our early expectations of employability. Now our expectations are more modest—the dropouts we enlist in this special program are considered overhires, that is, employees whose potential contributions lie in the future and are not charged to regular departmental complements. They are assigned to especially willing and patient supervisors who are expected to make them fully productive on a first-level job within a year and, hopefully, eligible for promotion within two years.

We have hired a total of 123 high school dropouts since we started our program. We have not been entirely successful in introducing all of these young people into the work force—about 30% had to be dismissed within a year after they entered the program.

Of course, we would like all of them to make a satisfactory start, for them and for us, but perhaps this is asking too much—we should reasonably expect a certain number of failures.

However, weighing the failures against the successes, we are greatly encouraged by the number of dropouts who have made it with us or have gone on to other work. The successes more than counterbalance our disappointments. About 32% of the boys and 37% of the girls were still employed with us and performing well according to our regular standards for a year or more. Some have qualified for skilled jobs and some have been promoted. Then there are those who left to enter the military or to take what they considered to be better jobs, or because they found it desirable to return to school as full-time students. They too should be counted on the plus side. So I think you will agree that the scale is tipped in favor of the program even though it is costly for us and far from perfect.

We continue to be concerned about the dropout, and we continue to look for new ways that might help them become employable according to our normal standards. This year we are trying a different approach utilizing the special teaching resources of the New York Human Resources Administration. In this joint effort, we will hire about 36 and provide time and space for remedial instruction under a specialist teacher provided by the H.R.A. The group will be split into three sections to provide a very favorable student-teacher ratio. Classes will meet daily for two hours in our training center during regular working hours. The rest of the day they will be on jobs at good pay—more than \$2.00 an hour.

The goal, as before, is the high school equivalency diploma and fully productive work which could lead to promotion. We also hope that some will eventually be able to take advantage of our tuition refund plan which is available to any employee in our organization who demonstrates potential for advancement and is interested in reinforcing his career development by college studies. I am convinced that many dropouts need not look forward to a lifetime of marginal employment—that the majority are thwarted by deeply rooted motivational problems, the reasons for which are well-known—that their apathy or hostility can be overcome by themselves if we give them the proper support and encouragement in taking the first steps in the work force.

DISCUSSION

DAVID P. TAYLOR

Massachusetts Institute of Technology

The three studies presented here this morning are all designed in part to provide policy-makers with information to be used when making decisions about the allocation of scarce government training and retraining funds. The most striking, even startling, results are presented by Professor Borus. He found that the graduates of “vestibule” training in Connecticut—training that lasted on the average only 170 hours—outperformed nontrainees in income by over \$1,000 a year in each of the five years following the training.

As Borus points out, he is really comparing the earnings performance of three groups during the years 1962–1966. First, the base group is composed of forty-four people who failed to enter the training programs not because they had found a job but for some other and unspecified reason—perhaps because of poor health or because they thought the material would be too difficult.

The second group was made up of 196 people who entered the training, and their earnings differential over the five-year period was in excess of \$5,800 relative to the base group. The third group, and in some ways the most interesting part of the sample, included the forty-eight workers who never entered a program because they had found alternative employment—the so-called nontrainees for job reasons. They ended up with an earnings differential in excess of \$7,700 in the five-year period relative to the base group. That is, those who did best economically were the ones who did not start a training program because they had found work—mostly through their own efforts. When all the nontrainees are lumped together, the effect of training washes out of the equation completely. This raises two questions in my mind:

1. Could not the major contribution of the training have been the placement services that went along with it? If this is the case, of course, the policy implications are different.

¹ M. E. Borus, *The Economic Effectiveness of Retraining the Unemployed* (Boston: Federal Reserve Bank of Boston) pp. 195, 213.

2. Was the base group really a control group? The only requirement imposed on the overall sample was that the workers must have qualified for one of the various programs. There was undoubtedly variation in performance on the qualifying tests. Would these scores have provided additional controls and increased the persuasiveness of the regression results?

Another question that should be raised involves the quality of the training and the location in which it was undertaken. We are considering trainees and nontrainees of seven programs in four occupations in the cities of Ansonia, Bridgeport, New London, and Norwich, Connecticut. Some were state programs, and others were conducted under A.R.A. Some had a virtual guarantee of employment at the end of the training; others did not. In some but not all cases the trainees were eligible for stipends. The unemployment rates in these cities ranged from 3 to 4 percent in New London to 9 to 12 percent in Ansonia at the time of the training, and the completion rates varied from 31 percent to 63 percent.² It seems to me that ample opportunities exist for one or more of these factors to introduce a bias of an unknown type and amplitude that might obscure the analysis.

Finally, Borus contends that because race and education did not interact with the economic benefits of retraining, we can direct training efforts toward those whose income it is socially desirable to raise. I find his evidence neither sufficient nor necessary. The distribution of educational attainment within his sample is extremely narrow—over 50 percent had exactly twelve years of schooling and over 80 percent were in the 9–12 years inclusive category. Moreover, less than 12 percent of his sample was nonwhite, and I would guess that this is the main reason the variable failed to interact with wage levels.

Despite my reluctance to accept without qualification the results relating to the magnitude of the benefits from retraining, Professor Borus does present persuasive evidence—given the original assumptions about the sample and the control group—that whatever their source, when benefits do appear, they are not likely to be transitory. And this is an important contribution.

² Borus, *op. cit.*, pp. 104ff.

I am left now with just a few moments to discuss the other two papers, and this is much less than they deserve. Professors Horowitz and Herrnstadt have carefully analyzed the routes leading to the achievement among other things of all-around craftsmanship in the tool and die trade. I was particularly struck by the great similarity in the length of time required to achieve all-around craftsmanship irrespective of the route used. And I applaud strongly the authors' conclusion that it is justified to "support . . . a variety of competing (training) methods attuned to the needs of individual workers and individual employers."

Professor Somers and McKechnie raise a number of the most important questions which must be answered if we are to spend our retraining dollars in the optimal way. Based on a review of the appraisal literature and their own empirical results, they conclude that the current evidence of the benefits of the retraining programs is encouraging. This conclusion is even more significant since it comes from some of the earliest evaluators in the field. But I would agree with Somers and McKechnie when they observe that our area of ignorance in this regard is even more impressive.

INTERNAL AND EXTERNAL LABOR MARKETS

VOLUNTARY LABOR MOBILITY IN THE U.S. MANUFACTURING SECTOR *

JOHN E. PARKER, *University of Michigan*, and
JOHN F. BURTON, JR., *University of Chicago*

This paper is concerned with the secular behavior of voluntary labor mobility in the U.S. manufacturing sector. The topic has been largely dormant since the 1958 investigation by Arthur Ross, whose general conclusion was that: "All in all, little evidence can be found for the proposition that labor resources have become immobilized and a new industrial feudalism has been created because men can no longer afford to quit their jobs."¹ A reexamination of Ross's conclusion is important because of the crucial role that labor mobility plays in shaping the performance of the economy.

I. A Theoretical Framework

The statistic which best measures voluntary labor mobility is the quit rate, which is the number of quits per month for each 100 employees. Quits "are terminations of employment initiated by employees for any reason except retirement, transfer to another establishment of the same firm, or service in the Armed Forces."²

Bearing in mind the definition of the quit rate, one can postulate a model:³

* A more complete version of this paper may be obtained from Professor John Burton, Graduate School of Business, University of Chicago, Chicago, Illinois 60637.

¹ Arthur M. Ross, "Do We Have a New Industrial Feudalism?" *American Economic Review*, Vol. 48 (Dec. 1958), p. 918.

² U.S. Bureau of Labor Statistics, *Measurement of Labor Turnover* (June 1966), p. 2.

³ Because we are currently engaged in research on several facets of voluntary labor mobility, including a study of 1960 interindustry variations in the quit rate, we have attempted to develop a general model which can explain both secular and cross section behavior of the quit rate.

$$(1) \quad QR = f(I, O, P, X),$$

where QR is the quit rate, I is a set of variables which measure the incentives for workers to quit, O is a set of variables which measure the cyclical or short-run variations in the opportunities for workers to move, P is a set of variables which measure factors subject to control by public policy that influence voluntary mobility, and X is a set of variables which measure all other factors that influence the quit rate.

Interindustry wage differentials are an example of I , those variables which measure the incentives for workers to quit because of the comparisons they make of the attributes of their own firm and other firms. Labor market theory assumes that a worker will quit his job if he feels that an alternative job offers a net advantage. The most obvious inducement to a worker that would cause him to quit his job is a higher paying job elsewhere, assuming that the nonwage aspects of the two jobs are equivalent. One might expect, therefore, that the volume of quits would increase as interindustry wage differentials increase because the widening differentials would cause an increasing volume of turnover in the low wage industries.⁴

It can be argued that an increase in interindustry wage differentials will not necessarily lead to an increase in voluntary mobility. Even when there are no pecuniary incentives for workers to leave their firms, there is a normal level of voluntary turnover because employees become disillusioned with their jobs, exchange acrimonious words with their foremen, or because of innumerable other reasons associated with the vagaries of being human. If the interindustry wage differentials now widen, it can be argued that the increase in quits in the low wage industries will be offset by a decrease in the normal amount of quits in the high wage industries. On a priori grounds, however, it seems more likely that widening wage differentials will provide a net increase in mobility because much of the normal turnover is largely insensitive to pecuniary considerations and therefore the increase in quits in low wage industries will not be matched by an equivalent decline of quits in the high wage industries.

Geographical and interfirm (but intraindustry) wage differentials also belong to the set of I variables because workers receiving

⁴The response of increased quits to widening wage differentials assumes that the widened differentials represent short-run deviations from the long-run equilibrium wage structure.

high wages along these dimensions should also have less incentive to quit than worker receiving low wages. There are other I variables in addition to wage differentials. An example is an industry attribute such as seasonality, which will probably be unattractive to workers.

The variables discussed above measure the incentives for workers to quit and move to superior jobs. The volume of voluntary mobility also depends on the workers' opportunities to move to these jobs. The opportunity variables, labeled O variables, measure cyclical or short-run variations in the state of the labor market. The variables which seem to be the most appropriate measures of O are the unemployment rate and the accession rate. We believe that workers are less likely to quit when they perceive that the labor market they would enter is slack, and we believe that the O variables are the most likely indicators of employees' attitudes.⁵

The third set of variables, P, includes those factors which might be regulated by public control for the purpose of influencing the amount of voluntary mobility in the economy.⁶ Examples are the extent of unionism, an institution which many have argued has a restrictive impact on mobility, or the extent of the information-disseminating activities of the employment service, a factor which should increase mobility.

The final set of variables is X, which includes those factors that may influence the quit rate but that do not fall into the previous categories of variables. The primary significance of this category is that it includes factors influencing the amount of mobility that are not subject to public control. For example, the amount of voluntary mobility may vary through time because of variations in the proportions of certain sectors of the labor force which have distinctive mobility traits. If skilled workers are less prone to quit and skilled workers constitute a larger proportion of the work force now than 30 years ago, then *ceteris paribus* the quit rate should be decreasing

⁵ Theoretically, a worker should be able to move to a superior job for which he is qualified even if the work force for that job is not being expanded—the envious worker need only offer his services at a lower rate than the going wage for the job and he will displace a previous employee. In practice, workers seldom behave in this manner and only attempt to move to superior employers when these employers are actually seeking workers.

⁶ More precisely, the P category includes those variables that influence the quit rate which are subject to direct control but which do not fall in the I or O categories of variables. Thus, even though the unemployment rate is affected by public policy, it is classified as an O variable because it is used to measure cyclical variations in the state of the labor market.

through time. Despite such a trend, few would suggest that skilled workers should be barred from the labor force in order to increase the quit rate. Other X factors include the sex composition and age distribution of the economy's labor force.⁷

Assuming that all the variables that affect the quit rate can be assigned to one of the categories I, O, P, or X, and assuming that the primary goal of voluntary mobility is an efficient allocation of resources, the model can be used to prescribe desirable relationships between the quit rate and the variables of the different categories. It is hoped that increased incentives to mobility, as measured by the I variables, would lead to a higher quit rate because presumably this mobility pattern will lead to the desired allocation of labor. The appropriate relationship between the quit rate and variations in the O variables would be less mobility when labor market conditions are adverse, since this relationship indicates that workers both learn about and respond to changing labor market conditions.

The desired relationship between the P variables and the quit rate is that an increase in the strength of the P program or institution, such as unionism, would not reduce the quit rate, because presumably this reduction would interfere with the most efficient allocation of resources. Finally, we are generally indifferent to changes through time in the amount of voluntary mobility associated with variations in the X variables because these variables merely measure the demographic characteristics of the labor force and are not subject to public control.

Again assuming that the quit rate is solely influenced by variables in the categories I, O, P, or X, there are statistical tests which can be used to determine if the amount of voluntary mobility has been declining through time and to determine whether any such decline in mobility is undesirable.

Let a time series analysis be made of the equation:

$$(2) \quad QR = f(I, O, T),$$

where QR, I, and O retain their previous meanings and T measures time. If the coefficient for T is negative and significant, the result is consistent with the proposition that, after adjusting for the incentives and opportunities for voluntary mobility, voluntary mobility is declin-

⁷ It is necessary to distinguish between the average age of the labor force, which is largely beyond the influence of direct public control, and the average age of the workers employed in the manufacturing sector, which might be influenced by public regulation of seniority systems and pension plans.

ing through time. While this result is disquieting, a complete evaluation of the time trend of labor mobility requires a statistical examination of the full model:

$$(3) \quad QR = f(I, O, X, P, T).$$

If T is no longer significant in equation (3), an examination of the coefficients for the X and P variables may enable a determination to be made of the causes of the decline in voluntary mobility. If, for example, the coefficients for the X variables are significant while the coefficients for the P variables are not significant, then one could conclude that the decline in mobility through time was not a matter of concern for public policy. On the other hand, if the P variables have been increasing through time and the coefficients for the P variables are negative and significant, then there is cause for concern. If T is still negative and significant in equation (3), a failure to include all relevant independent variables would not appear to be an inappropriate conclusion. A variety of other combinations of results for the tests for equations (2) and (3) is possible, but the discussion of the implications of any particular set of results will only be included as necessary in the subsequent sections.

II. A Time Series Analysis

This section first describes the actual variables used to represent the categories of the model. Then statistical results are presented for the 1930-66 period and for two subperiods: 1943-66 and 1949-66.

Variables Used in the Analysis.

Incentive Variables. Included in our regressions are two incentive variables. The first is a measure of interindustry wage differentials within the manufacturing sector: we expect that the quit rate will increase as differentials within manufacturing widen. The second I variable is a measure of the manufacturing-all economy wage differential. As manufacturing wages increase relative to wages in the rest of the economy, the quit rate in the manufacturing sector should decline since manufacturing jobs become relatively more attractive and consequently incentives for intersectoral transfers diminish.

Opportunity Variables. We also have two variables which measure the opportunity characteristics of the labor market. The first is the civilian unemployment rate. The hypothesis supporting its use is that a high rate of unemployment indicates to an employed worker that there are few jobs to which he can directly transfer and also

that there is a high risk of unemployment if he quits his job and enters the labor market in search of a new job.

The accession rate is also used as an opportunity variable. Accessions are additions to the work force, and the accession rate is a monthly measure of the number of additions per one hundred employees. The primary justification for the use of the accession rate as an opportunity variable is that workers are more likely to quit their present jobs if other employers are hiring.

Public Policy Variables. Union membership as a percentage of the nonagricultural labor force is used as a P variable. This formulation does not make an assessment of the importance of union mobility-inhibiting policies, such as the encouragement of seniority systems, as these have changed through time. Nonetheless, it is the best measure available of this aspect of factor market structure. Most commentators assume that unions have reduced mobility.

Other Variables. For the variables in the X category—those not subject to control by public policy—we have used nonproduction workers as a percent of total employees in the manufacturing sector. The percentage of all employees who are nonproduction workers probably should be negatively correlated with the quit rate because previous studies have revealed a general inverse relationship between mobility and socioeconomic rank. However, this relationship is partially due to involuntary turnover in lower occupations and since the present study concentrates on voluntary turnover, the normal relationship between skill and mobility may be absent.

The final variable is time, which is included in order to determine if there has been a change in the relationship between the independent and dependent variables during recent decades. Based on Ross's work, we have distinguished three subperiods within the 1930-66 period: the 1930-41 prewar period, the war and adjustment period of 1942-48,⁸ and the 1949-66 postwar period. In Tables 1 and 2, the periods are distinguished by the use of dummy variables. In Table 3, time is entered as a linear variable (with a value of 1 for 1949) to determine if there has been a change in the functional relationship within the period.

⁸ The years 1946, 1947, and 1948 are included since they still give evidence of abnormally high quit rates of the war and early postwar years. Ross, *op. cit.*, p. 908, argued ". . . that quit rates in wartime and immediate postwar periods are affected by short-run changes in the propensity . . . to move." The Korean War did not have such an impact. *Ibid.*, p. 905, footnote 2.

TABLE 1
Determinants of the 1930-66 Variations in the Quit Rate

	Equations ^a			
	A	B*	C	D
Constant	6.7805	3.7206	6.8741	4.1728
Intra-Manufacturing Wage Dispersion	-1.9569 (1.1100)		-1.9121 (1.0630)	
Manufacturing—All Economy Wage Differential	-2.4469 (2.9467) ²		-2.6296 (2.4218) ¹	
Log Unemployment Rate	-1.6523 (13.854) ²	-1.5121 (11.196) ²	-1.6515 (13.628) ²	-1.5772 (12.638) ²
Accession Rate	0.4082 (8.9304) ²	0.3563 (7.3933) ²	0.4120 (8.4775) ²	0.3495 (7.8693) ²
War Time Dummy	-0.1249 (0.4596)	0.2275 (0.8353)	-0.1609 (0.5239)	0.2933 (1.1220)
Postwar Time Dummy	-1.2911 (6.5840) ²	-1.0422 (4.9718) ²	-1.3229 (5.7012) ²	-0.9713 (5.0117) ²
Unionization			0.0029 (0.2673)	-0.0124 (1.4140)
Adjusted Coefficient of Determination	.9813	.9773	.9807	.9780
First Order Serial Correlation Coefficient	-0.0013	0.2322	0.0152	0.0959
Durbin-Watson Statistic	1.9895	1.5088	1.9597	1.7997

¹ Significant at the .05 level. (t-values in parentheses)

² Significant at the .01 level.

^a The results for each regression display the first order serial correlation coefficient calculated from the original data. When the absolute value exceeded .1, the data were transformed to take account of autocorrelated disturbances. Transformed regressions are indicated by an asterisk: the results for each of these regressions include the regression coefficients, t-values, adjusted coefficient of determination, and the Durbin-Watson statistic found after transformation for first order serial correlation. For details on the transformation process, see Hodson Thornber, "Manual for (B34T, 8 Mar 66): A Stepwise Regression Program," Technical Report No. 6603 (1966), Center for Mathematical Studies in Business and Economics, University of Chicago.

Statistical Results.

Tables 1-3 presents the results for various time periods for the model developed in Section I, as well as for a modified version which excludes the incentive variables from the analysis on the assumption that the available incentive variables may provide an inaccurate measurement of wage differentials.

1930-1966. Equations A and B, which correspond to equation (2), indicate that there is no difference between the prewar and war periods in the ability of the I and O variables to explain the level of the quit rate, but that the postwar predictions of the quit rate are systematically too high. The size of the postwar time dummy suggests

TABLE 2
Determinants of the 1943-66 Variations in the Quit Rate

	Equations ^a			
	A*	B	C*	D
Constant	2.8489	2.2704	6.3396	0.9340
Intra-Manufacturing Wage	-1.1312		5.7192	
Dispersion	(0.7172)		(2.3817) ¹	
Manufacturing—All Economy	-0.6471		-4.4477	
Wage Differential	(0.6459)		(3.5300) ²	
Log Unemployment Rate	-1.2553	-1.2403	-1.2600	-1.2029
	(7.7073) ²	(9.8935) ²	(9.9245) ²	(9.6539) ²
Accession Rate	0.6116	0.5587	0.5101	0.5743
	(11.530) ²	(11.253) ²	(9.9540) ²	(10.339) ²
Postwar Time Dummy	-0.8193	-0.8945	-0.6201	-0.8404
	(6.7303) ²	(6.2313) ²	(5.7772) ²	(5.8377) ²
Unionization			0.0369	0.0336
			(2.3507) ¹	(1.5038)
Nonproduction Employees			-0.0866	0.0041
			(3.0444) ²	(0.2243)
Adjusted Coefficient of Determination	.9946	.9910	.9969	.9915
First Order Serial Correlation Coefficient	-0.2162	-0.0998	-0.2902	0.0122
Durbin-Watson Statistic	2.2320	2.0304	2.3922	1.7729

Footnotes: See Table 1.

TABLE 3
Determinants of the 1949-66 Variations in the Quit Rate

	Equations ^a			
	A*	B	C*	D*
Constant	4.5877	1.5123	2.6391	3.0831
Intra-Manufacturing Wage	-13.832		-11.686	
Dispersion	(2.4228) ¹		(1.5333)	
Manufacturing—All Economy	-0.5095		0.3081	
Wage Differential	(0.2179)		(0.1035)	
Log Unemployment Rate	-1.2077	-1.1802	-0.9993	-1.0610
	(6.9254) ²	(7.0816) ²	(4.4322) ²	(6.3570) ²
Accession Rate	0.4671	0.5247	0.5173	0.4641
	(7.5890) ²	(7.1433) ²	(5.1774) ²	(4.9195) ²
Time	0.0370	-0.0088	0.0804	0.0572
	(1.1913)	(1.3784)	(1.8619)	(2.1011)
Unionization			0.0373	0.0162
			(0.9487)	(0.4668)
Nonproduction Employees			-0.0623	-0.1156
			(0.9293)	(2.8933) ¹
Adjusted Coefficient of Determination	.9828	.9525	.9832	.9830
First Order Serial Correlation Coefficient	-0.1999	0.0572	-0.2017	-0.2087
Durbin-Watson Statistic	1.7808	1.4274	1.8262	1.9141

Footnotes: See Table 1.

that after adjusting for the influence of the I and O variables, the quit rate is about one unit lower in the 1949-66 period than it was in the 1930-41 and 1942-48 periods. Since the average value of the quit rate for the entire 1930-66 period was only 2.2865, the decline in mobility indicated by Table 1 is far from trivial.

Equations C and D of Table 1 correspond to equation (3). There is no evidence that unions have caused the decline in voluntary mobility since 1930. Unfortunately, as revealed by the continued significance of the postwar time dummy in equations C and D, we were unable to determine what did cause the decline.

1943-1966. Table 2 begins with 1943 because of the change that year in the definition of the quit rate. The inclusion in the quit rate of information for nonproduction workers as well as for production workers—the only group previously covered by the statistic—enables us to use an additional independent variable, namely the percentage of all employees who are nonproduction workers. The addition of this variable does not materially affect our results.

Equations A and B of Table 2 again reveal that the I and O variables consistently overpredict the amount of voluntary mobility in the postwar period. The coefficient for the postwar time dummy is about .8, compared to the 1943-66 average of 2.6958 for the quit rate.

Equations C and D attempt to isolate the causes of the decline in mobility since 1943. The statistically most favorable results are in Equation C, which suggests that increased union strength is associated with a higher quit rate and that an increasing proportion of nonproduction workers is associated with less mobility. But even though every I, O, X, and P variable in our arsenal is significant in equation C, the negative coefficient for the postwar time dummy remains highly significant. In short, we cannot locate the cause of the apparent decline in voluntary labor mobility which has occurred since 1943.

1949-1966. Table 3 presents our attempt to determine if there has been a continuing decline in voluntary mobility within the postwar period. Given the limited number of observations, the adjusted coefficients of determination are reasonably high, but fewer variables have significant coefficients. The O variables—unemployment and the accession rate—remain highly significant, but the only significant I variable has a perverse sign. There is weak evidence that an increased

proportion of nonproduction workers is associated with a lower quit rate. Of central importance, there is no statistically significant evidence of a trend within the postwar period toward greater or less voluntary mobility.

III. Conclusions

One conclusion is that, after adjusting for the incentives and opportunities for voluntary mobility, there has been a substantial decline in voluntary mobility from the prewar and the war periods to the postwar period, although there is no evidence of a continuing decline within the postwar period. As indicated in the discussion of equation (2), this finding may be disquieting, but a meaningful evaluation of the time trend in voluntary mobility requires a consideration of the impact of the X and P variables.

Unfortunately, the use of the test specified in equation (3) does not enable us to reach a normative conclusion about the decline in mobility. Unionization (at least as we have measured it) does not explain any decline in mobility, and the increasing proportion of nonproduction workers only provides a partial explanation of the decline.

We have thus found an apparent decline in voluntary mobility in the U.S. manufacturing sector over the past several decades, but we have not found the reason. Part of the explanation may be due to the impact of variables which we are unable to include in this analysis, and we are currently working on other approaches to this topic which may enable us to identify better the determinants of voluntary mobility. For the moment, however, our research has only carried us to the point where we are certain the comforting conclusion reached by Arthur Ross that there is "little evidence" of "a new industrial feudalism" must be thoroughly reexamined.

JOHN ELLIOTT PARKER, 1934-1967

John Parker, co-author of this paper, died a few days before the IRRA meetings. Associate Professor of Economics at the University of Michigan, he had received his Bachelor's, Master's and Ph.D. degrees at the University of Wisconsin. His outstanding record as a student of labor economics at Wisconsin gave promise of an exceptionally productive scholarly career. His subsequent research on labor mobility and internal labor markets offered evidence of the potential fulfillment of that promise.

John Parker's untimely death on December 22, 1967 cut short the unfolding contribution of a productive young scholar; and it deprived many of us in Madison, Ann Arbor and elsewhere of a continuing association with a highly valued colleague and close friend.

COMPUTER AIDS TO THE PLACEMENT PROCESS FOR INTERNAL AND EXTERNAL LABOR MARKETS *

FRAZIER KELLOGG

M.I.T.

There is considerable logical attractiveness in the proposition that computer technology can be effectively applied in the realm of labor market placement problems. By some, the computer is viewed as a device which can store and manipulate a huge volume of information in a central location, and which can be interrogated from decentralized locations through various kinds of communications devices. Serving in this capacity, the computer will make order out of what is taken to be the chaos of fractionalized and informal flows of information about jobs and job seekers. Adam Smith would have been delighted with the prospects because complete and instantly available information are absolutely essential ingredients to the effective operation of markets.

At a somewhat more specific level of logic, there are those who have viewed computerization of area labor market placement information as a partial solution to those nebulous but persistent problems of unemployment and under employment. As the Report of the National Commission on Technology, Automation and Economic Progress observed—

“. . . There is simply no place in any local labor market, let alone on a national or regional basis, where individual job seekers or employers can discover the full range of possible jobs or employees available.”¹

and again that—

“Frictional unemployment can be minimized only if workers can be brought together efficiently.”²

* Based on study in the Industrial Relations Section, Sloan School of Management, M.I.T., and supported by grants from the Ford Foundation, the U.S. Department of Labor, and the American Foundation on Automation and Employment. Mr. Kellogg was a research associate with the faculty for the 1966-67 academic year.

¹ National Commission on Technology, Automation and Economic Progress, *Technology and the American Economy*, p. 50.

² *Ibid.* p. 49.

Some time before the proposal of a national system, a variety of organizations were enthusiastically exploring what the computer had to offer for increasing the effectiveness of manpower planning and management. Much had been done with the computerization of payroll and other housekeeping chores associated with personnel management, but the problems of assessing manpower capability and reassignment had not been extensively explored. However, the number of organizations embarking on exploratory design efforts in these areas was expanding rapidly. The motivation for getting involved in this kind of activity probably varies all the way from the presence of excess computer capability and substantial software staff in an organization, to real problems such as the manpower dislocations experienced by the aerospace industries due to dramatic changes in contract content. Some of the more specific hoped-for benefits to be derived from computer based aids to personnel management include reduced turnover, better utilization of already employed manpower, and reduced dependence on costly recruiting in the external labor market.

It is my impression that computer based aids to the placement process in both internal and external labor markets are still very much in the conceptualization and design stage. In talking with persons directly involved in this activity, it is sometimes difficult to ascertain what stage of development a given system is in. In short, it is difficult to tie down the state of the art.

It is possible, however, to get a feel for the kinds of problems to be encountered in the design, implementation and operation of matching systems. For one matter, it is appropriate to ask what kinds of talents and backgrounds are employed in the design of a system. Many times the design team is comprised exclusively of information sciences and systems talents. The absence, for example, of those with experience in personnel operations or labor market operations robs the design team of two important ingredients: one, a continuous focus on the uses a system is supposed to serve, and another, the ability to communicate effectively with those who will eventually be responsible for operating the system.

Another major problem lies in determining the information content of the system. Aside from the more obvious question of how skills are described, there is the question of how relevant skills are in the placement process the system is supposed to serve. To state that "matching systems don't place people" and that "they are simply a

tool" may appear to belabor the obvious. Nonetheless, preoccupation with the mechanics of the system itself can, and does, get in the way of maintaining a focus on the placement process. As far as information content is concerned, this means extensive communication with eventual users of the system, because people interpret the same words differently, and beyond that give different weights to stated qualifications in reaching a placement decision. It may well be a fact that common understanding and usage of descriptors can only be obtained after a substantial period of operating experience.

One more general comment. A member of the MIT workshop last winter commented that—

“. . . A system, once it is ready to go, is obsolete. It is constantly changing, both in content and use. You are never finished.”

This is not intended to hold up the spectre of repeated frustration and ultimate futility as far as computer based matching systems are concerned. It is to suggest, however, that the usefulness and eventual effectiveness of the tool will be the result of a rather long, and probably expensive “hands on” learning process. But more importantly, perhaps, it may be that we learn substantially more about the placement process than we now know by virtue of trying to aid it with computers.

All matching systems have the common property of matching people characteristics against job requirements, differences in information content notwithstanding. Beyond that, the differences between systems lie largely in the uses they are put to, or the uses they are being designed for. In terms of usage, organizational systems would be more properly described as manpower assessment and assignment systems. They are not matching systems in the sense that employees can look at an array of vacant jobs for which they appear to be qualified on the strength of a computer match of their characteristics and/or preferences with requirements of available jobs. This simply reflects the dominant personnel posture of most managements which is best expressed by Ted Alfred as “job oriented rather than people oriented.”³ Very few organizations have what is called an open posting of jobs where any employee who feels he is qualified can apply

³ See Theodore F. Alfred, “Checkers or Choice in Manpower Development,” *Harvard Business Review*, July–August, 1966.

and will be interviewed. One company which does have an open posting personnel practice does not yet have a computer based matching system. However, since employment is growing so rapidly in the company, computer based aids are being sought to maintain the practice as well as the philosophy of open posting. The practice of open posting is demanding of interview and counseling functions in the placement process, and in fact many managements argue against an open posting practice because of the high costs they feel it entails.

There is reason to believe, or at least speculate, that placement decisions have a highly subjective element. This is reflected in the open posting environment where people who apparently qualify for promotion vacancies prefer not to opt for them, and in the job oriented environment when persons with what appear to be obvious skill and experience qualifications are passed over in favor of someone with far less tangible, but apparently more obvious assets. Moreover, in the job oriented environment, where information about opportunities is often informal, does the hiring person place a premium on someone who has taken the initiative to explore the opportunity further? Thus, a very real problem for systems designers entails judging how, if at all, the information used for the match routine should provide for subjective elements in the placement process. Or conversely, what objective information should the system contain to indicate that placement interviews should be initiated? Taken together, where does the mechanical matching of characteristics end and the personal contacts involved in the placement process begin?

It has been said that most managements have a policy to "promote from within." Matching systems are, therefore, viewed as a device which helps managements make better manpower assessment and assignment decisions. One presumption which supports this view is that the computer can produce a complete list of people either objectively equipped to fill a position, or eligible for promotion, or both. In the same breath, it is presumed that personnel staffs can't cope manually with the volume of records that this activity entails, or can't do the job fast enough. Another presumption is that by performing a more thorough assessment and reassignment of already employed manpower, managements will be less dependent upon expensive recruitment in the external market, or at least have a more accurate picture of what sources needs must be filled from. What management has gained is more complete and immediately available

information. It may also have gained additional chores in the placement process by generating a greater number of placement interviews and discussions with hiring and releasing supervisors. Moreover, if the philosophy of promote or hire from within is operationally enhanced by an effective matching system, the volume of job changing transactions might well increase considerably if one considers that filling a vacancy with an employee sets off a chain reaction of vacancies behind the moving person.

Organizational systems are conceived of as a tool of centralized personnel management and are presently concerned with high-talent manpower. Most organizations engaged in the activity are large, and have geographically scattered units, some of which may be individual profit centers. Even where units are not scattered, most elements of the personnel function are often decentralized. Whatever value top management sees in organization-wide use of high-talent manpower, the practice may be viewed by units as a threat to their operating autonomy. Specifically, what happens if one unit is reluctant to release an employee to another unit in the organization, especially in the individual profit center situation? Or, what happens if a unit sees a vacancy as a promotion reward for one of its own employees and central management decides to fill the position with a person from somewhere else in the organization? These questions are raised only to suggest that the rationality gained by central management, may fly in the face of the more subjectively oriented local custom which are major determinants of how organizational or internal labor markets now behave, even at their most change-oriented level.

I'd like to make two observations about the relationship of internal labor markets to external labor markets which are based on interviews which had nothing to do with matching systems. One has to do with a phenomenon which might be called variations in the degree of potential upward mobility for a given individual. A program in the Bedford-Stuyvesant section of Brooklyn is training disadvantaged youth for jobs in the food service industry. The training includes instructions in all jobs from kitchen helper to first cook. None of the youth I spoke with expected to enter the job hierarchy at the first cook level, but were impressed with what they took to be the promotion possibilities. However, discussion with an industry representative produced the judgment that promotion, for one reason or

another, was slow in any given unit of a food service organization. Rapid promotion was, therefore, viewed as a function of movement between organizations. Whether or not job seekers and employers behave according to these observations is one matter. As far as employers are concerned, however, there is a fear that participation in a computer based area labor market system will open the door to mass loss of valued employees. One may design the most beautiful matching system in the world, with spectacular dry run success, only to fail operationally because employers will not participate out of a fear that they have more to lose rather than gain. Objectivity, trusted to a fault by our professions, may be feared to a fault at the operating level.

Another view of prospective internal mobility has to do with what a high school diploma represents to an employer. When an employer requires a diploma as a condition of employment, he isn't simply filling a job, he is employing someone who, in his mind has supplied an initial indication of promotability, trainability, and attentiveness, etc. In short, he is looking for someone who is potentially worthy of developmental investment. The placement at stake, therefore, is not just a matter of finding someone who is qualified for the job. Obviously all jobs are not considered career entry points, but for matching system purposes, it seems to me worth asking whether or not the appropriate distinction should be made. With all of the discussion which has centered on the relevance, or lack thereof, of education credentials to employment, I was struck with how tenaciously employers still cling to the requirement—even though tight labor markets were supposed to make them reconsider.

A major problem confronting the development and use of matching systems in external markets is the fact that a national market, much less a local or regional one, is simply not a homogeneous entity. Moreover, labor economists are not really sure what part objective information plays in the placement process, but the problem is compounded by the dearth of dialogue between those who are involved in labor market research and those who are designing matching systems.

A substantial and rather obvious problem confronting the implementation of an area system, whatever its dimensions, is that of getting employers to list their vacancies. As George Arnstein mentioned at the MIT workshop, this entails employer and job seeker confidence

in the organization sponsoring and operating the system.⁴ As matters now stand, there is something less than total confidence in the U.S. Employment Service. But even if the confidence did exist, employers may fear that they will lose more employees than they gain. This immediately raises the question of which job seekers are allowed to be in the system—all or just those who are unemployed? If all job seekers are in the system, should the search routine first go through the unemployed as a matter of public policy?

Assuming for the moment that employers will list their vacancies with the system, there are a host of problems associated with establishing a commonly understood system of job and people characteristics. As matters stand, there are probably as many individual descriptor systems as there are employers. When employers list jobs with the USES at present, that agency performs the task of translating those individual descriptors into the common language of the Dictionary of Occupational Titles. The sponsoring agency is left with that chore unless it can get employers to submit vacancies described in the common language itself. The national professional systems now in operation provide employers with forms for that purpose. It may be of some interest to note that none of the systems now in operation make use of the DOT, and to my knowledge only one of the planned systems will make use of it. The chief complaint seems to be that a comprehensive and detailed language such as the DOT is cumbersome. I don't think this should be interpreted as a criticism of the DOT as such. Any comprehensive set of descriptors is voluminous. One large company with an internal matching system has a set of 3300 descriptors. Be they ever so burdensome in this sense, there may be dangers in not having enough detail. Transferability of skills and interoccupational mobility are viewed as key ingredients to a placement process which attempts to preclude, or minimize the duration of, unemployment, whatever its cause. In fact, concern about the unskilled disadvantaged labor force has led to exploratory research directed at eliciting avocationally developed skills in addition to those obtained by education and/or work experience. Putting aside, for the moment doubts about the degree of relevance of skill and objective information to the placement process, let's assume that detailed charac-

⁴ See "Computer-Based Job Matching Systems: An Exploration of the State of the Art and the Proposed Nationwide Matching System." Mimeographed transcript of a two-day workshop at M.I.T., January, 1967.

teristics are not only necessary but desirable. This would imply that computer based aids to the placement process must facilitate the effective use of detailed information. This needs to be said only because there are very real pressures, economic, methodological, and technological to back away from the problem and perhaps even deny its existence.

Alternatives to the occupationally comprehensive area system approach have been discussed. Some of the present systems are oriented toward a highly specific clientele, or a sort of natural market in which job seekers are considering a rather narrow and homogeneous band in the occupational spectrum. In the interest of avoiding what appears to be the cumbersomeness of an occupationally open system, and possibly duplicating services already available, it might be wise to approach the design of a public area system as a series of independent subsystems which are based as much as possible on whatever natural markets there are—occupational, industrial, or geographic. This approach would have the apparent added advantage or relatively common understanding by both employers and job seekers of the descriptors being used. But then again, this approach might have the effect of putting unwanted constraints on inter-occupational mobility. Another approach would be to design separate pilot projects which try both the labor market subsystem approach and the total occupational approach.

I have already mentioned that most of the activity in this field is directed at the upper end of the occupational scale. Since much of the concern and support for developing a public system or systems stems from an interest in reducing unemployment, there appears to be what might be considered a gross misallocation or nonallocation of resources. To my knowledge, only one system has been designed which is conceptually geared to the placement problem of those who experience most of the unemployment. Incidentally, it is also the only system to my knowledge which uses the DOT. Unfortunately, in my opinion, this system design has never been given a pilot project test. If for no other reason than it is the only system with this orientation, it should be implemented. The understanding to be gained from working with it should provide valuable and much needed insights into the placement problems of the disadvantaged and the kinds of placement staffing which will be required.

INTRA-PLANT MOBILITY OF NEGROES IN THE AEROSPACE INDUSTRY

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The movement of Negroes within the plant or industrial organization is governed by a varied and complex set of factors. Of course, the same might be said for the intra-organizational shifts of any group of employees, white or colored. Race, however, adds problems and complexities all of its own which are occasionally obvious, but more often are intertwined with socioeconomic and industrial relations factors, and may therefore tend to be somewhat obscure. Studies of the racial policies of various industries, now under way as a result of a Ford Foundation grant to the Industrial Research Unit of the Wharton School, have progressed sufficiently so that, by way of an advance report, I can comment on Negro in-plant movement in one industry—*aerospace*.¹

AEROSPACE

Seven months before the Japanese attack on Pearl Harbor, *Fortune* magazine reported that the aircraft industry had “an almost universal prejudice against Negroes . . . you almost never see Negroes in aircraft factories . . .”² Today few industries are working more assiduously than aircraft and related aerospace companies to expand Negro employment opportunities.³ Yet it is the unusual aerospace company which has been able to raise its percentage of Negroes to 8 or 10 percent of a particular facility. The reasons why this is so tell us a great deal about problems of Negro employment, upgrading the intra-plant movement, and variations from industry to industry or plant to plant.

The aerospace industry employed an average of 1,298,000 persons

¹ The paper read at the joint IRRA-AEA Meeting in December, 1967, contained an analysis of Negro intra-plant movement in the automobile, pulp and paper and petroleum industries, as well as in aerospace. Space limitations required that this paper as published be confined to one industry.

² “Half a Million Workers,” *Fortune*, Vol. XXIII (March 1943), pp. 98, 163.

³ The definition of just what is defined as “aerospace” is not precise. Basically it includes aircraft, missiles, and related aero and space hardware manufacturing and research, but much of what is also electronics is inevitably included in the data.

in 1966, r 6.8 percent of total manufacturing payroll.⁴ Plants of this industry are located in all major regions of the country. Four-fifths of the product of these plants are purchased by the Department of Defense, the National Aeronautical and Space Agency or other governmental bodies. Commencing in World War II, and especially strong since 1961, the pressure of these government agencies has been heavy on the industry, first to open jobs to Negroes, then by "affirmative action" to increase Negro participation in the better jobs. The progress has been great, but disappointing to those who might expect a greater percentage of Negroes. The reasons are several.

Job Structure

First and foremost is the character of work in aerospace. Much of the work is of a high job shop precision level. Jobs are not broken down to semiskilled components when one builds a few Mercury capsules, a short-run order of missiles, or one-half dozen experimental planes. Yet much of the industry does just this. Such work requires highly trained mechanics, and unfortunately the Negro community has few of these.

There is some long-run work, to be sure. Companies having such orders are able to break down jobs into semiskilled components, and train relatively unskilled personnel as sheet metal workers or machine tenders to handle the repetitive work. It is noteworthy that our research indicates that the more repetitive type operations which exist, the higher is likely to be the percentage of Negroes. But where high precision, job shop skills are required, few Negroes make it up the occupational ladder.

A Negro production worker remarked to my son who is working in a chemical plant that "maintenance work was out of bounds." Finding either Negro craftsmen or apprenticeship candidates is a frustrating search. Past discriminatory practices, lack of Negro family connections to "pick up a trade," absence of a craft tradition in the Negro community, except in the southern trowel trades, and now the mores of the community pressing youngsters, white or black, to a mediocre college education instead of a more useful craft training, leaves high paid maintenance jobs with little Negro representation. Negro applicants from the South or from urban slums lack the necessary arithmetic or communications skills to qualify for apprenticeships. In aerospace,

⁴Aerospace Industries Association of America, Inc., *Aerospace Facts and Figures, 1967* (Fallbrook, California: Aero Publishers, Inc., 1967), p. 19.

as in most industries, skilled maintenance work, except for a few welders, carpenters, and trowel tradesmen, remains largely a white man's preserve.

Negro secretaries and other clerical help are much in demand in aerospace as in other industries. In the South, progress for female employees lags in the plants, but is somewhat better in the offices. In the North, many companies find Negro female sheet metal employees superior in diligence, productivity and attendance to males. But there has been little upgrading of Negro females, and not too much of white females either in this or other industries.

Aerospace companies have scoured the country looking for professional and technical employees. But Negroes have traditionally not been oriented to engineering as a profession. Bright Negroes seeking professional education and attainment have only recently gone into either engineering or work in industry. Considering this fact, the few who are found in the aerospace industry are a sizable percentage of those available. Several have very responsible positions, but many who graduated from segregated schools find their background insufficient for advancement, and probably would not even be employed were it not for governmental pressure.

The push to managerial jobs is slow. Negro supervisors are no longer rare, but not commonplace either. They now supervise mixed crews all over the country, but advancement beyond the first or second line is still relatively rare. Few Negroes have the modern "plumbers' license" for managerial development—the MBA from a prestigious graduate business school, and as those of us from such institutions know so regretfully, few are enrolled although our efforts to improve our position rivals that of the aerospace industry.

Locational Factors

We have already noted that the aerospace industry is located in every major region of the country. It is, therefore, found near the great concentrations of the Negro population in both the South and in the major industrial centers of the North and West. This superficially would appear to make the industry accessible to the Negro, who desired employment in the industry. In actual fact, the locational problems are severe.

The very nature of the aerospace industry requires most plants to be located on the outside perimeters of cities, preferably near an airport. In some cases, the facility must be even more remote.

Martin's Denver missile operations are actually 25 miles outside of the city in a semiarid pasture. Moreover, the need for remote test facilities draws plants away from cities. Again Martin's development of the Denver site, and United Aircraft's Florida plant located to be near Canaveral are illustrations of expansion that would have been more helpful to Negro employment if they had occurred in Baltimore or Hartford, Connecticut. Similarly, when World War II ended, a number of Southern California aircraft manufacturers abandoned facilities in older, heavily populated areas of Los Angeles and moved all their operations to those outside the city limits.

The significance of the plant location can be now well illustrated in the Southern California industry. The few plants located either close to Watts or on direct public transportation routes generally have two or three times the proportion of Negroes that those have who are located in the outer county areas. The same companies and policies are involved. Interestingly enough, however, the outlying plants have a less skewed inplant distribution of Negroes. These outlying plants are either new, or newly integrated. The practice of confining Negroes to certain jobs never existed, and was easier to avoid than where it had become institutionalized. Moreover, the type of Negro who can find a home in the suburbs, or is willing to commute great distances for a job, is usually highly motivated as well as able, and therefore capable of accepting or gaining promotion and upgrading opportunities.

Despite some exceptions, however, the farther from center city is the aerospace plant, the fewer Negroes are found on its employment rolls. Workers who have had little experience, motivation, or assistance do not know enough to look for work at long commuting distance; and superior workers usually do not have to commute long distances to obtain good jobs with promotion possibilities. Consequently, both employment and upward plant movement in the industry are restricted by the necessities of plant location in relation to the central city where Negroes are concentrated.

Seniority Systems

The seniority systems in the aerospace system are quite varied, but in general do not appear to restrict Negro advancement. In a few cases, the lines are long and narrow, but mostly seniority districts tend to be broad with families of jobs clustered in one district. There are occasionally plant-wide applications, and in some situations, trans-

fers among plants of one company are part of the collective agreement. The volatility of employment as a result of government contract awards and cancellations insure maximum interest in job security and a general approach to a broad seniority policy.

In general the wider the seniority district, the greater the opportunity for Negroes for upgrading and advancement. As the most recently hired and the group which most likely has the fewest skills, Negroes profit substantially from broad opportunities for movement. But, of course, a wide seniority progression system has its corollary disadvantages, too. When employment turns downward, it provides the broadest opportunities for bumping. With Negroes both relatively new and still overly concentrated in the semiskilled and relatively unskilled jobs, they are then especially vulnerable.

Job bidding is widely used in the industry to fill higher jobs. Company officials have repeatedly complained that Negroes appear more reluctant to bid on jobs than whites and often require great encouragement if they are to bid. Lack of experience in industrial practices, fear of moving from a job situation which is acceptable to white fellow workers to one which is not, or lack of motivation, are possible reasons for this.

At least one company in the industry does not apply straight seniority in either promotion or layoffs. One of this company's facilities is under considerable government pressure to increase its percentage and distribution of Negro employment. Recently employment declined in this facility, but the percentage of Negroes increased. Whether this resulted from "affirmative action" or discrimination in reverse, or whether these terms are distinctions without differences, could not be ascertained.

Training

The aerospace industry is accustomed to training because of its sudden employment shifts. Vestibule training—teaching basic shop behavior, arithmetic and English—is frequently done by the companies themselves or indirectly through support of school programs or those of such organizations as Opportunities Industrialization Commission. Closely related are the programs for training on simple sheet metal assembly or other entry jobs which often continue as long as employment is expanding. Special efforts have been made by the industry to include Negroes in these classes since 1962. Their success is indi-

cated by a steady increasing percentage of Negroes in most aerospace plants.

In addition, however, few industries offer so much training for advancement and upgrading. The rapidly evolving technology compels much of this if the work force and supervision are to be kept current. But this training also provides tremendous opportunities for those who wish to move up the occupational ladder. Negro involvement in such programs is substantial, but nowhere near the ratio one might hope or expect. Motivational factors appear very important. Willingness to contribute one's time to train for a better future depends on background, expectations and genuine belief in opportunity. That all three are lacking to some degree in the Negro community is not difficult to understand. Until training opportunities are grasped, however, Negro upgrading will not achieve its potential in aerospace or in any other industry.

Other Factors

There are many other factors which determine upgrading and intraplant movement of Negroes in the aerospace industry. Company dedication to equal opportunity, of course, varies, and plays a significant role. Union policy is also of importance, but is generally more passive than active in this industry. Both of these factors should be discussed in detail, but cannot be here for lack of space and time.⁵

Government policy has been already mentioned. It must be credited with a large role in motivating employers and keeping the significance of the problem in the forefront. But the government is not a single dimensioned pressure force. The government is also the customer, and it is the policeman. As customer, it demands, as it should, zero defect work. Life is involved and quality of workmanship cannot be compromised. The industry has to certify the capability of workmen on many jobs. Social programs are admirable, but there is no substitute for experience and ability. Affirmative action can go only so far, and educational, cultural, attitudinal deficiencies cannot be either glossed over or overcome quickly. The unfortunate plain fact is that the higher the qualifications which are required, the fewer Negroes are qualified and the more difficult it is to gain qualifications by short-run training or educational programs.

⁵ My forthcoming study, *The Negro in the Aerospace Industry*, will take up these matters, and others, in detail.

Much of aerospace work is under tight security. Jail or arrest records at one time automatically meant clearance denials. Given the facts of city slums and Negro-police relations, this was a powerful bar to Negro advancement, or even employment, in the industry.

Now a more sophisticated approach is the rule. Arrest records are scrutinized and the minor infractions discounted. It appears government security and equal opportunity pressures are today more synchronized in approach than formerly.

Cyclical Aspects

As in most industries, Negroes have made their greatest gains in the aerospace industry in times of full employment, and by the very nature of the industry, this means in times of war. The barriers were broken during World War II; serious upgrading occurred during the Korean War; and now the impetus of Vietnam, on top of the space program, has further expanded opportunities for development and promotion. But this has not been a smooth transition. Huge layoffs occurred after World War II, after the Korean armistice, and again in 1958, affecting the whole industry. Depending on the ebb and flow of government procurement, one company expands, another contracts, a plant may be abandoned or opened up.

As the last hired and the most recently promoted, Negroes have found that their gains were washed out time and again. Yet in each cycle, further gains were made up the occupational ladder; today's have been the greatest. A long-run view can, therefore, tend to be optimistic. Yet the institutional factors affecting Negro employment and upgrading in the aerospace industry are formidably negative. The average Negro employment in the industry will surely remain below 10 percent in the foreseeable future, and upgrading of Negroes will move at a slower pace than employment because the educational and skill qualifications, which the industry cannot waive for the obvious reason of human safety, are still lacking in our Negro population.

CONCLUDING REMARKS

It is apparent from the brief analysis that the factors which determine the movement of Negroes within the plant are much the same as those which control Negro job opportunities. First and foremost is an expanding economy. Negro employment and advancement cannot improve unless the demand for labor continues to rise.

The supply side of Negro labor is deeply disadvantaged by inferior education, training, and experience. The aerospace industry must require skill and educational attainments that few Negroes possess, and there cannot be legitimate compromise with these requirements. Acquiring skills and education is a time-consuming process, so that upward job movement in this industry will continue to lag as long as the Negro educational and skill gap endures.

Discrimination and motivation go hand in hand. Because of the former, the latter is often lacking. Opportunities for promotion, for training, or for improvement are not grasped. The promotion process is thus slowed, and discrimination often charged. Inexperience in industry, lack of help in setting goals, and the difficulty of breaking with the past all combine to resist progress and upward job movement.

Past discrimination is difficult to overcome. Where Negroes are employed only for laboring jobs, they often lack background, capacity, and motivation to grasp new opportunities. It is expecting much to believe that a man who knew that he would always be a laborer ever to believe that he may be promoted if he takes training. Forty acres and a mule can be promised once too often to be taken seriously.

Opportunities appear greater in new plants. Rigidities are not set, custom can be violated without resistance of existing personnel, and past mistakes avoided. New plants may, however, be farther from cities, the new centers of Negro population, and here lack of public transportation and housing discrimination curtail Negro job and job advancement opportunities.

Throughout industry, the crafts remain traditionally white. Yesterday they were simply closed to Negroes. Today qualified Negroes, like most qualified whites, go to college or take advantage of other, often actually less remunerative, opportunities. It is ironic that the country faces a genuinely grave shortage of craftsmen, but its mores and customs are working to prevent Negroes from helping to fill this great need and very well compensated work.

Government pressure has greatly aided Negro employment and is now pushing upgrading heavily. Fortuitously, this policy has developed in a period of rising employment, which it must have to be effective. But the great skill and educational gap remains, and one sees too little evidence of success in combating that, although it cannot be judged in the short run.

Seniority can be a great force in aiding Negro advancement, or in curtailing it. In aerospace, seniority has generally been favorable.

Many other factors are involved in Negro intra-plant movement. Company policies can radically affect it; so can plant location, union policies, and a host of other variables. Within the next two years, we hope to be able to explain for a score or more of industries why some are more hospitable to Negro employment and advancement than are others, and why some companies within the same industry have vastly different racial employment and upgrading policies than do others similarly situated.

DISCUSSION

JOSEPH C. ULLMAN

Purdue University

In his report on computer aids to the placement process, Frazier Kellogg makes five major points. *First*, we are still largely in the conceptualization and design stage in this field; *second*, there are many difficult problems involved in implementing computerized matching systems; *third*, we haven't moved very far toward solving these problems; *fourth*, attempts to implement computerized matching systems will help us learn more about the placement process; and *fifth*, it will be a very long time indeed before we get to a "one big system" situation in which all people-job matches are computer-aided.

I would like to comment on each of these major points. I emphatically agree that we are still largely in the conceptualization and design stage. Existing systems are rather primitive, and the number of computer-aided matches currently being made is insignificant. I don't believe that it would be rash to assert that the *Wall Street Journal* and the *New York Times* probably account currently for more external matches than do all of the computerized systems together.

It is also clear that we will learn more about the placement process as we attempt to apply the computer to matching. For example, we must learn what data are relevant to placement if we are to provide the computers with the correct inputs.

I agree with Kellogg that it will be a very long time before we get to a national system in the sense that all matches are computer-aided. In fact, concern over the difficulties to be encountered in a national system seems to me to be worrying about a straw man. I don't believe that many of the people working with these systems are thinking in terms of one big system for all, even for the future. What is usually visualized is market by market implementation. There are probably many markets in which the present matching system is so efficient that computerization does not make sense. For example, the Employment Service's contractor can presently see little to be gained from computerizing the placement operation of the Service's Garment Trades office in New York City.

My point is that we should not judge the practicality of computer-aided matching in terms of one big system concept.

I especially appreciated Kellogg's thoughtful exposition of the problems associated with computer-aided matching, although I believe that some of the problems he perceives are not unique to computerized systems. For example, organization-wide use of high-talent manpower conflicts with the desire of individual managers to stockpile talent, whether or not computers are involved. Similarly, the relationship between the Public Employment Service and other placement organizations is a general problem, not peculiar to computer-based matching.

In this connection, it seems to me that the unique problem caused by computerization is that it forces us to make the objectives of the matching system explicit. Let me illustrate this with an example. Maximum exposure to opportunities and maximum placements are competing matching strategies. Suppose that a placement counselor has two job orders A and B, and two applicants 1 and 2. Assume further that both applicants fit order A, but only applicant 2 fits order B. What is the placement counselor to do? If he tells both applicants about job B, applicant 1 may take job B, and applicant 2 will still be unemployed. If he tells only applicant 2 about job B, he may be depriving applicant 1 of the better opportunity.

Under ordinary arrangements, the placement counselor can probably take his choice of strategies, and no one will be the wiser. However, in a computerized system such matters become explicit policy questions.

Kellogg sees one problem as being more serious than I believe it to be. He is concerned that employers will boycott computer matching systems because of fear that they have more to lose than to gain from such systems. However, such a situation could only occur if most employers decided to boycott the system. The best strategy for the individual employer would seem to be the opposite from that suggested by Kellogg: use the system intensively to offset losses to other employers. It seems to me that a widespread boycott is an extremely unlikely event. Consider an analogue: Do you know of any cases in which employers used a similar rationale for refusing to place help-wanted ads in newspapers?

It is in the area of the present state of knowledge that I want most to add to Kellogg's remarks. This will come as no surprise to him, because he noted in his paper that no two people seem to agree concerning the present state of the art. I would like to elaborate on

this in two respects: the state of knowledge concerning selectors, and the status of the United States Employment Service system.

Kellogg suggests that the selectors being used in present computer-based systems are probably gross over-simplifications of the data used by people in their actual placement decisions. He further asserts that one aspect of this is that placement decisions probably have highly subjective elements, currently being ignored, and difficult for the computer to handle in any case. An example would be the fit between an executive's personality and a particular organizational environment.

I am in complete agreement with both of these points, but I believe we can say more than this. In brief, I do not believe that we are giving the computer a fair shake because we are not telling it everything we know. Let me suggest two examples. The present professional-technical level matching systems with which I am familiar use salary required and geographic preference in terms of region as two of several selectors. These systems might describe an applicant as desiring a \$12,000 salary and an East Coast location. In all likelihood, however, this is an incomplete statement of the applicant's preferences with respect to salary and location. His real (and known) preferences are likely to be something like this: If East Coast, \$12,000; if Boston, \$10,000; if not East Coast, \$14,000. It is not beyond the computer's ability to cope with this more complex set of preferences, but it is not being told the whole story. Thus, of course, the computer cannot provide a complete set of openings that match the applicant's real preferences.

A second example relates to employers' preferences. Any placement counselor worth his salt knows that the sequencing of referrals is a crucial aspect of successful placement. If the last six machine tenders I referred to employer X were of outstanding quality, I may now be able to induce X to take a couple of less advantaged people. However, if X took some poorly qualified people from me last week, I had better refer only high-quality people today. It should be possible to program the computer to make similar decisions, but we are not presently trying to do this.

In other words, given our present state of knowledge, we could do a lot better job of building selectors than we are now doing. We probably still cannot do as well in most markets as a highly capable person can do, but we can come much closer than we are now.

I would like to spend a couple of minutes talking about the U.S. Employment Service system. I suppose that I should preface these remarks by cautioning you that I have been involved in a small way with the development of this system as a consultant to both the Employment Service and the contractor.

Kellogg's implication that the U.S.E.S. has committed \$4 million to design and pilot project efforts toward a national matching system is misleading in two respects. First, the present \$3.8 million contract calls for much more than a matching system. In addition to a matching system, this expenditure will provide a management information system and a labor market information system. It is not possible to accurately allocate the \$3.8 million among these three functions, but even including the \$1 million spent through Fiscal Year 1967 on the LINCS system, I do not believe that it is reasonable to assign \$4 million to the matching system. Both the management information and labor market information systems are very important, and together they may turn out to be more important than the matching system.

Second, it should be pointed out that 27 percent of the \$3.8 million contract is allocated to developing a New York City Area system. This system is being designed to conform as closely as possible with natural markets within the Greater New York City area, along the lines of Kellogg's suggestions. Thus, a significant portion of the E.S. expenditure on matching is aimed at independent area systems rather than at a national system.

Finally, I share Kellogg's strong conviction that prospects for effective computer-aided matching systems are dependent in part on getting dialogue underway concerning the problems faced by these systems. Kellogg's paper offers a real contribution as a beginning to such a dialogue.

DISCUSSION

MYRON L. JOSEPH

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(a) *Northrup Paper*

What Professor Northrup may consider realism sounds to me like defeatism. Of course past discrimination is difficult to overcome, but we cannot simply accept the continued predictions of a bleak future for Negro advancement. The question is not simply what current conditions, beliefs and practices stand in the way of the Negro, but rather what things have been done, might be done, and could be done to change the situation.

In aerospace Professor Northrup points out that the Negro community has few highly trained mechanics, and that past discriminatory practices, lack of family connections to pick up a trade, and lack of education, help explain why skilled maintenance work remains a white man's preserve. But why aren't more Negroes included in the industry's training programs at every skill level, including the craft apprenticeships? What efforts have been made to make up for insufficient backgrounds, to create expectations of promotion and a real belief in opportunity? Professor Northrup says that until training opportunities are grasped . . . Negro upgrading will not achieve its potential in aerospace or in any other industry. Of course, but what efforts have been made by the Companies and unions to insure that the opportunities will be understood and grasped?

The paper describes the role of plant location in employment experience and concludes that the farther from center city is the aerospace plant, the fewer Negroes are found on its employment rolls. It can't be distance alone, since commuting has long been a part of industrial life. Professor Northrup claims that:

"Workers who have had little experience, motivation or assistance do not know enough to look for work at long commuting distances; and superior workers usually do not have to commute long distances to obtain good jobs with promotion possibilities."

Where is the responsibility? If Negro workers interpret a move to the suburbs as escape to whiteman's land, they are not likely to

come looking, not because they don't know enough, but because they expect discrimination. Professor Northrup explains that superior employees don't have to commute, but in another context he argues that the type of Negro who is willing to commute is highly motivated as well as able. What efforts have the companies made to recruit in center city and to publicize jobs and promotional opportunities for Negroes in suburban plants? The paper reports that "suburban plants near Detroit have a labor force that is 25 to 30 per cent Negro because they became known to the Negro community as 'good places to work.'" What have the aerospace companies done to create that impression?

Professor Northrup's gloomy predictions for Negro employment and upgrading in aerospace are explained by the lack of "educational and skill qualifications, which the industry cannot waive for the obvious reason of human safety, . . ." What does this mean? Are Negroes untrainable? Is there no pattern of vestibule training, job training, experience, and craft training, that could qualify Negroes for jobs of all skill levels in the industry? Nobody is suggesting that safety requirements be waived, but Negro workers can be trained to meet them. What efforts are being made by the Companies to overcome "educational, cultural, and attitudinal deficiencies," or, where possible, to adjust to them.

The craftsman situation in the Auto industry is discussed in similar terms. The road is blocked in part by poor test scores, but are the tests a valid measure of a worker's ability to learn the trade? Have the Companies experimented? Have they provided any remedial aid? Surely the Companies that helped maintain the craft jobs for the white elite, as reported by Professor Northrup, can be expected to do more than say "we'll take you if you pass our tests." Apprenticeship is not the only path to a craft job, and Negroes could be given more opportunity to qualify in a variety of ways.

The low Negro employment ratio in the office and clerical group in the auto industry is too easily explained away. I would like to have had some evidence on the Companies' recruiting efforts, and on the reported reluctance of Negro women to commute. Do Professor Northrup's findings reflect the views of local Negro organizations on the auto industry's hiring policies in the white collar area?

Although lack of qualification is a key factor holding Negroes down, I suspect that substantial discrimination still exists not far from the surface in the skilled trades and in white collar occupations, and that a variety of institutional arrangements help maintain the status quo. The question of discrimination should have been discussed more directly and not relegated to a footnote reference to a forthcoming study. To identify and understand industry differences in intra-plant mobility of Negroes we need a more probing look at the efforts to bring about change, and at the factors that have limited these efforts, than has been provided in this preliminary report. But more importantly, I differ with Professor Northrup's views on the trainability of Negro workers. A person with minimum education can be trained to watch dials and to accept responsibility. I am perfectly willing to assume, and to base public policy on the assumption that a man who thought he would always be a laborer can be convinced that he may be promoted if he takes training.

Companies have the responsibility to initiate change because they share the burden of past discrimination and because they are the essential moving force in the economy. If Negroes are to be integrated more effectively into the productive labor force it will have to be done by companies at the plant level, where the jobs are and the skills can be learned. Competition is a harsh task master, and we cannot expect industry to place itself at a cost disadvantage to further social goals. If I am right in saying that industry must do the job, it follows that we must find a way to make it profitable for firms to hire and train the disadvantaged. Subsidized training is not a new or revolutionary idea but we are only starting to think about programs that are designed explicitly to overcome the roadblocks to progress that Professor Northrup has described. And, as he emphasized, nothing will be very effective if we do not maintain an economy sufficiently buoyant to absorb and keep employed the upgraded workers who will be at the bottom of the seniority ladder.

(b) *Parker and Burton Paper*

I am not sure what windmill the authors are attacking. Ross found a very substantial reduction in the quit rate about the middle of the 1920's and a small decline during more recent years. The

authors assert that they are "certain the comforting conclusion reached by Arthur Ross that there is 'little evidence' of 'a new industrial feudalism' must be thoroughly reexamined." But his less sophisticated attempts to measure the secular decline in the quit rate resulted in an estimated drop of .8 per cent from the late twenties to the post-war period. The authors found that the post-war quit rate was about one per cent lower than in the 1930-1941 period after correcting for inducements and work opportunities, their approach to cyclical variation. Their findings are roughly consistent with Ross', whose conclusion, quoted above, had reference to the causes of reduced mobility and was not a denial that quit rates had fallen.

Ross made a relatively naive comparison of periods with roughly similar work opportunity conditions, first as measured by the unemployment rate and then as measured by the ratio of manufacturing employment to the nonagricultural labor force. His rough cut at the problem had the virtue of avoiding the distortions caused by the depression of the 30's and World War II. If, at any point in time, there is a minimum average quit rate, abnormally high unemployment rates will not force the quit rate down to levels consistent with the relationship between the two variables under normal conditions. When the extremely high unemployment rates of the 30's and the associated quit rates are included in the analysis they generate a relationship that will predict consistently high quit rates in periods when a normal cyclical relationship prevails. This effect would be masked and accentuated during the period of World War II, when quit rates were again abnormally high. As a result, an equation fitted for the 1930-1966 period would produce systematically high quit rate predictions for the postwar period, and would lead to an overestimate of the secular decline in the quit rate.

The authors report that they have "found an apparent decline in voluntary mobility in the U.S. manufacturing sector over the past several decades, but we have not found the reason." But that can be only because they have not yet looked in the most obvious places, some of which they discuss in the theoretical section of the paper. They have tested the correlation between a few variables, not including several of the most probable determinants of a secular decline in mobility, and the quit rate, and conclude that there is a residual decline in the postwar period not explained by

their analysis. However, in their presentation of the model they include the sex composition and age distribution of the labor force, and of employment in the manufacturing sector, among the factors that may influence the quit rate. These variables were not used in the time series analysis, nor did the authors consider the postwar stability of manufacturing employment, a factor suggested by Ross and others as having an important influence on the decline in the quit rate in the manufacturing sector. In the absence of an explanatory footnote, I can only assume that analysis of alternative models that include the sex/age composition of the manufacturing labor force and the rate of growth of manufacturing employment will be part of a more extensive study of the problem.

The variables used in the time series analysis are a reasonable subset of those that might have been included within the four variable sets suggested by the authors. The difficulty is that alternatives suggest themselves immediately, and there is no conceptual basis for preferring one over another. The authors have taken a first step toward providing a theoretical framework for the selection of variables. It may be possible to build the quit rate into a more explicit model of the labor market that could provide a stronger conceptual base for the empirical analysis.

Although the classification of variables suggested by the authors is an interesting analytical device, I cannot agree that we are indifferent to mobility changes associated with demographic and sociological variables that might not be subject to direct public control. For example, an aging labor force may reduce mobility and thus the efficiency of the labor force adjustment process. Proper diagnosis of the problem would help us assess the social costs of the trend, and if the costs were high enough we might want to develop compensating institutional changes to increase the mobility of older workers. Since there is some way of compensating for most changes of this type, it would appear that the distinction between the author's P and X variables, subject and not subject to public control, breaks down.

III

DISCRIMINATION AND OTHER OBSTACLES TO EFFECTIVE MANPOWER UTILIZATION *

LABOR MARKET OBSTACLES TO MINORITY JOB GAINS

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This paper will seek to identify and examine a number of obstacles to the effective utilization of minority group manpower. Put more appropriately, I will consider what I believe to be some major obstacles to the improvement of minority group labor market experience.

The first obstacle which I want to consider is that of highly structured labor markets. Structured markets are characterized first of all by a good deal of wage standardization. Wage standardization—payment of the same or very similar wage rates to all persons employed in a narrowly defined occupational classification—occurs when the labor market for a given job includes large institutions which do most of the hiring. For example, trade unions, especially those which consider their appropriate jurisdiction for wage bargaining to include all jobs in a market area rather than just the jobs in a particular bargaining unit, are frequently able to negotiate a wage rate which applies generally to persons working in an occupation. Medium and large size business firms and government agencies can effect the same result through formal wage administration which provides similar wages to all persons in these organizations who are doing similar work. Where a few such organizations employ most workers in an occupation, a high degree of market wage uniformity results.

A concomitant of wage standardization is a standard set of job

selection requirements. Standard minimum selection requirements follow logically and empirically from standard wages. The standard set of selection requirements usually covers educational attainment, citizenship, law abidance and various kinds of knowledge and aptitude.

The relevant point about these structured labor markets is that, though they provide wage equity for a few minority persons, they do so only at the price of excluding from employment many others. This is so because minority persons are much less likely to be able to meet the set of employee selection requirements than are majority workers.

This contention is supported by my own research which found markedly greater employment of Mexican-Americans in occupations characterized by a low degree of wage standardization than in those where wage rate uniformity was high.¹ It is also supported by recent findings that unemployment among nonwhites tends to be less in areas where wages are flexible—that is, not highly standardized—than where they are rigid.²

Since the 1930's labor markets in this country have become increasingly structured, a trend which has generally been applauded as providing greater wage equity among workers. The trend to structure has led, in our society, to great emphasis on schooling and, more recently, job training, so that everyone can attain the formal qualifications necessary for employment in the structured markets. But we have been guilty of very sloppy thinking or of no thinking at all with respect to the term "everyone." We have not bothered to recognize that many persons would not be able to obtain the necessary qualifications, that nonwhites in particular, because of the legacy of their treatment by the society, would widely fail to obtain them and, thus, would be excluded from the more attractive jobs in our economy.

Is it not now time to provide for a little less standardization of wages and qualifications? Specifically, employers, together with unions where there is collective bargaining, could work out arrangements for greater variation of wage rates within job classifications, for more utilization of learner rates, and for greater and more imaginative

¹ Walter Fogel, *Mexican-Americans in Labor Markets of the Southwest*, Advance Report 10, Mexican-American Study Project, University of California, Los Angeles, 1967, Ch. VIII.

² Harry Gilman, "Economic Discrimination and Unemployment," *American Economic Review*, December 1965, pp. 1077-96.

use of probationary or trial periods for employees. The last suggestion especially would provide more opportunities for persons who lack the *formal* requirements for attractive jobs to demonstrate their productive capabilities. There is evidence, also, that wage flexibility will encourage employers to provide more general training for young workers, even to the point of teaching skills such as reading and writing.³ Those workers who have been able to get into our highly structured labor markets have enjoyed a long period of prosperity in the U.S. I think it is now time to back up a little and let in those who have been excluded.

The second obstacle which I shall consider involves the way in which formal education is used in the employee selection process. Great emphasis on schooling in selection has been brought about by structured labor markets, but has also resulted from sharp increases in the average educational attainment of the population, extended periods of labor market looseness and from tendencies to accept broad generalizations about the value of formal education to economic activity.

Low educational attainment as measured by school years completed is probably not the major problem faced by minority groups in the labor market.⁴ Nevertheless, low educational attainment is certainly an important factor in the job problems of minorities.

I submit that part of the adverse impact which the low schooling of some minorities has on their chances for getting employment and on their occupational levels is unwarranted—unwarranted because it involves an excessive emphasis on the value of schooling for job performance in the skilled manual and, to a lesser extent, low-level nonmanual job sectors.

Since there is very little evidence on the relation of schooling to job performance, my contention has to be supported by logical inference. If school requirements which employers impose on applicants for skilled manual jobs are the same as the schooling actually needed

³ See Herbert Northrup and Richard L. Rowan, eds. *The Negro and Employment Opportunity* (Ann Arbor: Bureau of Industrial Relations, University of Michigan, 1965), pp. 331-346.

⁴ See Walter Fogel, "The Effects of Low Educational Attainment on Incomes: A Comparative Study of Selected Ethnic Groups," *Journal of Human Resources*, Fall, 1966, pp. 22-40 and "The Effects of Low Educational Attainment and Discrimination on the Occupational Status of Minorities," in *Proceedings of a Conference on the Education and Training of Racial Minorities*, Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison (forthcoming).

for successful performance of their jobs, then we would expect the low schooling of minority groups to distribute minority workers among skilled manual jobs in inverse order to the levels of schooling actually needed for these jobs. However, the correlations which I obtained between Mexican-American proportions of employment in 33 craft occupations and the schooling judged by Bureau of Employment Security experts to be necessary for performance of these occupations, was not significantly different from zero in either Texas or California. In contrast to these results, annual earnings of Anglo workers in these occupations were correlated with Mexican-American employment at the $-.47$ level in California and the $-.63$ level in Texas.⁵ These results imply that it is not high levels of schooling actually needed for skilled job performance which adversely affect the job level of minority groups, but rather the high education and other standards which high wage employers choose to impose.

Why do employers require seemingly excessive amounts of schooling and other aptitudes for the higher skilled manual jobs? It is not hard to answer that question. An important part of the employer's selection problem for high wage manual jobs is that of reducing the number of applicants to a manageable size. High schooling requirements and test scores are an efficient way of accomplishing this reduction. Even though the school requirements eliminate some workers who would provide a very satisfactory level of job performance, they probably do, at the same time, provide better results—in terms of work force productivity per dollar of expenditure—than any other method of applicant screening which is available.

But consider the costs which the employer does not include in his efficiency calculations. They are the individual inequities borne by capable workers who are eliminated by the schooling requirements, and the costs which these people impose on the society in the form of unemployment insurance, welfare, crime, riots, etc., because of the inequitable treatment they have received in the labor market. At present, the latter costs appear to be rising rapidly, because the inequities of schooling and aptitude requirements so often fall on dark skinned persons. It is hardly surprising that many of these persons attribute their shabby treatment to their color; once that attribution is made it is a short step to declare war on the white

⁵ Fogel, *Mexican-Americans in Labor Markets of the Southwest*, *op. cit.*, Ch. VII.

society since skin color is a characteristic not easily changed by its owner.

It is easily seen that the employer's perspective for selection decisions is much narrower than that of the total society; what is efficient for the employer in this case is not efficient for the larger society. A social decision framework would consider the costs that I have mentioned and would, therefore, undoubtedly call for changes in many job selection processes. Social decision making would call for greater use of performance tests and job trial periods. Above all it would call for increased expenditures on research in this area so that a better prediction of job performance in specific occupations could be developed. Since the benefits of such research—the reduction of inequities and anti-social behavior—would be social and not directly appropriable by employers, the financing of the research would also be social even though it might best be carried out by employers themselves.

A third obstacle to minority group success in labor markets is slack labor markets. Saying it positively, pervasive labor shortages would hasten improvement in the job structure of minorities. The best general evidence on this point is the experience of World War II. Recently, Lester Thurow has added some precise dimensions to the argument. Based upon 1954–66 relationships he has computed that an increase of one percent in adult white male employment from current levels would lead to an increase of 3.3 percent in adult non-white male employment.⁶ At the same time upward shifts in the jobs held by nonwhites would occur, including movement from manual to nonmanual employment.

I am surprised, in this regard, that rather slight attention is given by minority group spokesmen to the World War II juxtaposition between the largest ever minority gains in jobs and earnings and very low rates of unemployment. Unemployment rates in 1943, 1944 and 1945 were 1.9, 1.2 and 1.9 percent respectively. We cannot say what job gains were made by minority persons in precisely those years, but over the decade of the 1940's improvement in nonwhite occupational status was much greater than in either the 1930's or

⁶ "Employment Gains and the Determinants of the Occupational Distribution of Negroes," in *Proceedings of a Conference on the Education and Training of Racial Minorities*, Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison (forthcoming).

1950's.⁷ The rapid occupational gains of the 1940's resulted in a change of nonwhite male income as a percent of whites from 41 percent in 1939 to 61 percent in 1950.⁸

This historical point and the research cited suggests that if we were strongly committed to improving the job position of minorities we would take steps to reduce general unemployment well below the present levels of near four percent. Certainly, pushing unemployment down to anything below three percent would require onerous wage and price controls. But, we in America must begin to realize that any solution to our minority problems is going to be very painful indeed. In addition to being relatively effective, a policy of very low unemployment might distribute our pain more equitably than other approaches.

In any discussion of obstacles to minority job advancement discrimination must receive a prominent place. Discrimination affects the attractiveness of the job which a minority person is able to attain as well as his chances for being employed at all.

It is useful to distinguish two types of discrimination which occur in the hiring process. The first occurs when a preference or taste for not employing members of a recognizable group influences hiring decisions regardless of the comparative economic productivity of these persons. The second occurs in the absence of noneconomic preferences when an adverse judgment about the probable job performance of an applicant is made from a characteristic of the applicant which is not a good predictor of his job performance.

An example of the second type is the use of a high school education requirement where worker job performance has no relation to level of education completed. Clearly some hiring organizations use formal education as a means of discriminating indirectly against minority groups. Others use it out of ignorance, as discussed earlier in this paper. In either case, discrimination occurs against the job applicant who is screened out by the irrelevant schooling requirements. Thus, elimination of invalid selection methods would help greatly in reducing discrimination, not only discrimination against ethnic mi-

⁷ Nathan Hare, "Recent Trends in the Occupational Mobility of Negroes, 1930-1960: An Intracohort Analysis," *Social Forces*, December 1965, pp. 166-173.

⁸ Herman Miller, "Income and Education: Does Education Pay Off?" in *Economics of Higher Education*, Selma J. Mushkin Ed., (U.S. Department of Health, Education and Welfare, 1962), p. 136.

norities but also that which occurs against the newly developing minority of low educated persons, which even includes many WASPs.

The first type of discrimination—that arising from tastes or prejudices—will always be with us in some measure, I suppose, but it is incumbent upon us to find ways of reducing its effects. The most efficacious means of proceeding may be to raise the cost of discriminating. The accepted economic identification of discrimination is that it occurs when employers or workers behave as though there are non-pecuniary costs to them of hiring or working with members of an identifiable group. According to this definition employers and workers who discriminate will accept pecuniary costs, that is, lower profits and wages, rather than employ or work with the members of the undesirable group. But the facts are that most discriminators never have to bear such costs. Does an employer who refuses to hire Negroes have to pay a higher wage to obtain a work force as a consequence? I think not, at least in skilled occupations where most discrimination occurs. Negro labor supply in these occupations is not large enough to provide employers with a significant wage advantage if they cease discriminating. Do workers who refuse to work with Negroes receive lower wages as a consequence? Only when the Negro workers involved provide complementary labor, that is, when they work at less skilled jobs than those of the white workers. But in fact there is little discrimination against complementary Negro labor compared to that which occurs against Negro labor which is a substitute for that of whites. And when Negro workers are substitutes, whites enjoy higher wages if they discriminate—exclude the Negro labor from the market—than if they do not.

In the past a great deal of discrimination has not only been costless to those exercising their prejudices but has also provided significant pecuniary gain to the discriminators. This has been true in spite of rather large general costs to the society of the anti-social behavior of those discriminated against. Recently the costs of discrimination to discriminators have risen as a result of legislation and civil rights activities which bring various forms of harassment to employers and unions who engage in discriminatory behavior. The costs imposed by these forces can be expected to increase in the future.

Another way to raise the costs of discrimination is to increase the educational attainment and job skills of minority groups. More members of these minority groups will then become increments, at

least potential increments, to the labor supply for skilled occupations. When these increments are large, the opportunity costs to employers of employing only whites become large because utilization of the minority labor supply would greatly lower the equilibrium wage, if not immediately, at least over time in relative terms. Consequently, minority persons will be hired regardless of employer or worker tastes for discrimination. My own research in this area found no important discrimination against minority persons who are unskilled laborers. This finding certainly is not explained by lower tastes for discrimination against unskilled than against skilled minority persons. Rather, minority persons comprise such a large fraction of unskilled labor supplies that it would be extremely costly for employers not to hire them.

If I am correct about the negative relation between the fraction of labor supplied by a minority group and the amount of discrimination directed against it, then as minority persons raise their educational attainment and increase their job skills, hiring discrimination against them in skilled occupations will lessen. In other words, as more and more minority persons improve their job qualifications, the financial returns to these qualifications will improve over what they have been in the past.

Of course, in many occupations it will not be possible to raise the minority fraction of labor supply sufficiently to have much of an impact on discrimination. Especially in these occupations, therefore, there will be a continuing need for enforcement of fair employment legislation, for militant pressure on employers and unions and for appeals for equitable treatment on moral grounds.

It can be said as a general proposition that the remaining days of costless discrimination are numbered in all sectors of our society. Increasingly, those who exercise their prejudicial tastes will have to pay, in some kind of pain-cost terms, for doing so. Most of us would agree that this is as it should be.

BARRIERS TO EMPLOYABILITY OF NEGROES IN WHITE-COLLAR JOBS

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Employment barriers have a sharper edge for Negroes in white-collar jobs. Tight supply, low skill prerequisites and routinized jobs could be expected to lead to good opportunities for non-whites; however, this does not seem to be true. Hence this portion of the labor market whose race implications are not sufficiently understood, is worth investigating.

The survey of 250 white and Negro white-collar workers, conducted in the Milwaukee labor market as part of a larger study, was described in the 1967 Annual Report of the University of Wisconsin Center for Studies in Vocational and Technical Education. The respondents were randomly chosen from the active file of the state Employment Service, from direct applicants to employers, graduates from MDTA courses and recent high school graduates. The hour-long interview dealt with schooling, training, work history, job search, etc., as well as personal experiences, family relationships and attitudes, both to work and to others at work. It showed that none of the activities which are normally assumed to lead to successful employment experience proved to have a statistically significant correlation with such success—at least not in the white-collar labor market. The survey seemed to suggest that it made little difference for obtaining and holding a job what the respondents' experience had been in high-school, what kinds of training they had taken, what counselling or advice they had received, or how they had looked for a job. The correlation results were checked extensively, e.g. by correlating the respondents' answers separately by the source of each sample, or by comparing the answers of those who had been most successful in obtaining employment with those who had been least successful. But while some interesting side-lights emerged, the overall conclusions stayed the same. Thus some other distinguishing features will have to be looked for to explain differences in white-collar success. Distinctions by race did not fill this bill, though they pointed to employment barriers. (Many volunteered their belief that their own experience indicated discrimination.) Being born in the

south, for example, showed negative correlation with employment, as was lack of a high school diploma, especially clearly among Negro workers. Progression up the clerical job ladder seemed all but impossible for them, so that only job-changes brought improvement. Negroes' willingness to apply at the job-site, however, seemed to indicate their growing belief in an open job market. In general the differences by race were much smaller than anticipated, and the similarities were often striking.

This was surprisingly true of social relationships on the job, which had seemed a possible barrier to white-collar employment. Fellow employees may find the behavior of Negro workers socially unacceptable because of the difference in background, especially damaging in office situations where these relationships are so vital. Because of this, one would expect greater Negro dissatisfaction and more friction on the job, less likelihood of Negro and white workers to eat lunch together or associate after work than racially homogeneous groups would. These expectations were largely contradicted by direct and indirect answers received in the survey: in virtually all cases the percentages of the answers given by white and Negro workers were extremely close.

Does this indicate that, once workers are on the job and get to know each other, prejudices against individuals fade? The similarities in marital status between successful white and Negro workers, and the greater success of those who are married, seems also to point towards assimilation of successful workers to the work atmosphere. Attitudes at work may have a greater impact on the worker than does his background, once he is part of the work force. The statement that the "work ethic" may permeate quickly, and Negro office workers assimilate fast to the prevailing values at work (middle-class values), would be consistent with other findings of the study, in spite of the fact that other barriers to the employment of non-whites clearly exist.

But this seemed to contradict some other studies conducted under the same grant. These were studies of office work in individual firms where a "peer participant observer" was placed. These case studies seemed to show that the real barrier was in the different cultural background between white and Negro employees, as behavior pattern and values of white-collar workers differ from those whose personal and family history of unemployment left them unfamiliar with the world of work. Family relationships and intermittent work make it

hard for them to fit into the social relationships on the job which constitute the essence of white-collar employment.

The requirement of high school graduation is rendered meaningless by the low skill actually needed, as Walter Fogel pointed out. But the prestige attaching to it leads to the employer insisting on it, as his status is confirmed if he employs only high-school graduates. Much more important is the fact that, at least at lower level clerical positions, occupying a white-collar job confers prestige and status *in lieu* of any real meaning of the increasingly routinized and dull job. To keep down their dissatisfaction, white-collar workers emphasize social relations on the job. Again it is this status consciousness which makes safeguarding one's "in-group" position important and may lead to the exclusion of new employees from it. The failure of Negroes to gain acceptance by their fellow white-collar workers may affect their work ability more decisively than deficiencies in skill. They can be taught to dress and groom, to be reliable in their work habits, to get to work on time, and learn the formal rules for behavior on the job. But it is the informal rules of the personal relationships in the office to which they might not be sensitized, and which might exclude them from the informal associations and make fellow employees feel that they do not "belong." The workers, as well as management, must learn to understand that the real barrier may lie in this situation, no matter how much they intend to abide by equal employment opportunity; and this situation is not likely to change unless the job confers reward and pleasure, which it now fails to do.

Paul Jacobs has expressed this problem well:¹ "The status of unemployment does seem to create a common barrier to communication between them and the employed. . . . If a life routine is not centered on either work or the pursuit of work, it is going to be differentiated sharply from the kind of daily pattern carried out by most of us. . . . In general, our work-oriented society is tooled up to take in only those who match its norms. Any deviation from the norms causes either rejection or internal conflicts."

This is borne out by looking at the "profile" of the white-collar employees in one of the firms studied. We find that they are largely high-school graduates under 25, white, living with parents or spouse

¹ Paul Jacobs, "Unemployment as a Way of Life." In: *Employment Policy and the Labor Market*, Arthur Ross (ed.), University of California Press, 1965.

close to the office, and have held several previous clerical jobs. On the other hand, the "typical" Negro has not finished high-school, is not married, nor does he live with close family, lives in the inner core further away from the office, and has had no previous white-collar employment. The firm's clerical work force thus includes only the "in" group which involves identifying with the values of the social group—and Negroes will normally "belong." The characteristics of the group are accepted by them as desirable for both hiring and promotion, and management tacitly accepts these criteria. If the firm wanted to indicate that it meant non-discrimination literally, it would have to be willing to promote members of the minority group in a setting where promotion from within is not customary—and take the reaction of the work-force in stride. But this is not likely to happen until management has understood the importance of imbuing *all* workers with the accepted values of the world of work.

We should mention one more aspect of this relationship: the "middle-class work ethos" is often disparaged as a faulty yardstick, certainly for Negroes who have lived through unemployment, poverty and misery and don't find it easy to accept this as a measure. Our survey seemed to indicate, however, that those Negroes who were successful, had been "accepted" in the world of work because they had assimilated to it in many particulars. Success, in our present world, almost invariably means employment, work and participation—or at least income, power, and prestige, as C. Wright Mills states. How else can we measure "success" except in terms of the standards accepted all around, i.e. by the majority? What's more, even after we will have accepted the philosophy of a "guaranteed annual income" throughout society and will have approved other activities as equivalent to work, the principles of the work ethos will continue to prevail, even if the goals have been altered, as the ability to "belong" will be valued and used as a measure of success. In fact, it is difficult for us, no matter what we profess, to imagine the abandonment of such a yardstick in everyday life.

The crucial task is thus to bridge the gap of understanding on both sides of the employment contract. Educating the lower level of management to greater sensitivity to the problems faced by the disadvantaged is vitally necessary, though it is a long-term proposition. Getting fellow-workers to know each other better may be more effective and it is especially important in clerical jobs. This can be the

by-product of on-the-job training, which method showed better results and more placements than others in our survey. Admission to on-the-job training is the crucial hurdle, and placement is virtually simultaneous (unless the worker fails), while in other training methods the two are separate—and unrelated—activities. Once the worker is accepted *on* the job—even if not yet *in* the job—he becomes part of the “organization.” White office workers accept him more easily “into the fold” once they get used to him during the training period. Fewer barriers prevail and social intercourse comes more naturally. Aside from the specific skill training, this method often included basic education (“the three r’s”) and the development of personal and social skills (grooming, reliability, methods of job application, etc.), as well as influencing motivation and attitudes. This affects problems of social barriers and self-esteem, and includes interest-arousing activities not necessarily connected with the job (e.g. cultural interests), leading to changed attitudes to life and work and life at work.

Such a broad approach has been increasingly taken in recent experiments. A series of different features and techniques are being tried in all of them, different ones between training attempts. Each of these features may be responsible for whatever success the particular experiment shows—but we don’t know which one of them—is actually responsible for such success. The Opportunities Industrialization Center, which has been spreading to a number of cities from its Philadelphia origin, can well serve as example. The “in-group” concept of a Negro self-help group and the emphasis on changing the Negro’s self-image are some of its features. Its founder, Rev. Sullivan, states that it “brings confidence where there has been dependence, pride in one’s self where there has been only envy of others.” Recruiting in home, barber shop or pool hall by indigenous personnel and their informal approach and follow-up of prospective trainees may prove decisive. Social skills and basic education are taught separately from skill instruction by Negroes who themselves have only recently gone through the training process. But throughout, the empathy of indigenous teachers and their understanding of the trainees’ subculture is important. Counsellors appraise the potentialities of the workers and win their confidence; they also help them throughout the training period and act as models worthy of emulation. Centers are in a familiar neighborhood and within easy reach. These are

some of the features which make this experiment successful—but which of them are decisive?

Other projects are undertaken by welfare departments, by labor, by dept. stores, by industries, by Manpower Inc. etc. Several of the OIC's features are repeated. Additional ones are low teacher-student ratios which lead to close personal relationships. On-the-job training is improved by using the work-place after hours for additional training and counseling (this means absence of additional travelling, and instant "feedback" of work mistakes to counsellors). Follow-up of the trainees' job success, staying power, promotion etc. and using their job performance as guidance for new placements if necessary is made easier if training agencies continue to be involved with both workers and employers through continuing governmental contracts. Trying to awaken the worker's interest in areas unrelated to job prospects seems to have favorable results—*any* interests might alter his attitudes, hence change his approach to work. Systematic comparisons between these programs and older ones like MDTA (which, as our survey—and others—showed, lacked spectacular success) might indicate those experimental features which should be incorporated into existing programs as worthy of imitation. The value of these experiments lies in finding those features primarily responsible for success; this especially where attitudes towards the world of work have been changed.

Carefully controlled research is needed for the answer as a necessary next step. E.g. does close personal attention alone (even without training) improve the worker's motivation? Will contrived stress situations under sheltered workshop conditions show a different response of the trainees than would have happened without the training (i.e. than a control group exhibits)? Will they react to an unusual job situation or to a difficult job application differently before and after training if various aspects of training are tried separately? (The results could be observed through a one-way glass.) Can the change in motivation be measured through job activities which are so designed that the speed is quantitatively measurable? Will a new interest which makes after-work activities rewarding change performance on the job? White-collar emphasis on evening activities may make socializing on the job and thus assimilation easier—but can the results in job performance be measured? Such tests, if designed with care and imagination, may give us the answers to the

efficacy of some of these features; but it should be expected that the results would be quite different in the white-collar situation from what it would be for blue-collar workers with different aspirations and motivation—even the kind of frustrations on the job differ!

The importance for white-collar workers of relations at work is a significant finding. Here acceptance on the job seems to lead to greater similarity in the responses of white and Negro workers. Hence the ease of introducing office-workers to their entry job seems more important than what happens later, as that is when attitudes are likely to be shaped, and it is the reason why the method of on-the-job training is promising as an introduction to office jobs.

We must recognize the two-pronged nature of the problem: employer and office workers must learn to accept Negro workers as part of the organization, by recognizing the difference in their cultural background and learning the reasons for their difficulties; and they, in turn, have to change their attitude and motivation so that they can enter into the spirit of the world of office work, and accept its emphasis on status and prestige to make up for the waning content of the work. This is the bridge which needs to be crossed, if we want to improve the Negro's employment condition. Even equal employment opportunity employers have a great deal to learn about how they could communicate their convictions to their staff, and change white and Negro workers' attitudes to the work and towards each other.

Although the white-collar field seems to sharpen the focus, we are only beginning to find out what stands in the way of the employability of Negro clerical workers. We need a new look as incisive in describing the white-collar world as the book by C. Wright Mills, but we need it with special emphasis on the difference between the races. As yet, we don't know enough about the subtlety of the relationship between white and Negro workers in office jobs and what specific means will prove the most effective ones to bridge the gap. Further research will help to answer these questions before long, it is hoped, so that somebody may get ready to write such a new book.

FINDING JOBS FOR THE JOBLESS

LEONARD RICO

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Historically Federal manpower policies have been directed essentially at labor market problems associated with the supply of labor. But for notable exceptions such as the relief and work programs of the 1930s, government efforts have been designed to expand and restructure the supply of manpower. Only relatively recently have Federal manpower policies begun to reflect a concern for the demand side of the market equation. Job development and the creation of jobs of necessity must be an integral part of any coordinated public endeavor to promote employment for every citizen willing and able to work.

Today the structural nature of job markets no longer is questioned, but is an accepted fact. The heroic assumptions of freely competitive markets do not prevail to insure a job for everyone seeking employment. The political reality that the level of employment is a public concern was acknowledged in the Employment Act of 1946. A new social ethic was legislated—that the effective utilization of our nation's manpower resources could be promoted through special Federal policies.

The urban job creation aspect of Federal manpower policies is the focus of this paper. It is organized as follows: first, a summary of urban slum and rural employment conditions; second, an outline of the development of job creation emphases in Federal manpower programs; third, an analysis of selected pioneering attempts to develop job opportunities; and fourth, some concluding observations.

Wasted Manpower

For the first time in 13 years, the average annual unemployment rate in 1966 dropped below 4 percent because of a generally prosperous economy. Paradoxically urban and rural pockets of poverty and joblessness continue to exist alongside a healthy rate of economic growth and a not-so-healthy rate of inflation. Nationwide improvement in employment and income has only begun to filter into these pockets of unemployment and poverty, and these problems have not

been adequately ameliorated by established Federal manpower programs as yet.

This dilemma led the Department of Labor to seek to determine *who* are unemployed, *where* they reside, and *why* they could not find work.¹ After preliminary surveys and considerable data analysis, another survey was conducted in November, 1966, in ten slum areas of eight cities: three in New York City (Harlem, East Harlem, and Bedford-Stuyvesant), and one each in Boston (Roxbury area), New Orleans (several adjacent areas), Philadelphia (North Philadelphia), Phoenix (Salt River Bed area), St. Louis (North side), San Antonio (East and West sides), and San Francisco (Mission-Fillmore). The results of this household survey indicate broadly the need for additional jobs.

The unemployment rate for these ten slum areas ranged between 6.2 percent in Bedford-Stuyvesant and 13.2 percent in Phoenix. The average rate for all ten areas was 9.7 percent or almost three times the 3.7 percent national unemployment rate for January, 1967.

Of those employed, 6.9 percent wished to work full time, but could find only part-time employment. Further, 21 percent earned less than the minimum level of \$60 per week. Many slum inhabitants have given up the search for work and are not included in the work force or among the unemployed. The nonparticipation rate for males 20 to 64 years of age was 11 percent. (From 20 to 33 percent of the *expected* adult male population of the slum areas surveyed could not be located or accounted for.)

The survey results also included a "sub-employment rate" based on the number of unemployed, underemployed, full-time wage earners below the poverty level, half the male "non-participants" aged 20 to 64, and half of the expected but unaccounted for males. The sub-employment rate varied from a low of 24.2 percent in Boston to a high of 47.4 percent in San Antonio, and averaged 33.9 percent for all ten areas. In short, over a third of the residents in the slums surveyed are being utilized ineffectively in the labor market.

The general socio-economic characteristics of the slum populations, as well as individual circumstances, account for a great deal of the sub-employment rate in those areas. Nevertheless, it has been

¹ Unless otherwise noted, the following data are taken from a summary report submitted to the President, *A Sharper Look at Unemployment in United States Cities and Slums*, U. S. Department of Labor (undated).

demonstrated that such labor market conditions as the shortage of unskilled jobs also contributed to the under-utilization of slum manpower.

Rural unemployment and underemployment data are scarce.² The 1966 average unemployment rate for wage and salary workers 14 years of age and over in agriculture averaged 6.5 percent. Exact data on rural underemployment are not available, but earnings data indicate that rural workers experience extremely high underemployment rates. In addition, the participation rate of rural residents is well below that of urban residents. These data show that the rural employment problem is at least as critical as the urban employment situation, although their characteristics may differ significantly. To what extent has Federal manpower policy been directed toward alleviating these unsatisfactory employment conditions through creating and developing job opportunities?

More and Better Jobs

It is useful first to distinguish between *employment* and *manpower* policies.³ The distinction that is made is roughly equivalent to questions regarding the supply and demand for labor. Thus, employment policies are concerned with the level of employment and the rate of job creation. Manpower policies, on the other hand, are focused upon the characteristics of the labor force and the efficient development and utilization of human resources to meet changing demands for manpower. New interest and strong pressures have been operating to integrate the supply and demand aspects of providing more and better jobs.

This direction is reflected in the 1964 *Manpower Report of the President*. President Johnson outlined the three goals of an "active manpower policy."

The first is to develop the *abilities of our people*.

Another is to create *jobs* to make the most of those abilities.

The third is to link the first two, to *match people and jobs*. Federal responsibility for job creation was not only to provide jobs for

² Unless otherwise noted, the following data are taken from the *Manpower Report of the President*, U.S. Department of Labor (1967), pp. 108-110.

³ *Toward Full Employment: Proposals for a Comprehensive Employment and Manpower Policy in the United States*, Subcommittee on Employment and Manpower, (1964), pp. 37-45.

the unemployed but to provide jobs that would fully utilize the capacities of the employed as well. These objectives were to be achieved through such programs as the 1964 tax reductions, area redevelopment activities, and job opportunities created through the training of skilled manpower in short supply. Earlier efforts had not been notably successful in increasing the supply of jobs for the hard-core unemployed.

The Area Redevelopment Act (ARA) of 1961 had been designed to deal with structural economic problems besetting depressed areas. The ARA attempted to provide new venture capital, to improve public facilities, to develop community planning, and to increase training for the unemployed and underemployed. While this Act was intended to advance general economic development, the Public Works Acceleration Act (PWAA) was passed in 1962 to deal with the immediate reduction of the unemployment rolls.

In 1965, the Economic Development Act (EDA) succeeded the ARA, and the Appalachian Regional Development Act was passed. The employment effect of these programs is reputed to be negligible, except for those in construction and other skilled trades and professions.

The Manpower Development and Training Act (MDTA) of 1962 was directed at unemployed family heads with a history of prior employment. As designed initially, the Act was to help the unemployed to qualify for jobs and to aid the underemployed in obtaining better jobs, rather than to create jobs *per se*.⁴ The emphasis of the MDTA was first on institutional training of the unemployed for existing job vacancies.

Subsequent amendments broadened the focus to include training unemployed and poverty-stricken youths and providing remedial, pre-vocational education. In a 1965 MDTA amendment, job development, particularly in the service sector, became an important responsibility. This amendment, augmented by a Job Development Program, is designed to encourage both public and private employers to hire additional workers. The underlying assumption of these programs was that training and related activities would reduce unemployment

⁴For a case study analyzing the relative success of this program, see the author's "The MDTA: Training the Unemployed," *The Quarterly Review of Economics and Business*, 5:2 (Summer, 1965), pp. 5-26.

by helping the jobless to qualify for vacant jobs and by developing additional job opportunities.⁵

The Economic Opportunity Act (EOA) of 1964 included several provisions to implement the job creation goal of the active manpower policy mentioned above. The EOA and amendments to it in 1965 and 1966 provided funds for public employment as a direct means to reduce the ranks of the unemployed. The Community Action Program created jobs for the poor by enlisting their participation in developing and carrying out projects. Job Corps work programs were established in rural conservation centers for youths 16 to 22. The Neighborhood Youth Corps also made full- and part-time jobs available to youths of 16 to 22. In addition, the Work Experience Program enabled heads of households on relief as well as "other needy persons" to develop skills and to obtain jobs and thus help to reduce welfare costs and increase employment. Finally, limited funds were made available to encourage self-employment through the development of small businesses.

The economic achievements of these early endeavors designed to reduce unemployment through job creation are questionable in the short-run, but may be greater in the future. By means of a 1965 amendment to the EOA, public employment opportunities for conservation projects were expanded. In 1966 the Nelson-Scheuer and Kennedy-Javits amendments encouraged the development of service jobs and concentrated employment programs for high unemployment areas. This increasing emphasis on job creation aspects of Federal policy is highlighted in the 1967 *Manpower Report of the President*.

The *Manpower Report* outlines three methods of achieving the goal of creating jobs with a future: first, develop more jobs in urban and rural poverty areas; second, develop more sub-professional jobs; and third, encourage private firms to hire the disadvantaged. Several of the projects formulated to implement these objectives are described in the next section.

Frontier Job Creation Efforts

Pioneering efforts at providing new jobs mount a concentrated attack on pockets of unemployment and poverty. The pilot human

⁵ For a discussion of the application of this program to the health industry, see *Training Health Service Workers: The Critical Challenge*, U. S. Department of Health, Education, and Welfare (undated).

resources development programs utilize a case-by-case approach in dealing with unemployment and in coordinating the resources of the community to overcome particular barriers to employment at decent wages and with room for growth. Enterprises to accomplish these objectives were either created by the Concentrated Employment, Community Action, and Model Cities Programs, or selected from private industry. These prototype organizations and programs, which are just getting underway in Philadelphia, parallel national efforts at job creation.

Multiservice Neighborhood Center: The creation of a "War on Poverty Center" in each slum neighborhood had become a national objective by mid-1966. In early 1967, fourteen cities were selected to demonstrate the feasibility of this project. A \$127,177 grant was approved to build a center in North Philadelphia. The goal is to coordinate on-the-spot social, health, manpower, educational, and recreational services in poverty districts. Funding from five Federal agencies is involved, but under the special presidential "convenor" order, the Department of Housing and Urban Development is responsible for planning the overall program. The other four agencies have authority over their own areas of responsibility.

A major function of such community action programs is the employment of the poor in the program itself. The poor are hired as subprofessionals, the great majority of them in the Head Start Program. The establishment of slum neighborhood centers thus will provide jobs as well as services for some limited number of area residents.

Philadelphia Concentrated Employment Program: In mid-1967 the Labor Department announced a \$52 million effort to provide jobs for 34,000 hard-core unemployed in ten cities and two rural areas. Philadelphia was granted \$4.9 million to fund 2,600 slots for North Philadelphia residents in the City's concentrated employment program. Previously nine other cities had been selected, so that the total concentrated employment program amounts to about \$97 million to involve 61,000 unemployed.

The Philadelphia Employment Development Corporation (PEDC), a nonprofit organization, was created to run the City's Concentrated Employment Program. The PEDC coordinates manpower activities to avoid duplication; centralizes the flow of Federal money into the city; enhances local control of expenditures; and provides a basis for broad interest group participation in common manpower

problems. The overriding goal of the PEDC is "to place every participant in a permanent, full-time job suited to his capabilities and preferences paying the minimum wage or better and with opportunities for skill and salary advancement."⁶

The PEDC subcontracts to eight state, city, and private nonprofit manpower agencies for specific services required. These include responsibility for recruitment (outreach); interviewing, employment counseling, and testing; psychological evaluation; coaching; pre-vocational training; skill training; job development; and placement. The PEDC effort is being financed by MDTA, New Careers and Special Impact (Nelson-Scheuer and Kennedy-Javits 1966 amendments to the EOA), and increased NYC funds.

The major components to assure a job for all participants were outlined in the initial PEDC program. Through the establishment of 2,000 on-the-job training slots in private industry, employers will be encouraged to hire the hard-core unemployed. In addition, 643 jobs will be created by new or expanded programs: New Careers—235 subprofessional jobs; Special Impact—168 work experience jobs; Neighborhood Youth Corps—240 work experience jobs for youths 16–21; and MDTA—500 skill training slots. The success of the PEDC, a fledgling effort as of November, 1967, depends largely upon its ability to gain the cooperation of private industry in opening up existing jobs and creating new jobs for slum residents.

Project Team: In mid-1967, the Department of Labor publicized the awarding of contracts totalling \$14 million to six private firms and one public school system in ten cities to serve 6,230 hard-core jobless. The Philco-Ford Corporation received a \$1.5 million contract to train 800 unemployed residents of North Philadelphia. The strategy of this particular program is to engage the dynamic energies of private enterprise in a "total effort" to train and find jobs for the urban unemployed.

Project TEAM (Training and Experience to Augment Manpower) is financed under MDTA.⁷ TEAM is required to use the Pennsylvania State Employment Service to recruit the "hardest" of

⁶ *Concentrated Employment Program for the City of Philadelphia*, (June 1, 1967), p. i. The following data also came from this source, except where otherwise noted.

⁷ Unless otherwise noted the following data come from *TEAM Proposal to Establish a Center for Training and Experience to Augment Manpower for Employment*, Philco-Ford Corporation (March 31, 1967).

the hard-core unemployed and to cooperate with other manpower organizations in the City. The goal is to enroll 75 percent adult and 25 percent youth trainees. Philco will conduct the pre-vocational training stage of about six-weeks' duration. The second stage, on-the-job training, will be subcontracted to other Philadelphia vicinity firms, subject to Department of Labor approval.

The key to job development success here is based, in part, upon Philco's ability to provide positions for the jobless in private industry, and also and not incidentally within Philco itself. The assumption is that Philco's experience and its contacts in the business community will facilitate its success. It is too soon, as of November, 1967, for operating data to be available.

Some Concluding Observations

Presently Federal manpower policies involve a combination of pre-vocational education, skill training, and job creation. The major emphasis and commitment of resources have been to overcome supply-side barriers to full employment. Only in the recent past has there been a serious concern with the creation of decent-paying jobs with a future. Early but inconclusive reports on pioneering efforts to develop jobs for the hard-core unemployed are not too encouraging.

The thrust of manpower policy to reduce unemployment is, first, to reduce basic educational barriers to employment; second, to encourage private firms to provide subsidized work experience and training in the hope that the unemployed will qualify for open market-created jobs in these firms; and third, to make temporary, subsidized work experience and training slots available in the public sector, so that the unemployed may qualify for private employment or for public jobs created through increased government expenditures.

It is clear that the products and services of the public sector can be expanded without the notorious "boondoggling" of the 1930s. Involuntary unemployment can be reduced through provision for consumer needs not fulfilled by free market operations. At present it is unclear whether we are willing to spend the money necessary to meet these human and community needs. One thing is certain: the necessary condition to ameliorating hard-core urban unemployment is finding suitable jobs for the jobless.

DISCRIMINATION: A BARRIER TO EFFECTIVE MANPOWER UTILIZATION

PHYLLIS A. WALLACE

*Equal Employment Opportunity Commission**

This discussion is concerned with discrimination in employment as a major barrier to full utilization of manpower. An operational definition used by Thurow,¹ Fogel,² and others that discrimination is a subjective evaluation of an individual's productivity which interferes with or adversely affects his chances in the labor market, is used. No attempt is made to specify a precise measurement of labor market discrimination.

The role of the Equal Employment Opportunity Commission in helping minority group workers to gain full participation in the economy is described. Statistics on minority manpower employment patterns in 1966, are examined, and in the context of these findings I discuss the nature of employment discrimination.

I. Role of the Equal Employment Opportunity Commission

The Equal Employment Opportunity Commission, established under Title VII of the Civil Rights Act of 1964, combats discrimination in employment. Title VII prohibits discrimination by employers, labor organizations, and employment agencies on account of race, color, religion, sex, or national origin. The law is comprehensive in scope covering (1) failure or refusal to hire, (2) layoff or discharge (3) restrictions with respect to compensation, terms, conditions or privileges of employment and (4) limitations or classification of employees in any way which would deprive an individual of employment opportunities or otherwise adversely affect his status as an employee because of race, color, religion, sex, or national origin.

The Commission seeks to advance the economic status of minority group (Negroes, Spanish-Surnamed Americans, Orientals,

* The views expressed do not necessarily reflect the policies of the Equal Employment Opportunity Commission.

¹ Lester Thurow, *The Economics of Poverty and Discrimination*, The Brookings Institution, 1968.

² Walter Fogel, *The Effects of Low Educational Attainments and Discrimination on the Occupation Status of Minorities*, Conference on Education and Training of Racial Minorities, May 1967.

and American Indians) and women workers through programs designed to eliminate discrimination in employment. The question we are really asking is why the functioning of the labor market processes (in terms of gains and losses) falls with severe differential intensity on minority group members? Why have so few made significant employment and income gains? Why are so many restricted to inferior occupational categories?

II. *Minority Manpower Employment Patterns*

The reporting system of the Commission, The Employer Information Report—EEO-1, authorized under Section 709(c) of Title VII, provides us with detailed information on minority group participation and utilization in the work force. The Equal Employment Opportunity Commission in conjunction with the Office of Federal Contract Compliance of the Department of Labor and Plans for Progress conducts an annual employment survey to determine the industrial, geographic, and occupational position of minority group and women workers.

The EEO-1 employment survey covers private employers with 100 or more employees and holders of Federal government contracts of \$50,000 or more with 50 or more employees. The major exclusions are workers in Federal, State, and local government, private household employees and self-employed persons. Agricultural employers are exempt from the law because of size of establishment and the twenty-week work rule. Some employees of religious and educational institutions are also exempt.

Earlier this year the Commission released preliminary data on minority group employment in 1966 for several standard metropolitan statistical areas in the U.S. The analysis revealed a fairly consistent picture of under-representation of minority workers in the labor force and their concentration in the lowest paying blue collar jobs.

If we examine aggregate EEO-1 occupational data for the two largest minority groups, Negroes and Spanish-Surnamed Americans, we find that Negroes represented about 8 percent and Spanish-Surname about 2.5 percent of the 26 million employees reported in the survey. However, these workers occupy only 2.5 percent and 1.2 percent, respectively of white collar positions. Negroes hold almost one-fourth of jobs in the service category. See Table 1.

In a study of the EEO-1 data that Princeton University is preparing for the EEOC and the Department of Labor, a detailed analy-

TABLE 1
 Minority Employment by Major Occupational Categories, 1966 ^a
 (000)

	Total	White Collar	Blue Collar	Service Workers
All Employees	26,230.4	11,338.3	12,809.7	2,082.4
Male	18,028.1	6,669.0	10,169.6	1,189.5
Female	8,202.3	4,669.3	2,640.1	892.9
Negro Employees	2,120.5	286.2	1,372.5	462.6
Male	1,472.1	103.0	1,103.5	266.5
Female	648.4	183.2	269.0	196.1
Negro percent of employees	8.1	2.5	10.7	22.2
Spanish-surnamed Americans	654.9	141.3	433.8	80.4
Male	452.8	69.8	328.3	55.4
Female	202.1	71.5	105.5	25.0
Spanish percent of employees	2.5	1.2	3.4	3.9

^a Based on EEO-1 data.

sis of the occupational position of minority group workers shows Negro and Spanish-surnamed males to be under-represented in the six most desirable (highest paying) occupations. The researchers conclude that Negro males have the least desirable occupational structure and Spanish-surnamed males the second least desirable. The inferior occupational position of female minority group workers differs from those for males.

These numbers show that female minority group workers have a higher occupational position than male minority group members. Part of the answer may be related to the peculiar occupational structure of females in the labor market. Over 40 percent of all women workers are in clerical occupations, which are at the bottom of the white collar category. All males entering white collar occupations compete for positions in sales and the more demanding white collar occupations. The appropriate comparisons are minority group members to their majority group counterparts. The probability was 2 out of 5 that non-minority males would hold white collar positions as compared with the one in 15 for Negro males and one in seven for Spanish-surnamed males.

Another view of employment patterns for minorities can be shown by industrial analyses. The top 10 industries of the U.S. as reported

TABLE 2
 Negro Employment in Ten Top Industries, 1966^a
 (000)

SIC	Industry	All Employees		Negro Employees	
		Total	% Male	Total	Negro % of All Employees
20	Food and Kindred Products	1,125.2	75.4	124.2	11.0
28	Chemicals	930.9	80.2	57.1	6.1
33	Primary Metals	1,182.9	92.4	145.4	12.3
35	Machinery	1,373.7	85.5	58.3	4.2
36	Electrical Machinery	1,722.9	63.0	92.6	5.4
52-59	Retail Trade	2,859.9	47.1	240.9	8.4
	Wholesale Trade	1,056.3	79.6	64.5	6.1
	Medical Services	1,060.1	20.0	174.1	16.4
37	Transportation Equipment	1,853.1	89.9	168.9	9.1
40-47	Transportation	1,629.5	91.0	139.1	8.5

^a EEO-1 reports. Based on unrounded data.

under the EEO-1 are ranked by total employment and their minority representation is shown in Table 2. These industries each employed a million or more workers and together accounted for almost 60 percent of employment in the EEO-1 survey. The Negro participation rate ranges from 4.2 percent in machinery to 16.4 percent in medical services. The average for the top ten industries is 8.5 percent. There are the usual bottom-of-skill concentrations. In food and kindred products 80 percent of the Negro males work in semiskilled and unskilled jobs as compared with less than half of white males. In primary metals almost 90 percent of Negro males work at semiskilled and laborer levels as compared with approximately half of the white males.

The medical services industry deserves special comment. It shows the largest participation rates for Negroes, 16.4 percent. Examination of race, sex, and occupational data for this industry indicate that it is heavily dominated by female employees (approximately 80 percent), mainly white collar with half of these workers classified as technicians. Many of them are general duty nurses as well as other laboratory personnel. In 1960 Negro nurses accounted for 18 percent of all Negro female, professional, technical and kindred workers, the second important professional group after elementary school teachers. Since nonprofit hospitals (the main employer) in the medical

services industry, have not been leaders in paying high wages, it is open to question whether Negroes employed in these "white collar" jobs enjoy a preferred economic status.

III. *Nature of Employment Discrimination*

After review of these data, it is clear that powerful influences intervene to prevent minority manpower from achieving the benefits and opportunities they deserve in the labor market. Frequently educational and skill deficiencies, especially the former, are identified as the primary constraints on full participation in the work force. In his analysis of white/nonwhite occupational positions based on 1960 Census of Population data, Fogel finds that controlling for educational attainment accounted for only 30 to 40 percent of the differences between occupational positions.

We know that Negroes have made substantial gains in education since 1960. The median years of school completed by the employed nonwhite labor force in March 1966 was 10.0 for males and 11.2 for females as compared with 8.2 and 9.4, respectively for these groups in March 1959. Adjustments for qualitative differences in education would not be large enough to explain the remainder of the difference.

Noneducational factors may account for perhaps as much as sixty percent of the difference. The most significant noneducational factor is discrimination in employment. Even if only half of the difference in occupational status were associated with employment discrimination, the EEOC would still have a Herculean task.

Employment discrimination that exists today may not be the blatant, overt exercise of prejudice typical of previous decades. Operationally, present labor discrimination may be subtle, inadvertent, and may largely result from functioning of a highly technical, competitive, economic society.

The subordinate status of minority groups in the labor market has become so institutionalized that the Commission must focus on patterns of discrimination in employment through technical assistance programs as well as enforcement and compliance procedures. Under the law charges alleging discrimination are filed and investigated to determine whether the facts justify a finding of "reasonable cause" that an unlawful employment practice has been committed. In the event of a reasonable cause finding, the Commission seeks redress through the conciliation process of persuasion and negotiation.

Through this process the Commission seeks relief for the individual as well as remedy for any existing pattern of discrimination. If conciliation is unsuccessful, the individual may go to a U. S. District Court, or the General Counsel of the Commission may recommend referral of cases to the Attorney General for suit.

The complaint-oriented strategy described above may not be the most effective way of eradicating discrimination. Frequently the redress of individual grievances restricts the benefits to only one or a few individuals within a company or the population from which the employer receives applications for employment. Significant gains in eradicating pervasive patterns of discrimination can be achieved only by strategies of intervention that systematically alter the differential impact of labor market processes.

For example, testing of minority group applicants for employment raises several significant questions related to full utilization of manpower. Perhaps, one of the most significant recent developments in business and industrial employment testing is the realization that tests and for that matter other selection instruments, may not predict the job performance of minority and non-minority applicants in the same way. A test may be useful in selecting whites but not valid for prediction of the job performance of Negroes, and vice-versa. We know of several large companies that have begun extensive validation of the same tests on Negroes and whites separately. These projects were started as a result of the Commission's recommendations in its *Guidelines On Employment Testing Procedures*, adopted in August 1966.

IV. *Other Reporting Systems*

In addition to the employer reports two other reporting requirements for apprenticeship programs and labor organizations will provide an informational base for action. The EEO-2 reports are filed by those joint labor management apprenticeship committees meeting the criteria of (1) five or more apprentices in their program and (2) at least one employer sponsor with fifty or more employees and (3) at least one union sponsoring the program that operates a hiring hall or has fifty or more members. These reports will show the number of minorities in training, information on standards and selection procedures, and whether tests are used. Since August 1, 1967, records for all applicants by race have been required.

Union reporting forms (EEO-3) are filed by all local unions,

covered under Title VII, with 100 or more members. Included are labor organizations affiliated with national or international unions as well as independent or unaffiliated unions. Referral or hiring hall unions with 100 or more members must provide a breakdown by sex and minority group for their membership and persons referred for jobs. In addition, these local unions are also asked to provide minority group breakdowns for applicants for union membership and job referral.

Conclusions

Jobs are the key to participation in this society. Racial barriers have forced minorities on the average to produce and lay claim to a smaller share than other Americans of the nation's real output. Discrimination in employment against citizens because of race, color, religion, sex or national origin has consequences which are destructive not only for the groups involved but for this nation.

IV

THE PERIPHERAL LABOR FORCE

INTRODUCTION

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The relevance of focusing on the “peripheral worker” is suggested by the wide gap that exists between the corpus of economic theory and the realities of the labor market. Conventional theory starts with a simple bifurcation between work and non-work. It largely ignores a third possibility that falls between. Next it is predicated on the assumption that unless a man works he is likely to be without income. This too is at variance with the facts of a welfare society.

Since work is viewed in economic theory as being irksome there is little room for considering large numbers of persons, especially women, who may prefer work to non-work, income considerations aside. As a consequence of its simple bifurcation of the world into workers and non-workers conventional theory likewise has little sensitivity for the considerable number of young people who have one foot in each of two roles—as students and as workers.

The conventional wisdom has likewise never fully assimilated the extent to which trade unions in selected branches of the economy have a controlling voice over who works, at what he works, and how much he works.

Still another interesting discrepancy between the simplified assumptions of theory and the complexities of reality is the failure of most analysts to consider the extent to which a gap may be developing between where jobs are being expanded and where various groups of workers are forced to live and the consequences thereof for whoever has access to available jobs. Finally theory is only now coming to

grips with a deeper exploration of the way in which the nation's work gets divided among its citizens resulting from the fact that some are discriminated against because of the color of their skin or for other arbitrary reasons.

It is safe to conclude without impinging on what Professor Morse will have to say that the "peripheral worker" has been the neglected worker both in our economy and in our research about the economy.

THE PERIPHERAL WORKER IN THE AFFLUENT SOCIETY *

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When the Conservation of Human Resources Project first began its investigation of the peripheral worker, it was decided that our definition of the peripheral worker, derived from the framework in which the Bureau of Labor Statistics work experience data is cast, would be all those individuals whose work experience was less than full-time full-year.¹

There are all sorts of objections that might be raised against this procedure, perhaps the most important being that an individual who according to this definition is peripheral in a particular year might well not have been peripheral the year before or the year after. Also our definition does not distinguish between those who are in a peripheral status because that is their desire and those who are in it because of accident or in spite of a wish to be fully employed. In addition, the peripheral segment of the working population as we have defined it encompasses individuals who range all the way from those who have had only a few hours work a week or two during the entire year to those whose work experience is almost indistinguishable from that of the full-time full-year worker. And the picture would be very different if we were to have an unchanging sample in the survey from year to year so that we could look systematically at the work history of part of the population over a number of consecutive years.

For the past fifteen years or so, the percentage of those with work experience who have worked full-time for the entire year has ranged from slightly more than 57 percent in the Korean War period to slightly less than 54 percent from about 1958 to 1962, with a small rise from 1962 to 1965. To get some idea of the dimensions of the group of individuals whose work experience in a given year is markedly different from that of the full-time full-year employee, we can appropriately lump together those who work less than 27 weeks (the

* This is part of a larger study conducted under a contract with the Manpower Administration of the Department of Labor.

¹ See U.S. Department of Labor, Bureau of Labor Statistics, *Work Experience of the Population in 1965*. Special Labor Force Report No. 81.

group the BLS has called intermittent workers) with all those whose work experience was mainly part-time. Since 1959 about three out of ten individuals with work experience have been either intermittent or part-time workers. In 1965 this group numbered 26.5 million.

If we now look at what has happened to the major components of peripheral work over the past decade and a half, several features stand out. Part-time workers accounted for less than 15 percent of all individuals with work experience between 1951 and 1953. Between 1953 and 1958, this figure rose quite steadily and fairly rapidly, so that in 1958 part-time workers accounted for approximately 20 percent of all individuals with work experience. Since that year, however, the percentage share of part-time workers among all people with work experience during the year has remained very stable (with the exception of a slight drop in 1959). A characteristic of part-time work experience is that slightly more than one half of all part-time workers work a half year or less. Almost one third are employed 13 weeks or less. Those workers who are classified as "intermittent," the individuals who have worked full-time but for half a year or less, during the entire period from 1950 to the present, have accounted for approximately the same share of all individuals with work experience, about 11 percent of the total.

Individuals whose work experience is intermittent or who work primarily part-time schedules are more apt to be in some demographic groups than in others. Only 2 percent of white males aged 25-54, for example, are part-time workers, and less than 3 percent fall into the group that works full-time a half year or less. Although this demographic group accounts for more than one-third of all those with work experience during the year, only about one out of 26 part-time workers is a white male aged 25-54. Only about one out of every ten intermittent workers (those who work full-time a half year or less) is a white male in this age group. Although young workers, male and female, (our term included anyone 24 years or younger) accounted for only about one-quarter of all those with work experience in 1965, they accounted for almost one-half of all part-time work experience (46.6%). The same age group (14-24) accounted for an even higher proportion of all intermittent work experience, more than one-half (51.1%). Females aged 25-54 constituted slightly more than one-fifth of all those with work experience, but almost three out of every ten people whose work experience during 1965 was part-time in char-

acter. Women in these age groups accounted for one-quarter of all those whose work experience was intermittently full-time.

The occupational and industrial distribution of peripheral work experience is relatively clear cut. Occupations of high status, occupations requiring relatively high educational attainment, occupations having a high component of investment in on-the-job training, usually have a high proportion of full-time full-year employment experience. It is the workers in the lower status service occupations, private household workers, waiters and so forth, and laborers, above all farm laborers, who are much more apt to be part-time workers or intermittent workers. Industries characterized by large-scale firms and relatively large amounts of capital per employee usually have a very high proportion of full-time full-year employees in their work forces, and so do governmental agencies.

On the other hand, industries in which the typical firm is small in scale tend to be characterized by a relatively high proportion of part-time and intermittent workers.

A cautionary footnote should be appended to the figures that have been mentioned. All this material is the result of a once-a-year interview at which individuals are asked to sum up their employment experience over the past year. The most serious built-in limitation of the BLS work experience data is that it compels an individual to compress a possibly immensely varied experience into a very few terms. Because of the form of the questions, an individual is either a part-time or a full-time worker. He cannot be both. He is placed in only one occupation, only one industry. But it is the more peripheral worker whose employment experience is most erratic and multi-dimensional.

Finally, there is another part of the work experience data about which a brief comment is in order. In addition to being asked about the extent of his work experience, an individual is asked why he is a part-time worker. We have not stressed the distinction between voluntary and involuntary part-time and part-year work experience. Although an individual may feel that his part-time or part-year work experience is entirely voluntary, it may well be that it is just this feeling of "voluntariness" which demands explanation. It is all too easy for all of us to come to feel that the customary is also the voluntary.

The woman who takes care of the home may see no possible alternative; everyone in her world may expect her to work only part-time

or part-year. She may finally come to feel that, like all women similarly circumstanced, her life style is more or less a matter of her own volition. The interesting questions may be just those which emerge when we examine critically her statements that she is voluntarily working part-time or part-year. Similarly a student may state that he works part-time or part-year because he is attending school. But if we probe deeply in a particular case, we may find that actually many students would much prefer to work and are in a profound sense involuntarily going to school, which may be simply an indirect way of saying they are involuntary part-time and part-year workers. A different kind of labor market, a more receptive attitude on the part of society to young workers might transform many young part-time part-year workers now going to school into quite satisfied full-time full-year workers. Even what seems like a straight-forward answer that an individual is a part-time or part-year worker because of illness or other disability often cannot stand critical examination. It is not alone the army which has malingers, and the interesting question again is why a particular illness, debilitating to one individual, prohibitive of work experience, is surmounted by another.

Although the work experience data of the BLS goes back only a few years, there is an immense amount of earlier material available in the publications of the various state departments of labor, in the reports of industrial commissions, in investigations carried on by the Department of Labor and other federal agencies, which bear tangentially on the questions of hours and intermittent employment patterns in some industries and some geographical areas. This material gives one the impression that there was a great deal more intermittent work in the late 19th century than we are apt to take account of. Indeed, if we think of the actual day to day life of the great mass of Americans at the turn of the century, if we ask ourselves what tasks they were engaged upon, we cannot help being struck by how many people must have been involved in lines of activity, industries and occupations, which necessarily offered a good deal of part-day, part-week and part-year employment. It was a common thing to hire laborers by the hour; the day laborer, farm and non-farm, was by a large margin the largest occupational group.

If the 19th century was characterized by a great deal of part-time and intermittent work, a wrong impression of one of the basic characteristics of social life is given by using the terribly long full-time weeks

in industries such as iron and steel as typical of the world of work. But attention to the character and amount of peripheral work experience at the turn of the century is important not just because it may provide a corrective to exaggerated impressions of the length of the average work week. Let us consider who the peripheral worker in America was in these years from 1880 to around 1914 when the economy was maturing. These were the decades when a stream of immigrants flowed into the eastern ports of the country. The immigrant of these years, strange in language, in religion, in custom, in dress, arriving in America with inappropriate skill, was socially excluded and condemned to occupy the lowest status.

In the society emerging in America in those years, low status in general, when translated into economic terms, meant low status occupations and these tended in turn to be intermittent, unskilled, insecure manual occupations. The costs of flexibility of output in the form of intermittency of employment, employment by the hour, employment by the day, fell very heavily upon the immigrant. One institution, it is true, might have given him some status, might have afforded him some protection, the trade union. But all too often it, too, seemed united against him. The trade unions as a group were leaders in the fight for restrictive immigration laws. They passed resolutions against the immigrant, condemned him for lowering standards of living.

With the passage of the Quota Law of 1921 it was no longer possible to recruit a new group of peripheral workers from a flow of immigrants. It is true that for a time the old situation will continue, but the "new immigrants" grow older and it is necessary to replace them. The children of the "new immigrants" have gone to American schools. Their native tongue is English and they are, on the average, more literate, because more urban, than the children of native-born Americans. For many of these children the brand of their fathers' social inferiority, the childhood traumas induced by the erratic character of their fathers' and mothers' work experience, with its concomitant poverty punctuated by times of dire need, will be sufficient reason to make them hold firmly to the idea that security of employment is the most important of goals, some status in the labor market the only real insurance.

In the Great Depression, the native-born worker, the immigrant's son, the immigrant himself are all swept into the crucible together. Out of the ordeal a new type of trade union emerges in which the

foreign-born and the sons of the foreign-born take leading roles. Since the new unions are primarily in the great large-scale industries, the position won for their members is to become more and more valuable, more and more secure. But peripheral work must still be done, flexibility of output is still necessary in the face of random ups and downs of demand, seasonal changes in demand, and cyclical fluctuations. Peripheral work must still be performed where scheduling problems produce odd operating hours. Who is to fulfill these roles, now that the immigrant is no longer available?

According to this new structuring of the supply of labor, all adult white males, particularly those who are married, have a claim to full-time full-year employment. They may not achieve it, but it is right and proper that they should claim it, and that the major institutions of society, governments, business organizations, and trade unions, should try to implement these claims. Full employment is *their* full employment. The other major groups of potential workers—women, youth, older workers, non-whites, and those immigrants who get past the quotas—are the proper sources of peripheral workers. This does not, it should be emphasized, mean that all workers from these groups perform peripheral work. Quite the contrary. A large fraction of women workers, older workers, and non-white workers do, indeed, work full-time the year round. What it does mean is that peripheral workers will be drawn primarily from these groups. It means also that, as a society, we still have a great difficulty deriving institutional means to afford the peripheral worker the kind of protection that is taken for granted with respect to the full-time full-year workers. The peripheral worker performs the tasks and services that are hard to plan for in large-scale bureaucratic fashion. But he is also a member of an immense non-competing group of workers. His wage rates, his conditions of work, his legal and extra-legal status are *not* determined by the immensely complicated apparatus of three-way bargaining between large-scale employer, large-scale union and government that determines the fundamental conditions of life for most of the nucleus of our working population, the full-time full-year workers.

If this account can be accepted as approximately correct, it may have some significant implications. I want to look at one of these implications now. The years between 14 and 20 are considered by most European countries to be critically important in the socialization of the young worker. These are the years in which he is absorbed into

the work force. The future stability of the work force, and of society itself, depends upon a successful outcome of this process of socialization. Formal schooling, at least full-time schooling, is terminated for most future workers at a relatively early age. Proposals to extend the school leaving age have met with strong resistance, even on the part of some working-class parents. In my view this resistance stems in part from fears that an extended educational period will threaten this traditional process of socialization at work.

In America, how different! Here the school leaving age has increased for just those individuals who in the past would have formed the bulk of the non-managerial, non-technical work force. If our society were convinced that during the years of late adolescence the young worker-to-be had to undergo a process of socialization, it is hard to imagine that we would be as liberal in our attitudes toward increasing the length of the educational process.

The high school drop-out is embarrassing proof of the extent to which youth are relegated to peripheral work experience. We want him in school because we do not want him to assert at that age a claim to more than peripheral work status. The same kind of young man, in a European context, might at the same age already be a regular member of the work force, his youthful work experience being a positive value rather than a negative attribute.

We are beginning to amass a body of material produced by the participant-observer, by studies in depth of critically important groups. A study of a very peripheral group of workers, the street-corner Negro, carried out in Washington by Elliot Liebow is a useful complement to these remarks.² The informal shape-up of Negro men on a Washington street corner is far from a world of union contract, seniority, unemployment insurance, social security, and minimum wages. But the situation of those who use the shape-up is so desperate they fear an attempt to regulate it would threaten total exclusion from the world of work. To them, the world of work has become completely bifurcated.

The question this paper is concerned with is whether this bifurcation is a very general phenomenon. Do powerful, pervasive, though largely obscure barriers stand between the peripheral worker and the status of full-time full-year employment? Do we take it for granted

² Elliot Liebow, *Tally's Corner* (Boston: Little, Brown and Company, 1966).

that peripheral work in general, and the most peripheral work in particular, should be performed by members of demographic groups whose status is lower than that of the adult white male group?

Do we make an over-investment in human capital in those workers who possess full-time full-year status and an under-investment in human capital in peripheral workers? If so, does this in itself constitute one of the important barriers between the peripheral worker and employment in those sectors of the economy that can provide continuity of employment?

The peripheral worker in our society provides the economy with a very important part of the flexibility which it must have if it is to be efficient and dynamic. In the past, the immigrant provided much of the flexibility that a growing economy required and he often paid too much of the costs. We should ask ourselves today whether new groups have taken the immigrant's place. If the answer is even in part, "Yes," we should develop policies which will insure that the costs of flexibility are not shifted onto the peripheral workers and—in the long run this is much more important—that the social and economic barriers to movement from peripheral work status to full-time full-year status are reduced to the point where part-time and intermittent work experience represents an enlargement of option and opportunity, not a contraction of life's possibilities.

DISCUSSION

GERTRUDE BANCROFT McNALLY
Washington, D.C.

My comments on Professor Morse's paper are directed toward the usefulness of his concept of peripheral workers as a new tool for diagnostic statistics on the work force. I shall leave the discussion of the plight of such workers to other members of the panel.

Mr. Morse's paper presents a new approach to a classification problem that has intrigued labor economists and statisticians for many years: i.e., how to separate the sheep from the goats in the working age population. Who is a sheep—that is an important member of the labor force, worthy of public concern when unemployed or poor—and who is a goat (nonsheep in Census-BLS type language) depends upon the needs and biases of the beholder. In the past, such terms as primary and secondary workers, primary and fringe or marginal workers, permanent and intermittent labor force members, full-time and part-time labor force members, have been used. In general, the terms and the definitions have been coined to distinguish between those, such as family heads or major wage earners, whose job needs and employment status are a matter of high concern to employment policy makers, and others—wives, students, semi-retired—who may or may not *need* to work. A fairly recent example of this effort is the publication by the BLS of data on the unemployment rates of the full-time and the part-time labor force. The full-time labor force consists of all those with full-time jobs or seeking them, plus those working part-time for economic reasons (slack work, etc.) The part-time labor force consists of those voluntarily working part-time or seeking part-time jobs. The advantage of this type of dichotomy is that it is as objective as possible, and requires no value judgments on the importance of the specific individuals in the family or in society. A married man has no more weight than his working wife if they are both working full-time or seeking full-time work.

Whereas most of the classifications I have mentioned tend to minimize the importance of the intermittent temporary worker group, Morse's approach would certainly tend to maximize it. In his proposal, the traditional goats change places with the sheep: peripheral workers defined as those working less than full-time the year round

are the subject of concern. They constituted 30 percent of all men who worked in 1966 and the large majority of all women—60 percent. These are very large groups to worry about—15.5 million men and 21 million women. Even if we define peripheral workers, as the author sometimes does, to include only those working part-time and those working less than half a year, we have almost 10 million men and 16 million women. Should we have as a national objective the provision of year-round full-time jobs for all of these?

The size and heterogeneity of the peripheral group, under either definition, give me pause, and suggest that sharpening of the concept is needed if it is to be a worthwhile tool of analysis, or diagnosis. The author uses the term in several ways—as a measure of labor force attachment, as a description of type of work, and as a label for types of workers. If a measure of labor force attachment is wanted, then perhaps a better criterion is the number of weeks in the labor force (working or seeking work)—first published by the BLS for 1965. According to this measure, incidentally, there is no difference between white and Negro women—55 percent are in the labor force working or seeking work for 50–52 weeks—and for white and Negro men, the difference is quite small—84 percent for white men and 81 percent for Negro men in 1965. For all groups, the proportions in the labor force year round are much higher than the proportion with full-time jobs the year round; the latter is a figure which measures only success, not labor force attachment. But we have no historical series based on the measure of time in the labor force, and can only look to its use in the future.

As to the difference between peripheral workers and peripheral work, I believe we need some further thought. Years ago almost all servants worked long hours, full-time and the year round. Now, some domestic and other service jobs are year-round full-time but most are not. Households that want full-time domestics and can both find and afford them, in general, pay better, require longer hours but less work per hour during the week. Many day workers do not want the long hours with one employer but prefer to shift from one employer to another, during the week, and thus work for households that cannot afford or do not need to have a full-time worker. Housekeeper and baby-care jobs tend to be full-time, but except for this, the work is substantially the same. Is it peripheral?

Again, retail trade is an industry which makes extensive use of

part-time and intermittent workers, along with regular full-time sales clerks. Is the work peripheral? Hospitals are, as any one knows who has been in one, nightmares of tangled working arrangements. Here, it is true, much of the skilled nursing and laboratory work is performed by regular full-time workers, but by no means all.

In agriculture and construction, the factors of weather and seasonality are so important that the term peripheral hardly applies across the board. Despite these fluctuations, there is regular work in these industries. We must all know farm operators, landscape gardeners, builders, who are crying for regular full-time workers but cannot find them at the wages they are offering, or indeed, to hear them talk, at any wage.

What I am trying to say is that apart from seasonal activities, there may be relatively few so-called peripheral jobs that are not associated with small scale or badly organized, or fly-by-night business operations as described in Elliot Liebow's study of the street corner Negro. I would suggest, therefore, that the term peripheral is more useful as a description of workers and their working arrangements rather than of an occupation or type of work.

And now for my real concern—and here I engage in complaining to the author about something he explicitly says he cannot do, at this point. It seems to me *essential* to be able to distinguish among various types of peripheral workers if the concept and measurement are to be at all meaningful. In 1965, 7 million persons were in the so-called peripheral class chiefly because of unemployment. They would in large measure be candidates for full-time work and should have high priority in our concern. Nor would anyone doubt that underemployed workers like the casual construction laborer or dishwasher or migrant farm worker or day laborer, some of whom may never report weeks of unemployment because they find some work each week, should also be of great concern. (Incidentally, many underemployed workers would not appear even in a count of peripheral workers because they work long hours most weeks. Some 3 million men and 2.6 million women in 1965 worked year-round full-time but earned less than \$2,500—chiefly in agriculture, retail trade, personal services, and in nonfarm self-employment.) Adequate resources of our manpower planning establishment should be directed toward improving the organization of the labor market for such workers, recruiting

them into training or retraining and rehabilitation programs, and trying to solve this old and too familiar problem.

Illness or disability, which is another major reason for failure to work full-time the year round, cannot be put aside so cavalierly as the author does. Illness, disability, and low income are highly correlated, and the inability of persons with certain types of handicap, physical or mental, to get and hold full-time jobs cannot be ignored. The National Health Survey, on the basis of very detailed interviews, revealed that 84 percent of the men 25 to 64 years old not in the labor force in an average week of 1964-65 had chronic conditions that for the majority limited their work activities or made them totally unable to work. How many were faking no one knows but that health is a serious problem affecting the employability of large numbers of our population cannot be argued. New approaches such as the Neighborhood Health Centers supported by OEO are required, and not simply the decasualization of employment.

Mr. Morse has a novel point of view about another very large segment of the peripheral group—namely those who worked part-time on less than a full year because they were going to school—9 million in 1965. He seems to think that if many could be extricated from school, they could enter the ranks of regular full-time workers and thus be saved. Having been conditioned to grieve over the dropout and to rejoice over sensible programs for providing work experience along with education, I am not prepared for such a change in values. Certainly many of our recreation and resort establishments would have to fold up, along with the Christmas trade, if young people ordinarily in school were not free and eager to take vacation jobs. Here, it seems to me, the author in his admiration for systems which provide orderly transitions from school to work through training and apprenticeship schemes (often at menial tasks and extremely low wages) has confused us. What may be wrong in the USA is the type of education and the disorganized labor market for young people, not the fact that in a given period of time, like a year or a week, both education and employment experience occur, usually to the advantage of the young person.

My last complaint is about the treatment of women! The majority of peripheral workers are women and the majority of them work less than year-round full-time because of home and family responsibilities. The author says "The woman who takes care of the

home may see no possible alternative; everyone in her world may expect her to work only-part time or part-year. She may finally come to feel that, like all women similarly circumstanced, her life style is more or less a matter of her own volition." Not pausing to comment on this reflection on her wits, I will only say that there is such wide variation among women in their attitudes toward working full- or part-time outside the home that dogmatic statements are unwise. One knows oneself, one's friends and relations, or one's neighbors. We also have a BLS survey of married women who entered or left the labor force in 1963 (and would therefore be classified under the broad definition as peripheral). In that survey, the women were asked "If you had a choice, which of the following would you prefer to do:

- Not work outside the home at all
- Work part-time only
- Work at regular full-time jobs."

Some 42 percent said they would prefer not to work at all and 35 percent said their preference was for part-time work only. Only 23 percent preferred a regular full-time job; not unexpectedly, this proportion was higher (29 percent) among women who had entered the labor force, and was still higher (49 percent) among those who took jobs because of personal preference rather than economic necessity.

Admittedly a small sample from a small survey but it is relevant to the discussion of peripheral workers and their true feelings about working full time the year round.

The gist of my remarks really is that I think the author, who is calling attention to serious disorders in our current labor market is really talking about under-employment: unemployment and involuntary part-time work and full-time work at low wages. For this concept we have as yet no fully adequate measures, but perhaps some of the on-going longitudinal research using annual work experience data along with many other measures of resources, needs, and attitudes may supply the necessary answers to support both statistics and new policy decisions.

DISCUSSION

ROBERT M. FEARN

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I'm pleased to have the opportunity to discuss the interesting paper read by Professor Morse. My remarks will be restricted to a major hypothesis of the paper—namely, that peripherality is likely to result from institutional or educational constraints so that we may regard the members of the peripheral labor force in the main as a noncompeting group.

The question Morse raises is an empirical one. As such, it should be formulated in a manner which is consistent with traditional economic theory in order to facilitate appropriate tests of the hypothesis with the best statistical tools available.

In the absence of noncompeting groups, the traditional theory of choice leads us to expect differences in labor force participation rates and differences in allocations of labor time among individuals and population subgroups to be functionally related to a number of "choice" and taste variables. The "choice" variables include relative wage rates in different employments including the implicit returns of housewifery, differences in unearned income, the expected returns from the allocation of time to further schooling and the like. Where labor force activities can be explained (in the statistical sense) by such "choice" variables or by taste variables, the noncompeting group hypothesis will be found wanting.

In his paper, Morse considers both differences in labor force participation rates and differences in the allocation of labor time, given labor force participation rates, for various population subgroups: interpreting these differences as behaviors consistent with the non-competing group hypothesis. Such differences, however, may result from free choice.

In attempting a preliminary evaluation of the degree to which differences in labor force participation are related to "choice" variables, we are fortunate in having a large number of studies of the determinants of labor force participation among various population subgroups. These studies extend back to the classic work of Douglas and Schoenberg¹ and include studies done by my fellow discussants.

¹Erika H. Schoenberg and Paul H. Douglas, "Studies in the Supply Curve of Labor," *Journal of Political Economy*, XLV (1937), pp. 45-79. See also George F. Break, "Income Taxes, Wage Rates and the Incentive to Supply Labor Services," *National Tax Journal* VI (1953), pp. 333-352.

Recently one finds the work of Cain, Mincer, Bowen and Finegan, Tella, Dernberg and Strand, and Kusters.² In my view, these studies indicate that much of the variance in labor force participation rates among groups which are loosely attached to the labor force can be explained by "choice" variables. One of the most illuminating of these studies is Cain's recently published book on the labor force participation of married women—one of the groups strongly represented in the peripheral labor force. My own work on the labor force and school participation of teenagers shows a similar flexibility of labor force response—particularly among students.³ Alternatively stated, these studies show elasticities of labor force participation with respect to a number of "choice variables" which are often sizeable and statistically significant. Moreover, the R^2 's attributable to choice variables are relatively large.

In his paper, Morse also considers the difficult problem of labor time allocation: suggesting that a large proportion of the peripheral workers are estopped from moving into the full-time work force although part-time and intermittent employment is open to them. Again the question revolves around the range of choice. It is certainly conceivable that there are important educational, attitudinal, or class differences which limit an individual to part-time or inter-

² Glen Cain, *Married Women in the Labor Force: An Economic Analysis* (Chicago: The University of Chicago Press, 1966).

Jacob Mincer, Industrial Relations Research Association, *Proceedings of the Nineteenth Annual Winter Meeting* (Madison, Wis., 1967), pp. 219-229. "Research in Labor Force and Unemployment," (Unpublished progress report for the National Bureau of Economic Research, 1966).

W. G. Bowen and T. A. Finegan, "Labor Force Participation and Unemployment," *Employment Policy and the Labor Market*, ed. Arthur M. Ross (Berkeley, California: University of California Press, 1965), pp. 115-161.

Alfred Tella, "The Relations of Labor Force to Employment," *Industrial and Labor Relations Review*, XVII (April, 1964), pp. 454-469.

Thomas Dernburg and Kenneth Strand, "Cyclical Variations in Civilian Labor Force Participation," *Review of Economics and Statistics*, XLVI (November, 1964), pp. 378-391.

Marvin Kusters, "Income and Relative Price Effects in the Labor Supply Function," (Unpublished monograph, Public Finance Workshop, The University of Chicago, December 15, 1964).

Jacob Mincer, "Labor Force Participation of Married Women: A Study of Labor Supply," *Aspects of Labor Economics* (New York: Princeton University Press, 1962), pp. 63-97.

³ Robert M. Fearn, *Labor Force and School Participation of Teenagers* (Unpublished monograph, Labor Workshop, The University of Chicago, 1967).

mittent labor. In 1874, John E. Cairnes described the noncompetitiveness of an unskilled worker as follows:⁴

“ . . . but beyond this, he is practically shut out from competition. The barrier is his social position and circumstances, which renders his education defective, while his means are too narrow to allow of his repairing the defect or of deferring the return upon his industry till he has qualified himself for a skilled occupation.”

The answer to the question raised by Morse depends, then, upon the degree to which full-time work differs from part-time work in the nature of the “required skills.” Few studies are available in this important area of analysis. I strongly encourage Morse to concentrate upon improving our knowledge of the cross elasticities of demand (and of supply) in the part-time versus the full-time labor market.

This area of investigation is filled with analytical difficulties. As a corollary, however, it provides numerous opportunities for new insights. Let us consider a few of these difficulties and concomitant opportunities. First, one must take care not to confound the measurement or interpretation of cross elasticities with the results of aggregate monetary and fiscal influences. The cross elasticities of demand, in particular, may be very small under conditions of less than full employment. To elaborate, consider the operation of the labor market under such conditions. Where there are known differences in mean levels of skill among easily identifiable groups and where full-time wage rates are rigid downward, employers will tend to use race and other simple measures as cheap screening devices—without regard to the overlapping of the skill distributions—leaving the lower skill group to casual employment if any. Upon returning to aggregate full employment, full-time employment opportunities will emerge for those previously rejected as unqualified. The recent opening of employment opportunities for Negro males in the textile industry of the Carolinas is a good illustration of this effect.⁵ Because fewer Negro males are available now for part-time or seasonal work in planting and harvesting, Carolina farmers have begun to employ more

⁴ John E. Cairnes, *Some Leading Principles of Political Economy Newly Expounded* [1874] (New York: Augustus M. Kelley, 1967), pp. 65–66.

⁵ Donald D. Osburn, *Negro Employment in the Textile Industries of North and South Carolina*, (Washington, D.C.: Equal Employment Opportunity Commission, Research Report 1966-10, November 21, 1966).

women and more teenagers, chiefly Negroes, at higher wage rates. The entire phenomenon suggests reasonably high cross elasticities of demand between the part- and full-time labor markets. The important point of this case study for Morse's analysis is that Negro males acted as if they were a noncompeting group *under conditions of less than full employment* without actually being prevented by lack of skill or other attributes from full-time participation under conditions of aggregate full employment.

Second, in looking at the interconnections between the part- and full-time labor markets, one needs to consider the effect of the disincentives which are built into our welfare and social security systems. The research of two of my colleagues at North Carolina State University—Dr. Christopher Green and Dr. Leonard Hausman⁶—strongly suggests that welfare recipients may choose to work part-time (or full-time on a sub-rosa basis) in order to avoid the implicit 100 percent tax rate on market earnings above some minimal level. A similar restraint may influence the behavior of older workers who face or faced until recently similar high marginal tax rates under social security regulations. Incidentally, Hausman's work also points up the limited income producing potential of welfare recipients—even with full-time employment.

Third and I believe very important, one needs to investigate the degree to which poorly trained individuals are relegated to part-time or casual employment by the differential application of our high minimum wage laws and by similar *private* regulation of wage rates.

Finally, we need to consider the influence of labor market information on the part-time, full-time work choice. Following the lead of Lurie and Rayack,⁷ one of our graduate students, Mr. William Pace, recently conducted an investigation of racial differences in job search patterns in the Raleigh, N.C., area, concluding that:

“The predominant use of informal search methods, largely friends and relatives, probably works to the disadvantage of nonwhite job seekers. Given the concentration of nonwhites in low skill, low wage occupations and assuming that the

⁶ Christopher Green, *Negative Taxes and the Poverty Problem*, (Washington: The Brookings Institution, 1967).

Leonard Hausman, *The 100% Welfare Tax Rate: Its Incidence and Effects*, (Unpublished Ph.D. dissertation, University of Wisconsin, 1967).

⁷ Melvin Lurie and Elton Rayack, “Racial Differences in Migration and Job Search: A Case Study,” *Southern Economic Journal*, Vol. 23, pp. 81-95.

friends of nonwhites are largely nonwhite, the flow of occupational information through friends and relatives serves to maintain the status quo with respect to the occupational distribution by race.”⁸

Although Pace did not direct his attention to the part-time, full-time labor market choice, the effect of the truncated informational sources cited by Pace could be a major one for members of the peripheral labor force—whether black, white, yellow, or red.

To summarize, I have suggested that “choice” variables, governmental constraints, and information channels may go far in explaining the behaviors Morse associates with noncompeting groups. This does not mean that I reject the usefulness of Morse’s hypothesis. Indeed, no reasonable man familiar, in particular, with the historically poor educational system of the South and the conditions of Negro ghetto schools in the North would reject it. What I have been attempting to do in this comment is to clarify the issues and to suggest the need for rigorous empirical tests. By such tests, we should be able to identify those persons or population subgroups who are in the peripheral labor force by choice—married women, student workers, and the like—and those who are there because society has given them no other alternative. I expect that a full analysis of the latter would reveal not only the influence of low educational or skill levels in the Cairnesian tradition, but also the interaction of these low levels of education with the disincentives of the welfare and social security system and the disemployment effects of high minimum wages.

⁸ William Vernon Pace, *Racial Differences in Job Search Patterns* (Unpublished Master’s paper, North Carolina State University, 1967), Abstract.

DISCUSSION

WALTER FOGEL

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Professor Morse's working definition of the peripheral worker population includes all individuals whose work experience is less than full year or full time. In 1965, 38 million persons came under the scope of this definition, or roughly 45 percent of all persons who worked during the year. Professor Morse's attention, however, appears to extend even beyond these 38 million. At least this can be inferred from his discussion of voluntary and involuntary peripheral work where he suggests that, though it is *customary* for many housewives and students to stay out of the labor force because of the demands made by other activities, it should not be assumed that this behavior is *voluntary*. If all persons who are out of the labor force because of their not entirely voluntary performance of other activities were to be included in the concept of a peripheral labor force population, that population would be very large indeed.

Though Professor Morse's vision, at least peripherally, includes a very large number of persons, I suspect that his real concern in writing about this subject is with a much smaller number. Though he does not wish to stress the distinction between voluntary and involuntary part-time—part-year work experience on the grounds that what appears to be voluntary may in reality be only customary, I think he would agree that many of the 38 million who were part time or part year workers in 1965 did not want a full time—full year work experience and that many others who would like to have had such experience did not have it because they had other commitments, commitments which had been undertaken with at least some degree of free choice.

It is obviously true that some of Professor Morse's peripheral workers are much worse off than others—that some must endure great economic, social and psychological disadvantage because of their peripheral status, while the peripheral status of others does not entail disadvantage and may even include substantial benefits. If we are to design appropriate policy and get it accepted—an end to which I assume Professor Morse's interest is ultimately directed—we must have a way of identifying those whose peripheral status is an indi-

cator of disadvantage. Therefore, the voluntary-involuntary conception or some variation of it must be retained.

That being so, I think we can talk most usefully about the peripheral problem by confining our attention to the unemployed (because by definition, unemployment is involuntary), those who work part-time for economic reasons and those who want to work but are not in the labor force because they believe no jobs to be available to them or are physically incapacitated. I would like to also include the mentally incapacitated but know of no careful attempts to explicate the size of this group. Professor Morse's paper is concerned with all of these groups—as well as with others that I have excluded—and also seems to suggest that we can improve our knowledge if we broaden the time perspective within which we look at these concepts. Let us take a very brief look at the effect of enlarging this time perspective.

At present the CPS provides us with data on unemployment measured over one week. In 1965 an average of 3,400,000 people were unemployed in the 12 weeks during which unemployment was measured. But in 1965, 12,300,000 people experienced unemployment at some time during the year. The peripheral concepts other than unemployment, are not measured either well or often, but if we are willing to estimate with reckless abandon, we can add in those who worked part-time for economic reasons, those who were not in the labor force because they believed no work was available, and those who wanted to work but could not because of illness or physical disability. Then we come up with totals of about seven and a half million as the weekly average and somewhere around 20 to 22 million over the year of 1965.

At least a couple of things stand out from these two sets of figures. First, it is evident that large numbers of people who have trouble getting and keeping employment do not fall into the unemployment classification. Instead, they would have to be classified as partially employed, discouraged or disabled. Secondly, the numbers of people who have difficulty getting and keeping employment over a year's time are much larger than the numbers with such problems in a given week. In relative terms, about 10 percent of those in the labor force plus those not in because of disability or discouragement have trouble each week; over a year's time this percentage rises to about 20 to 25.

Thus, it is certainly true that if we use the peripheral concept, or perhaps I should say, my version of it, and if we extend the time

period we look at, the problem of obtaining and keeping employment in our society takes on larger dimensions than if we confine our attention to unemployment in one week.

Now I would like to turn to another aspect of Professor Morse's paper. He finds that the incidence of peripheral work is especially heavy for four demographic groups. If I interpret him correctly, he attributes the disproportionately peripheral status of these groups, and of the immigrant groups who he sees as their predecessors, to societal attitudes. The young, the old, women and ethnic minorities are all seen by the influence makers in our society as outsiders, are assigned low social status and are relegated to peripheral kinds of employment.

I must express sharp disagreement with this view. Though society may discriminate against all four of these groups, and unmistakably does in the case of disadvantaged ethnic groups, I would argue that discrimination brought about by prejudiced attitudes is not a major reason for the peripheral work status of any of these groups, with the possible exception of the ethnic minorities. Rather the peripheral status of these demographic populations derives primarily from the useful functions that it performs for them and from employer judgments about the worker characteristics which produce economic efficiency. In other words, peripheral work is common to these groups because many persons in them prefer it and because in the aggregate, the job qualifications of these groups compared to those of males aged 25-54 are low.

I would contend that peripheral work is especially functional for women and the young, has some functional aspects for older workers, but probably has none for minority group males of prime working age. The job qualification problem exists for all of these demographic groups if we recognize that employers are interested in training, turnover and fringe benefit costs as well as in the skills and abilities which people bring to the job. Though employers may underestimate the economic productivity of all four groups, I am of the opinion that only the racial and ethnic minorities would greatly improve their economic position if all labor market discrimination were to end. In fact, so much more serious are the peripheral work problems of Negroes, Mexican-Americans and Puerto Ricans, that I doubt the usefulness of trying to discuss their problems in the same context as

that used to consider the peripheral work attachments of women, the young and the aged.

I hope that my remarks have not given the impression that the matters which concern Professor Morse are not important, because they are very important indeed. Furthermore, many of the problems denoted by the peripheral work concept have not really been faced by our society. We especially have not faced the problems of transition between the various kinds of nonemployment and employment statuses. For example, we have not provided institutions which would facilitate the transition between high school and work for the poor and not so bright which are analogous to colleges and universities as they perform this function for bright young people with means; we have not provided good opportunities for educational second chances for those adults who could not or chose not to complete high school during the usual schooling years; our society makes it very costly to be over 50 and without a steady job, yet we have done very little to help the many who are faced with this status, the recent anti-discrimination legislation, notwithstanding; and most serious of all, we have not provided programs which adequately compensate Negroes for our discriminatory treatment of their ancestors.

Yes, the peripheral concept does denote great problems and much effort should be devoted to their solution. But policies designed to deal with these problems must be based on sound understanding and analysis if they are to be accepted by our policy makers and if they are to be effective. Let us extend every best wish to Professor Morse and his associates for the development of this understanding and analysis.

DISCUSSION

DAVID P. TAYLOR

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Mr. Chairman and fellow peripheral workers, I am happy to have the opportunity to comment on the paper Professor Morse presented here this afternoon. Mr. Morse is to be congratulated for focussing our attention on a group in the labor force certain segments of which have been too long neglected.

I am particularly concerned, as Morse is, that we, as a society, are shifting too much of the cost the flexibility our economy requires to those who can least afford it. I believe, based to some extent on my own research into the labor market for unskilled Negroes, that there can be no answer but YES to the question of whether new groups have taken the immigrant's place in providing this flexibility whatever the reason. I further believe that we must find ways immediately to enable those who want full-time work to make this all-important transition.

Having said that let me raise some questions about the material presented. These questions may arise because of the way the paper I read was organized rather than the fact that Morse has not considered these issues. First, he finds that large scale industries—those with heavy capital/labor ratios tend to employ large numbers of full-time, full-year workers while industries with typically small scale firms use many peripheral workers. One thing that should not be ignored, however, is that some of the latter industries are characterized by heavy seasonal fluctuations. Retail trade, as many of us have recently experienced, is the glaring example.

Then Morse in the written version gives his special attention to the health service industry, which is made up of large scale units with heavy capital investment but a large number of part-time and intermittent workers. He blames this fact on the low wage levels and the lack of job security the institutions in this industry offer to their work force. While I am entirely sympathetic to this general view, let me add that a significant proportion of the peripheral workers in this industry may be in occupations such as special duty nurse and be intermittent employees because of their own convenience. Thus in Boston, this fiscal year to date, the nurses registry of the state employ-

ment service has made over 7000 placements. This is the second largest volume of placements of any of the Boston offices—the general industrial office has made fewer than 3000 placements since July first of this year.

I had more serious difficulties in understanding the comments about voluntariness and the part-time part-year labor force participation of women and students. In the case of some married women Morse suggests that they are staying home, tending their children not because they want to, but because they are expected to by society. I would suggest that this is almost entirely conjecture on his part. He has presented no evidence from which inferences can be drawn in this regard. On the same evidence I could conjecture that a number of full-time, full-year female workers would prefer to be peripheral workers but our society expects them and their families to maintain a certain standard of living.

Regarding students, Morse says, "A student may state that he works part-time or part-year because he is attending school. But if we probe deeply in a particular case, we may find that actually students would much prefer to work and are, in a profound sense, involuntarily going to school, which may simply be an indirect way of saying that they are involuntary part-time or part-year workers. A different kind of labor market, a more receptive attitude on the part of society to young workers might transform many young part-time, part-year workers now going to school into quite satisfied full-time, full-year workers."

This has a refreshing iconoclastic tone to it in these days of increasing emphasis on formal education. Let me suggest, however, that the ideal solution might not be to make the labor market more attractive for these young people but rather to make the school systems of the nation less unattractive. It could be argued that in following Morse's prescription there is the great danger of encouraging young people to maximize short run income at the expense of long run returns on investment in education.

One final note—I think it is interesting that in some of those industries in which intermittency of employment is still the rule, certain institutions have developed which are designed to smooth out employment patterns to the extent possible. I have in mind organizations such as temporary help agencies and labor unions in the construction

and longshoring industries. Further research is needed to determine if the contributions outweigh the exploitive nature of these institutions.

Let me conclude by returning to an earlier comment. Professor Morse has made a contribution by raising significant issues about an important but ambiguously defined segment of the labor force. He has posed questions and problems relating to the racial components of the peripheral work force which our society must face immediately if our social fabric is to be maintained.

CONCLUDING OBSERVATIONS

ELI GINZBERG

A few themes can be extracted from the presentation of Professor Morse and the constructive comments of the discussants. Everybody is agreed that the "peripheral worker" has been too long neglected and that henceforth more effort should be devoted to studying and evaluating his role. Secondly, such study will require the collection of materials from an unchanging sample of workers so that the analyst will be able to gain a perspective over a longer period of time.

From an analytical point of view, the behavioristic category of the "peripheral worker" as encompassing all who work less than full-time full year must be refined so that one can sort out more clearly those who are peripheral for reasons of choice as distinct from reasons of necessity. In such an undertaking care would have to be taken to assess the impact on peripherality of such discrete factors as the general tightness of the labor market, the changing attitudes and behavior of strategic groups of workers (i.e. women) toward paid employment, the interrelations among critical institutions (i.e. school and job), the operations of the welfare system, and still other major institutions. This is another way of emphasizing that as the role of work changes in a dynamic society so do the meanings that can be attached to the peripheral worker.

Research should distinguish more clearly between workers who want part-time jobs and employers who want part-time workers.

Just as there was general agreement among the presenter and the discussants about the importance of studying the "peripheral worker" so there was agreement that focussing on the peripheral worker was one additional way of understanding more fully the factors causing the waste of human resources due to unemployment, underemployment and low productivity.

The policy implications of this new focus suggest that we must broaden our sights from a concern with 4 percent unemployment to a 20 to 25 percent wastage factor when allowance is made for those in the labor force who are underemployed and those outside who have no opportunity to work.

V

GOVERNMENT'S MANPOWER ROLE

GOVERNMENT'S MANPOWER ROLE

OPENING REMARKS

E. WIGHT BAKKE

Yale University

The government's role in the manpower field is in some respects new and in many respects old. Many of the activities which today are recognized as falling under the manpower umbrella have long been the concern of those chosen to carry on the nation's political affairs. For example, support for vocational rehabilitation, vocational education, apprenticeship training, land grant colleges, professional education, armed services training, and even for some aspects of general education have long provided government assistance to the development of a qualified labor force, and the regulation of immigration has greatly affected the labor supply. Urban and regional development, the direction of government purchases, depressed area renewal, work relief, the encouragement and protection of invention, industrial development, and foreign trade have amplified job openings for portions of that labor force. The Employment Service and the continuous statistical activities related to the operations of the labor market have provided facilities intended to expedite and make more rational the bringing of men and jobs together. This evolution of a multiplicity of activities which have a bearing on manpower problems is one reason for the wide distribution of the responsibility for such activities among many departments and bureaus of the government.

What is new in this decade, in addition to a special effort on the sponsorship of a number of training activities and special efforts for particularly disadvantaged members of the potential labor force, is

the effort to develop of concept of a positive manpower policy and to integrate the support for and administration of the various supply, demand, and labor market facility elements involved in order to implement that policy.

That effort has not been completely successful. One reason for that is that a policy assumes that the action contemplated is focused on a commonly accepted objective, or at least on a priority relationship among several objectives. That is something we are not clear about.

There are two paramount objectives which have motivated government efforts in the manpower field. The first is to amplify the economic strength of the nation. The volume and productiveness and adaptability of the employment relationships in the country provide the national economy with essential resources for economic stability, viability, and growth, and with the ability to meet the tests of national strength raised by war, competition in international trade, and the desire of political leaders and others to boast about the superiority of our economic system.

A second paramount objective motivating government efforts in the manpower field is to increase the economic and social well-being of the nation's individual people. The volume, productiveness, and adaptability of the employment relationships in the country, provide individuals with the income with which they are able to buy a living, and with a working role which is an important factor in determining their status in society.

The effort to achieve each of these objectives is essential to the achievement of the other. Successful efforts to increase the nation's economic strength make firmer the institutional foundation for individual economic well-being. Successful efforts to improve the economic and social well being, and especially the employability, of people provides better human resources contributing to developing national economic strength.

The demands of two wars and the scare thrown into the nation's leaders by Sputnik led to an emphasis on the national economic strength objective. The rapid advances in technology and both the threat and the promise of automation and the need to turn these developments into sources of national strength and growth provided an objective for M.D.T.A.

As I think will be clear, however, from the papers to be delivered

here today, the actual working objective that can be inferred from the way manpower legislation and its administration have developed in the United States of the 1960's is more closely related to providing economic welfare for individual people, and indeed, in many ways, to carrying out of a major aspect of the War on Poverty. Indeed if one can infer objective from practice it can be said I think that the Manpower policy of the 1960's is simply the latest of those policies by which governments have acknowledged responsibility for the economic well-being of their citizens, and in particular those on the bottom rungs of the economic ladder. The idea of what is appropriate and important for government to do in implementing its overall manpower role has been colored very naturally by the idea of what was appropriate and important for government to do in relieving economic distress of certain people. Let me take five minutes to remind you of those earlier policy emphases of which the present manpower policy emphasis can be said to be the latest.

The economic well-being of the members of a political society has, from the earliest times, been one of the concerns of the governors of that society. That concern has not always been given the highest priority, and the motivations of the governors have varied considerably from time to time and from place to place. Governors are necessarily interested in loyalty and support of the governed, qualities which it is assumed are generated by the people's economic security. The economic and military strength of a society are closely related to the energy, and productiveness, of its human resources, and such qualities in turn are greatly affected by the stability and adequacy of the economic resources, facilities, and rewards available to the people. With some governors a sense of moral responsibility and humanitarian idealism have buttressed these more pragmatic considerations.

From time to time in the economic history of a country, nevertheless, a new direction is given to the implementation of government concern for the economic welfare of its citizens. Under the impact of new ideas, of changing needs and experiences, or of political opportunism, the direction, scope, and character of the role of government in this matter come into new focus.

The seeds of a new major emphasis may have been present for a very long time. And the new direction to government policy and practice does not eliminate the old arrangements. There is a reciprocal impact of the new on the old and of the old on the new which keeps

either from being distinguishable as a pure type. Such mutual influence is both harmful and advantageous to the realization of the full potential in the new emphasis.

The older members of this Association have witnessed the emergence of several such new emphases in government practice and policy in the United States in the course of their professional careers.

The traditional way in which government implemented its concern for economic well-being of its citizens, aside from the encouragement to and support for entrepreneurial enterprise, was through public assistance or relief. On the assumption that productive employment in private or public enterprise would assure the opportunity for *self-provided* economic well-being of the vast majority, the government's role was residual and came into play only when the public conscience would not tolerate the degree of human distress evident in the case of the minority who were self-declared paupers.

A major new emphasis was introduced in the 30's in the United States in the form of government administered social insurance. The social insurance or social security approach introduced the principle that it is appropriate and sensible for government to "insure" those who, by their productive employment, have earned and paid for a right to such insurance. They were to be protected against hazards to their continuous employment which interrupted the flow of the earnings from which they normally could be expected to support themselves and their families. The earliest experiments in the protection against such hazards took the form of workmen's compensation in the case of industrial accidents. In the 30's the insurance principle was widened and applied to protection against involuntary unemployment, sickness, and other causes of temporary and permanent disability, and advanced age. Compensation or benefits were provided not on a declaration of need arising from a lack of private resources, but as a right established during a period of work to be exercised when a person faced the task of making a living without a job. In principle such benefits were not relief, they were not charity. But it was assumed that the burden on the traditional forms of public assistance, relief, and charity would be reduced by the preventive action of benefits related to such categories of hazards to continuous employment which in the past had been observed frequently to be the causes of economic distress.

The post-World War II full employment policy provided a new

meaning and direction for government efforts relative to the economic well-being of its citizens. Its emphasis moved from the idea of compensation when experiencing an interruption to continuous employment, to the provision of employment itself. The emphasis on the terms of the British Labor Party's slogan of the 20's, "Work or maintenance" was placed heavily on "Work." The focus of the full employment direction was on the provision of job opportunities for all who were willing and able to work. The objective was the creation of a sufficient demand for goods and services through fiscal and monetary policy and practice which would stimulate a sufficient volume of jobs to provide full employment.

The pragmatic justification for this kind of government activity rests on the recognition that the work and the products of the employment relationship are basic foundations for the economic stability and viability of the nation and for the economic and social well-being of its citizens. Moreover an amplification of the opportunities for employment could be expected to reduce the burden on funds necessary for the social insurance applicable to the prime working years and for public assistance, charity, and relief.

This is not the time and place to elaborate on the anticipated and experienced result that an aggregate number of jobs equal to an aggregate number of jobseekers did not equal the full employment of the nation's manpower, or its allocation to places where it was needed. It was clear that factors related to changes in technological, industrial, and occupational structure, related to the lack of a fit of the qualities available in workers with those required by jobs, related to the inadequacy of labor market facilities for bringing workers and jobs together stood in the way of realizing that objective. At least it was clear to those who were not satisfied to define full employment as a situation which left an average of over 4% of the nation's manpower unemployed, and many more working at tasks which demanded only part of their time and only a portion of their potential productive capacity.

In the face of these considerations developed the idea of a positive and active manpower role for government. Manpower policy and practice focus attention upon the establishment of *particularized* employment relations between *specific* individuals and particular jobs. When the obstacle is the lack of capacity in the labor supply to function in available jobs, the effort is to develop that capacity in the per-

sons who do not have it. When the obstacle is the lack of jobs available to utilize the capacities available, the emphasis is upon the creation or development of jobs which can use those available capacities. When the obstacle is the lack of labor market facilities to bring men and jobs quickly and effectively together the emphasis is on the improvement and amplification of those facilities to the efficient movement of workers into the jobs which utilize to the maximum their working potential.

The post-World War II developments in Government activity related to this Manpower direction in public policy, the evaluation of their substance and the way in which they have been administered and the problems encountered in giving them legislative sanction and support, these are the subjects which the able and distinguished participants in this panel are going to deal.

EVALUATING FEDERAL MANPOWER PROGRAMS

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Summarizing two years of effort in 3500 words indicates either low output or high discipline. The task can best be accomplished in summary form with a few generalizations about the state of manpower policy and a brief evaluation of specific programs. References are given for data and details.

A. The Nature of Federal Manpower Policy

1. There is no federal manpower policy in the dictionary sense: "a definite course of action selected from among alternatives, and in light of given conditions, to guide and determine present and future decisions." However, there are programs and practices which can be analyzed in aggregate and from which policy emphases can be extracted.

2. Legislation in the 1950's such as the National Defense Education Act and practices of agencies such as the Atomic Energy Commission emphasized manpower as an economic resource, with particular concern for the development of scientific and technical manpower. Spending for such purposes increased during the 1960's and now totals over \$5 billion annually. However, the focus of public manpower efforts during the 1960's shifted in another direction.

3. The thrust of the manpower programs of the past five years has been to aid those who face various disadvantages in competing for jobs. This emphasis is attested to more by legislative and administrative efforts and public discussion than by expenditures of less than \$2 billion per year.

B. Overall Critique of Federal Manpower Policy

1. The relevant manpower programs which emphasize in varying degrees services for the competitively disadvantaged are the Manpower Development and Training Act, the Vocational Education Act of 1963, the Vocational Rehabilitation program and the several man-

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power components of the Economic Opportunity Act. The EOA programs are not evaluated in this paper since they are considered in Sar Levitan's contribution. However, they do figure in these generalizations about the state of manpower policy. In addition, the United States Employment Service is included, not as a program but as a major deliverer of services.

2. This array of programs did not emerge as part of any systematic effort to identify and provide each of the services needed by various disadvantaged groups or by all the disadvantaged. Instead individual acts were written, considered, and amended in rapid succession to meet current crises, real or imagined, with little attention to their interrelations. Though overall objectives are reasonably clear, the objectives of some of the individual programs are not.¹

3. The resources and enrollments in all of these programs are too small relative to the size of the labor force and the magnitude of needs to have had an appreciable impact on the problems they were intended to "solve." Remedial programs for the disadvantaged currently enroll an average of only 300,000 people at any point in time—this in an economy where in prosperous 1966, 2.5 million persons were unemployed 15 weeks or more, 850,000 were unemployed over half the year, 1.3 million looked for but did not find any work, 1.3 million males 25 to 64 years of age did not seek work and more than five million persons worked for less than federal minimum wage.

4. The 1961-67 period is most appropriately viewed as an experimental one during which many things were tried with varying degrees of success and failure. A positive contribution of these efforts was the identification of a number of services which have proven useful in lowering the obstacles to employment and retention of the disadvantaged. A few of these are:

- a. outreach to seek the discouraged and undermotivated and encourage them to partake of the available services;
- b. adult basic education, to remedy the lack or obsolescence of earlier schooling and prevocational orientation to expose those with limited experience to alternative occupational choices;
- c. training for entry level skills, for those unprepared to

¹ Sar A. Levitan and Garth L. Mangum, *Making Sense of Federal Manpower Policy*, Policy Papers in Human Resources and Industrial Relations, No. 2, Institute of Labor and Industrial Relations, the University of Michigan, Wayne State University, 1967.

- profit from the normally more advanced training which assumes mastery of rudimentary education ;
- d. training allowances, to provide support and an incentive for those undergoing training and residential facilities for youth whose home environment precludes successful rehabilitation ;
 - e. work experience, for those accustomed to the discipline of the work place ;
 - f. job development, efforts to solicit job opportunities suited to the abilities of the disadvantaged job seeker ;
 - g. relocation and transportation assistance to bring the workers to where the jobs are ;
 - h. subsidization of private employment of the disadvantaged ;
 - i. job coaching to work out supervisor-worker adjustments after a job is found ;
 - j. creation of public service jobs tailored to the needs of job seekers not absorbed in the competitive market.

5. Essential as these services are, they are available through no one program, agency or labor market institution. The various programs are limited in the services they can offer. The budgetary commitments for the various services are not rationally related to need. For instance, there are currently more slots for work relief than for training when training should probably stand above work relief in the hierarchy of remedial services.

6. The administrative capability to deliver these services has yet to be developed. At the local level, there is no single agency or combination of easily accessible institutions where those seeking help can find it. Neither has any community the resources to provide some type of service to all who need it. A multiplicity of federal funding sources encourages interagency competition at the federal level and a proliferation at the local level placing a premium on "grantsmanship." Coordination has been tried with little success and consolidation of programs has been limited. Existing agencies have changed their orientation and biases but slowly and only under considerable outside pressure. New agencies have yet to learn affective practices. Surprisingly little has been done, considering the number of programs and the level of expenditures, to develop or train capable staffs at any level of government.

The currently approved model for delivering comprehensive manpower services is the Concentrated Employment Program (CEP).

It attempts to concentrate and integrate the efforts of existing programs on behalf of target populations. It appears to have two premises: (1) the complex of programs and agencies can be integrated and focused through a single local institution; (2) while sufficient resources cannot be marshalled for a measurable national impact, concentration of both financial resources and administrative capability on narrowly defined targets may make an appreciable difference in a limited number of big city slums and rural depressed areas. The brief CEP experience argues for both technical assistance for planning and management capability and augmented resources to avoid becoming one more link in a chain of unfulfilled promises.

7. Administration officials and Members of Congress have been too impatient to await the results of new and existing programs and to allow for restructuring, removal of negative elements, and finally their expansion into effective programs. As a result, there has been an excessive resort to gimmicks and to attempts to devise "instant policies for instant success." The procedure has become a familiar one. New approaches are designed intuitively rather than empirically. They are launched with public relations fanfare, complete with numerical goals and early target dates. Manipulation of numbers to "prove" success then becomes a major staff function until a quiet burial of the goals and targets can be devised. The favored gimmicks of the moment are the CEP approach and private enterprise involvement. Both have promise as part of the manpower policy arsenal of weapons but the experiences of neither to date has earned the warmth with which they are being embraced.

8. For no program are there adequate valid data for evaluation of strengths and weaknesses and no program currently has a reporting system capable of producing such data. Data on the characteristics of enrollees are adequate in some but not all programs. Data on services provided are weak and follow-up data on program results are grossly inadequate and undependable. *Ad hoc* internal evaluations have been made of several programs, either in-house or by contract, but for the most part, their coverage is limited, their data weak and their investigations not probing.

9. Nevertheless, one concludes from observation, available data and piecing together other fragmentary evidence that some programs are at least moderately successful and merit expansion. None is a clearly proven failure, though in several cases the funds could have

been better spent elsewhere. Through this necessary experimental process many lessons have been learned, needs probed and useful services identified. Congress has demonstrated a willingness to change and adapt programs in light of administrative experience. Expansion of programs has been slower than anticipated but less because of Congressional reluctance than absence of aggressive Administration requests.

C. Program Evaluation

1. MDTA ²

MDTA's original objective was to retrain experienced adult family heads displaced by economic and technological change. As labor markets have tightened, its emphasis has shifted to the disadvantaged. MDTA consists of two distinct components—institutional and on-the-job training (OJT)—which are best evaluated separately.

a. The institutional training program has built-in “creaming” tendencies since its enrollees are primarily those who have sought help from an Employment Service office. Nevertheless, MDTA institutional training is increasing its proportionate enrollment of the non-white, the young, the public assistance recipient, the handicapped and those with 9 to 11 years of education. It has yet to make significant progress in serving those with 8 years of schooling or less and persons over 44 years of age. Over half the institutional enrollees are apparently drawn from families with annual incomes of less than \$3000 per year. The institutional training program probably “creams” within each disadvantaged category. However, the 70 to 80 MDTA skill centers clearly reach a more disadvantaged clientele than other

² For detailed evaluation of the Manpower Development and Training program see Garth L. Mangum, *Contributions and Costs of Manpower Development and Training*, Policy Papers in Human Resources and Industrial Relations, No. 5, Institute of Labor and Industrial Relations, The University of Michigan, Wayne State University, 1967. The MDTA reporting system is set up to produce adequate data on trainee characteristics, training occupations, completions and employment experiences of the first post-training year. However, serious under-reporting makes the latter of doubtful validity and makes state-by-state analyses shaky. The OJT reporting is particularly bad. The reporting system is especially poor on costs and the nature of the training given. A mass of data is poured into the computers but there have not been the staff resources and top level interest to see that it was retrieved and analyzed for managerial and evaluative purposes. Nevertheless, more information is available than for other programs.

MDTA projects and are probably reaching as deeply as any program except perhaps the Job Corps.

b. The OJT program has never served appreciable numbers of disadvantaged and its record has been worsening in all categories. This may in part be due to recent pressures to expand it to one-half of the total MDTA enrollment, primarily to get more enrollees within the same fixed budget. Enrollment means employment and employers are quality conscious. The federal administrators of the program in the Bureau of Apprenticeship and Training are experienced at promoting apprenticeship but accustomed to leaving recruitment and selection to employers and unions. To augment the limited BAT staff, OJT slots have been contracted to trade associations who subcontract the training to their members or to community action agencies, unions and civil rights organizations who subcontract, usually with smaller employers. The trade associations have a quality bias and the community contractors, while they have the right prejudices, lack experience and competence.

c. Overall, the MDT program has a favorable cost-benefit experience. The completers have more stable employment and higher earnings after training when compared with their own pre-training experience and with control groups. Disadvantaged institutional completers still have a more difficult time finding jobs than other completers but have better experience than in the absence of training. The disadvantaged have a difficult time getting into OJT but once in have retention rates not significantly different from those of the non-disadvantaged.

In addition to its contributions to its enrollees, MDTA has had a positive influence on the Employment Service, on Vocational Education and, to a small degree, on apprenticeship. There are continuing issues of priority between serving the disadvantaged and non-disadvantaged, the relative effectiveness of institutional and on-the-job training and the appropriate federal, state and local administrative roles. None of these threaten the overall value of the program, however.

Enrichment of the program's services has been authorized from time to time but without commensurate increases in budget.

Thus the choice has been between richer offerings for fewer and a leaner program for more. The program could be doubled in size within the limits of current administrative and training capabilities. Skill Centers are currently operating at less than half capacity. Doubling the MDTA budget with emphasis on expanding the skill center concept and directing OJT more clearly toward the disadvantaged should be a legislative priority in 1968.

2. Vocational Education ³

The Vocational Education Act of 1963 was the first major reorientation of federally supported vocational education since its beginning in 1917. Most importantly, it directed a shift in objectives from training for occupational categories to serving the training needs of people. It stressed serving those with academic and socio-economic handicaps who could not profit from the regular programs. Federal funds, which are matched equally by the state, were expanded from approximately \$50 million to \$256 million per year over a three-year period (and Congress actually appropriated the funds). Construction of "area" vocational schools (those serving a broader area than a single high school), more teacher education and better vocational guidance were encouraged. Closer alliance with the Employment Service was directed in order to relate training more directly to the labor market. Money was also authorized for research and innovative programs.

Some progress has been made, but largely, it would seem, for lack of federal leadership, a promising Act has not had a substantial impact upon the status and content of vocational education. The relative emphasis on agriculture and home economics has declined (though their absolute enrollment has increased), new schools have been built, significant research has been undertaken for the first time, and relationships with the Employment Service in determining job market needs have been improved. About one of

³ See *Reorienting Vocational Education*, forthcoming policy paper in Human Resources and Industrial Relations to be published by the Institute of Labor and Industrial Relations, University of Michigan-Wayne State University. The Vocational Education reporting system is abysmal. Its only real concern has been to see that the states match every federal dollar and that the dollars are spent within the occupational categories prescribed by the Smith-Hughes and George Barden Acts. There is practically no information on student characteristics, training contents and results.

each four high school students now enrolls in a federally-supported vocational program but 3 of 5 are still in home economics and agriculture. Another 1 in 6 are in office occupations which were added to the list of federally-supported courses by the 1963 Act. Four-fifths of the reported increase in enrollments since 1964 is accounted for by the addition of office occupations and may not reflect an actual increase in enrollments. Post-secondary and adult courses reach 4 percent of the labor force.

There has been little meaningful innovation under the Act and a great reluctance to adopt proven experiments demonstrated in projects financed by foundations, OEO and MDTA funds. Training occupations still reflect more the 1917 categories than current labor market needs. Offerings for those with special needs account for less than 1 percent of total expenditures. Programs in rural schools and urban slums are limited and poor—just where they are needed most. This generally dismal picture is belied by some real bright spots but in general change has been slow and minor.

Why the failure of an Act, which endorsed new objectives and multiplied available funds, to make a significant difference in results? Three fiscal years is a short time for change to occur in a mature institution. Basically, however, little change occurred because there was little incentive to change. Nothing more than pious hope was provided to encourage the shift from an occupational grouping to a people serving orientation. As the Act is written, the new funds can be used to achieve the new objectives, but they can also be used to pursue the old ones.

3. Vocational Rehabilitation ⁴

The Vocational Rehabilitation program each year results in the placement in competitive employment of more disadvantaged persons than MDTA or any of the EOA programs and at lower

⁴ See Garth L. Mangum and Lowell M. Glenn, *Vocational Rehabilitation and Federal Manpower Policy*, Policy papers in Human Resources and Industrial Relations, No. 4, Institute of Labor and Industrial Relations, the University of Michigan, Wayne State University, 1967. The Vocational Rehabilitation reporting system is reasonably adequate for managing a rehabilitation program but there is no follow-up information to allow realistic assessment of program results beyond immediate employment. Data are currently inadequate to assess the demographic, economic, and cultural characteristics of the clients but the federal agency is now collecting data on an individual client basis and will soon have data processing capability which should improve the situation.

average costs. However, its clientele have physical and mental handicaps rather than economic or cultural ones and surprisingly little training occurs. The federal agency claims a 35 to 1 ratio of benefits to costs which can be deflated, using their data, to 12 to 1. However, the program is of undoubted worth. Its particular value is an individualized comprehensive services approach involving a close counselor-client relationship. A rehabilitation plan is mutually developed for each individual and the counselor, in effect, has a blank checkbook to purchase whatever services are needed.

There is some debate among vocational rehabilitation personnel between those who favor physical restoration to eliminate handicaps and those who emphasize training and other services to make employment possible despite existing handicaps. In addition to the basic services, there is an extensive research program, encouragement for innovation and a program of grants to universities and individuals for pre-service and in-service training of rehabilitation personnel. The program has favorable congressional support and expands about as rapidly as the states are willing to meet their 25 percent matching requirement.

4. The United States Employment Service⁵

The manpower legislation of the past five years has had a substantial impact upon the Employment Service, so much so that the agency is quite different from the Employment Service of 1962. No longer is it restricted to referring qualified workers in response to employer job orders. Through referral to MDTA, Job Corps and Neighborhood Youth Corps, involvement with vocational educators and community action agencies, and its own Youth Opportunity Centers and Human Resources Development Program, the Employment Service can search out those in need of its services, enhance their employability and even provide public employment.

The Employment Service is very much in transition. By and large, its involvement with the disadvantaged has been under pressure from the national office and in response to competition from community action agencies. Its role and objectives are in a state

⁵ The Employment Service has detailed data on how many transactions occur but none on who is served, how well and what the results are. A forthcoming report by Garth L. Mangum and Arnold L. Nemore, *Reorientation in the Federal-State Employment Service*, will provide some data and more extensive analysis.

of confusion. The Department of Labor has become a more aggressive partner in the federal-state system. It has continually added new programs and responsibilities to the Employment Service without commensurate increase in staff and budgets. It has then failed to set priorities among the assignments, all of which cannot be fulfilled adequately and equally with available resources. There is also evidence of failure to seek and achieve concensus before major policy changes. As a result, state and local officials do not share the degree of commitment to many responsibilities exhibited by those in Washington.

Four policy objectives appear to coexist, each reflecting stages in the agency's development. Many state Employment Security directors and businessmen still see the agency's primary function to be providing a work test for the payment of unemployment compensation. Most local Employment Service managers probably see their agency as an employer-serving labor exchange. The more progressive aspire to the position of Community Manpower Center, serving all occupational groups and community institutions. Current federal emphasis is on serving the disadvantaged. Mutually exclusive elements in these objectives are apparent. "Image" with employers probably suffers in direct relation to antipoverty involvement.

Problems of salaries and training remain significant barriers to attracting and retaining competent professional personnel. As long as ES and UI are together in the federal and state bureaus, the Employment Service will remain at the fourth tier in the pecking order of authority and prestige in the Labor Department and in a similar position in state governments.

The time is imminent when the USES budget will have exhausted the revenue potential of its Social Security Act Title III basic funding service. At that time, the issues involved in the ES-UI attachment will have to be faced and the decision will have to be made to switch partially or completely to general Treasury funding.

The Employment Service with its ubiquitous local offices is inevitably the "front line" arm of most manpower programs. It has been pressured by events into broadening its activities in behalf of many it previously could not or did not serve. It has cherished ambition to reach upward to others who have not previously sought its services. Without clear objectives it has no measure to evaluate or be evaluated by its own performance.

D. Summary

1. Accomplishments

Needed services have been provided, needy persons have been served and useful lessons have been learned.

The base has been established for a coherent program of remedial services to the competitively disadvantaged.

2. Limitations

The administrative capability has yet to be developed for efficient delivery of services.

The resources committed are grossly inadequate relative to need.

Solution to the first limitation would greatly increase the chances of solving the second.

MANPOWER ASPECTS OF THE ECONOMIC OPPORTUNITY ACT *

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A. Rationalization

A case may be made for the rationalization of the antipoverty manpower programs. Emphasis is placed upon needs of youth whose life work is ahead of them. Separate programs are provided for needy youth attending school and for those who have dropped out of school. Two major alternatives are available to the latter group: work projects in their own communities or residential centers away from home.

Adults are also provided several options. The Work and Training Program is designed to improve the employability of relief recipients and other needy persons. A related program was added in 1965 and expanded in 1966 for unemployed adults in rural areas (Mainstream). The Economic Opportunity Act has also funded since 1966 a new program designed to develop New Careers for the poor, stressing opportunities for upward occupational mobility. Similarly, community action agencies employ indigenous poor in various subprofessional occupations, opening for them not only entry jobs but opportunities for rising on the occupational ladder.

B. Administration and Coordination

Regrettably, this orderly presentation has more the earmarks of a press release than a description of reality. Three different federal agencies fund these programs and though they frequently serve the same clientele, each program has its own set of regulations, eligibility criteria and levels of pay. Each program is a separate entity, operating independently of all other programs. The Concentrated Employment Program, utilizing funds from different sources to package a single project, is an exception, but thus far of doubtful merit. Consolidation of Neighborhood Youth Corps, Mainstream and New Careers into a single comprehensive program, as provided by the

* This paper is based on the author's forthcoming volume, THE GREAT SOCIETY'S POOR LAW, a study devoted to an evaluation of the Economic Opportunity Act. The project is financed by a grant from the Ford Foundation.

1967 amendments to the Economic Opportunity Act, indicate intent and concern, but implementation remains for future agenda.

There is lack of coordination not only between the out-of-school NYC and the Job Corps serving the school dropout population, but also between the in-school and out-of-school NYC administered by the same agency at the federal level—and frequently also by the same organization at the local level. Though the expensive Job Corps program was to be limited to youths whose rehabilitation requires residential facilities, no adequate screening devices have been developed to select youths who need Job Corps training and those for whom NYC would do. There are also no arrangements for transferring NYC enrollees to the Job Corps and Job Corps enrollees to NYC. There are also skill centers in some 70 or 80 communities, established by the Office of Education under the Manpower Development and Training Act. At the lower age spectrum, these centers serve essentially the same population as the out-of-school NYC and the Job Corps and provide remedial education and rudimentary skill training. In some communities skill center facilities go underutilized, though NYC enrollees could benefit by the remedial education and prevocational training offered.

The Work Experience and Training officials in HEW have also operated their projects separately from Labor Department and OEO efforts. There is no coordination between WE & T and Mainstream projects, though both operate in rural areas and have essentially the same objective of improving the employability of adult poor. Similarly, CAP manpower programs operate separately from New Careers projects, though they share the common goal of developing subprofessional employment for the poor.

C. *Data*

Lack of data, the researcher's usual complaint, is more than justified in the case of the antipoverty manpower programs.

1. *Job Corps*

Initially, the Job Corps improvised data to suit immediate needs, creating serious credibility gaps. As a response to Congressional attacks, the Job Corps sponsored a number of follow-up studies conducted by Louis Harris and Associates. Technically, these studies leave much to be desired, but they provide information about the

educational and employment status of corpsmen prior to entering centers, their attitudes and appraisal of center life, and their activities after they left the Job Corps. In addition, the agency developed careful cost data and has attempted to measure learning achievements of corpsmen while they were in the centers. These data provide a basis for appraising Job Corps performance.

2. Neighborhood Youth Corps

Again, as a result of outside pressures, the Bureau of Work Programs has contracted belatedly for a number of studies which will eventually supply information about program operations. The BWP has also announced recently the inauguration of an internal information system about NYC performance, but the effort is still in the planning stage and remains only a promise. The limited information available about in-school projects is based upon studies undertaken by a few city school systems, independently of NYC. Some information about out-of-school NYC is available from its own surveys about the characteristics of enrollees and from an inadequate sample study of former enrollees. In addition, there are a few surveys of selected projects. Cost and performance data are almost completely lacking.

3. Work Experience and Training

Information is available from monthly reports of individual projects. These reports are normally incomplete and the available statistics are not reliable. A number of project sponsors have prepared their own reports.

4. Mainstream and New Careers

Though these programs were approved in October 1966, no reporting system has been developed. Most of the New Careers funds were allocated to the Concentrated Employment Program and no information has been made public about the use that has been made of the committed funds.

5. Community Action Program

Only guesstimates are available about the number of indigenous indigents who are employed on CAP-funded projects. Whatever information is available about their earnings, characteristics, duration of employment and occupations can be gleaned from reports on

a few community action agencies. Whether the projects studied are typical cannot be ascertained.

D. *Funding and Costs Per "Slot"*

The total federal appropriations for EOA manpower programs during fiscal year 1967 amounted to between \$800 and \$900 million. The lack of precision is due to the unavailability of information about the funds allocated by community action agencies for the employment of indigenous poor who are hired to serve other poor persons in their communities. Average annual enrollment in the program was about 250,000, excluding summer NYC. The following tabulation presents the best available estimates of the funds allocated to each program and the annual cost per "slot."

Program	Fiscal 1967 Funds (Millions)	Average Annual Cost Per Enrollee ^a
Job Corps	\$211	\$8,076
Neighborhood Youth Corps	372	.....
In-School	(68)	650
Summer	(133)	520
Out-of-School	(160)	2,930
Other	(11)	.....
Work Experience and Training	100	2,100
Enrollees drawing public assistance	.....	1,450
Others	.....	3,450
Mainstream (Nelson)	36	3,500
New Careers (Scheuer)	36	5,000
Community Action Program	n.a.	4,500

^a Only "hard" figure is for Job Corps; the others are estimates for budget planning or guesstimates.

E. *Review of Programs*

1. *Job Corps*

The primary goal of the Job Corps is to provide education and training for youth from impoverished homes who have failed in school, who have no salable skill and frequently not even a rudimentary preparation for work.

Job Corps data indicate that an enrollee who spent about nine months in a center improves his reading ability by one and one-half grades and his arithmetic comprehension by two grades. In the absence of acceptable norms, this level of achievement is difficult to evaluate. However, the record is clear that the longer a corpsman remains

in a center, the more likely he is to be employed and to use his training.

Nevertheless, considering the high cost of maintaining a youth in the Job Corps—exceeding \$8,000 a year—it is necessary that youths who require residential training be identified and that other youths be assigned to alternative programs. Thus far the selection of a youth for the Job Corps, NYC or some other program is determined by fortuitous circumstances.

Some educators have questioned the basic premise of the Job Corps. They have argued that it is a romantic notion to expect the rehabilitation of youths from city slums or rural areas after a stay of eight or nine months in the centers. These critics suggested that removing youths from their environment is an impediment rather than a help to their rehabilitation. This argument was persuasive with many Congressmen and the 1967 Republican Opportunity Crusade bill proposed turning the Job Corps over to vocational authorities who would make it part of community skill training centers. Congress rejected the proposal.

The case for providing residential centers for certain disadvantaged youth is persuasive. However, the Job Corps has not succeeded in motivating enrollees to remain in the centers for enough time to permit the education and training to have its effect. Only one of every three enrollees completes his course of training. Nevertheless, based on a cost-benefit study, Professor Glen Cain of Wisconsin University has concluded that the social benefits that will accrue from the program will exceed costs.

2. Neighborhood Youth Corps

In contrast to the controversial Job Corps, the Neighborhood Youth Corps has distributed its funds with a minimum of fuss and has provided income to as many as a million poor youths. Congress has continued to bestow its blessings upon the program, despite the little that is known about its effectiveness in enhancing the employability of enrollees.

The Neighborhood Youth Corps has a double function: to provide part-time employment to youths from impoverished homes attending school and to help those who left school to “develop their maximum occupational potential.” Despite the clear Congressional intent, the program may be described more properly as an income

support program. The funds allocated to NYC are distributed about equally between the in-school (including summer) and out-of-school projects. There is considerable evidence that the in-school program is effective in preventing youth from dropping out of school.

It is more difficult to justify the out-of-school program as an income maintenance program. Few projects provide remedial education and prevocational or vocational training in a systematic manner, though the bulk of the participants are high school dropouts. The reason for this is not hard to find. Given limited resources, the administrators of the program opted to serve a maximum number of clients. The result has been that the bulk of federal funds is expended on providing income to participants. Youths participating in the program are normally assigned to public or nonprofit private organizations. Too frequently their assignments are in the nature of "make-work" not leading to skill acquisition or better opportunities for employment. A sample survey of former out-of-school NYC enrollees showed that only five percent of the boys and 13 percent of the girls were employed by the agencies to which they had been assigned during their NYC experience. There is little direct relation between the NYC assignment and later employment.

In October 1966, Congress indicated concern for the quality of training provided by NYC and authorized the use of NYC funds for on-the-job training with private employers. The Congressional mandate remains to be implemented.

The out-of-school NYC program seems to be a mixture of work experience, income support, anti-riot insurance and "aging vat." There is little doubt that NYC has provided income support to many impoverished youth and their families. The program has also benefited from the widely held impression that it provides anti-riot insurance. The rationale of NYC as an "aging vat" is based on the fact that unemployment rates among youths decline as they mature from teenagers into adulthood. There is room, therefore, for a program which would provide youth with some income and work during their early years in the labor force.

3. Work Experience and Training

The goal of the Work Experience and Training Program (Title V of the Economic Opportunity Act) is to help welfare recipients and other needy adults to become self-supporting. It was hoped that the work experience and training gained on the projects, as

well as the additional supportive services, would help the enrollees to find work.

Available evidence raises the question as to whether the goal of the program is being achieved. Although about a third of former enrollees have secured jobs, it is doubtful whether participation in the program has significantly contributed towards their securing employment. Despite the image of second and third generation welfare recipients, employable recipients of public assistance remain on relief rolls for an average of less than nine months. Therefore, it is not unexpected that many participants in the Title V program, who average five months on a project, would secure employment upon completion or even before terminating their WE & T experience.

While Title V leaves much to be desired as far as achieving its statutory goal is concerned, the administrators of the program could not publicly claim credit for some of its most socially useful projects. In a number of areas, Title V projects have become the employer of last resort, saving thousands of families from dire want and deprivation. Given the legislative mandate, the reluctance of administrators to claim credit for these programs is understandable.

It would seem that most WE & T projects have provided little meaningful work experience and training. The program has probably failed to help many participants achieve self-support. One of every two relief recipients remains on public assistance rolls after terminating participation in a project and most of the funds allocated to WE & T during its first three years was expended to provide temporary work relief.

Several built-in obstacles in our public assistance system militate against the success of the program. In most states, all earnings of relief recipients are deducted from the assistance they receive, a situation which will be somewhat ameliorated by the 1967 amendments to the Social Security Act. Since the jobs open to recipients frequently pay little more than the basic needs provided by public assistance, there is little incentive to accept a job. The incentive to secure employment is further reduced by the difficulty which a relief recipient will have in returning to the welfare rolls if he should lose his job.

Congress has recently determined to expand the work experience program for relief recipients. While the House Ways and Means Committee, which originated the legislation, intended to re-

duce relief rolls by requiring "employable" mothers to work, it would seem that Congress has taken a major step to expand the role of government as an employer of last resort. However, as Garth L. Mangum, who coined the phrase, has stated: "The government as an employer of last resort must be the last resort for the government as well as the individual." To become self-supporting and to gain employment in the competitive market, the poor need more than opportunities for sheltered work, which is all that the new legislation provides.

4. *Mainstream*

Mainstream is a close relation to WE & T. Originally introduced by Senator Gaylord Nelson as a token rural public works measure, the program was expanded during fiscal 1967. The rhetoric of the program—the name itself is an indication—established two apparently contradictory goals: to hire chronically unemployed workers in community service jobs and to provide for upward mobility. Since the median age of Mainstream participants is estimated to be about 45 and most of the projects are located in rural areas with scarce alternative employment opportunities, it is not likely that the upward mobility goal of the program can be achieved. Mainstream projects have served as employers of last resort, paying minimum hourly rates, though in some areas the hourly rate is higher, depending upon the prevailing wage for unskilled labor.

5. *New Careers*

The concept underlying the New Careers program, according to Congressman James H. Scheuer who introduced the legislation is to provide "unemployed, low-income persons . . . new permanent jobs with career potential."

Two elements are involved: the breakdown of jobs into components and the training of the poor to fill the newly-created jobs. A prime condition for New Careers is the existence of sustained labor shortages in selected occupations. The acquiescence, if not support, of vested groups to "watering down" job qualifications is also crucial.

Few would question that job requirements are frequently blown up and have little relation to efficient performance. At a "high level," it is sufficient to mention that many universities still require pro-

iciency in two foreign languages to qualify a Ph.D. candidate specializing in manpower problems.

There is room, therefore, for springing, or at least loosening, the credentials trap (to use Dr. S. M. Miller's apt phrase) that controls entry into various occupations. For example, many chores performed by teachers do not require a B.A. with training in philosophy of education. Head Start has accordingly funded jobs for teacher aides who perform the simpler tasks involved in a teacher's day-to-day activities. Other educational programs have since followed suit. The teacher aid jobs, however, do not normally provide for occupational advancements and the aide's tasks remain largely menial and clerical. The New Careers program attempts to build on this experience providing opportunities for upward mobility. A project funded by the Scheuer program in Minneapolis offers an illustration. Teacher aides hired with funds from the Elementary and Secondary Education Act will be provided a combination of on-the-job experience with college courses leading to a teacher associate job whose functions will include serving as a teacher's substitute and helping teachers with special problem cases and remedial education. The City of Minneapolis has assumed the responsibility to absorb half the cost of training teacher aides after one year and to establish, subject to state approval, a permanent teacher associate position. The expectation is that the project, if successful, will establish a new job classification which may spread beyond Minneapolis, and even the state boundaries.

It should be recognized, however, that the concept has serious limitations, even dangers. Many New Careers devotees have tended to attach special virtues to the concept and have thus fallen into new traps of their own. It would be more correct to view New Careers as a stop-gap measure offering more than entry jobs to the poor and slum residents than as a solution to fill vacancies in public jobs requiring professional and technical training. In the long run, the quality of public service may be deteriorated if job qualifications are reduced indiscriminately.

6. Community Action Program

The experience of community action agencies in hiring the poor to perform subprofessional duties offers additional observations on the difficulties of developing job opportunities with upward mo-

bility. Since the Office of Economic Opportunity maintains no systematic data on subprofessionals hired by community action agencies, judgments about their activities must be gleaned from disparate sources. The available data suggest that in most cases the training provided subprofessionals is sporadic or non-existent and that professional workers have normally shown little enthusiasm for sharing work and responsibilities with the subprofessionals. Consequently, as CAA's become stabilized and bureaucratized, a common ailment of maturing organizations, the subprofessionals may be locked in their lowly status with limited opportunities for upward occupational mobility. Turning CAA's over to the tender care and supervision of city halls and county court houses does not offer bright prospects to the development of subprofessional careers in CAA's. It seems that CAA's offer the indigenous poor jobs with relatively low income and limited career prospects.

F. Conclusion

A review of the Economic Opportunity Act work and training programs casts serious doubt whether these efforts achieved the hortatory goal of the legislation. Too many participants have failed to gain economic independence, let alone opportunities for upward occupational mobility. The experience also indicates the difficulty of designing and administering mass projects which lead to the economic self-sufficiency of the poor. It is not surprising, therefore, that much of the antipoverty funds has been expended on traditional relief measures to meet age-old problems. It would be a mistake, however, to conclude that federal funds have been wasted. On the contrary, money was distributed to provide temporary support to poor people, and, to quote a Jewish saying, "living by the hour is also a living."

ADMINISTERING FEDERAL MANPOWER PROGRAMS

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The new federal manpower programs of the 1960's are gaining a well-deserved public acceptance, because they are directed in a realistic fashion at one of the most important domestic problems of our time.

These programs were not designed with administrative efficiency in mind. Individual programs have developed piecemeal with administrative authority spread among a half-dozen federal and a greater number of local agencies.

An overall assessment of the strengths and weaknesses of manpower program administration is not possible. Anyone attempting to determine whether the administration has been "good" or "bad" is open to the question: Compared to what? Money is being spent, and there has been a lot of action. When these efforts are compared to the slowly evolving administrative arts in business and government whenever new ventures are undertaken, we might well conclude that on-balance things have gone rather smoothly.

The limited objective of this paper is to explore, briefly, some of the major administrative problems which hamper the success achieved by present manpower programs, and, secondly, to review some recent efforts at improving the administrative processes.

Whose responsibility is it to take the basic statutory provisions and convert them into a well-developed and smoothly functioning and successful program? Some federal agencies merely parcel out money to state and local governments, thereby leaving the real tough and practical problems to each state or locality. Other federal agencies take more active roles in providing guidance and leadership in matters of program detail; i.e., people to be enrolled, the quality and quantity of services to be provided, etc. No federal agency is presently staffed and prepared to provide the range of technical services and guidance which local project managers need and would welcome.

* This paper is based on the author's experience as Executive Director of the President's Committee on Manpower during the period 1965 to 1967.

SOME IMPORTANT PROBLEMS

The major problems which seem to render effective administration difficult can be summarized.

(1) The most serious problem is the limited knowledge on precisely how much of what kinds of manpower service is needed for a person with given handicaps to achieve success in the labor market. Presently, programs operate in terms of possible services with no guidelines on how much of each service is required to best accomplish the goal. Manpower services are identified as including recruitment, counseling, testing, basic education, prevocational training, occupational training, work experience, supportive services such as minor medical treatment, transportation assistance, coaching and day care, and with appropriate job development and follow-up evaluation at the end. Designing successful programs depends upon knowing what the probable trade-offs are among the alternative combinations of manpower services. More study and speculation is needed on the proper mix or sequence of service.

(2) A second major problem closely related to the above concerns standards against which the quality of any selected service can be judged. How can a project director assess the quality of the counseling being given, the problems inherent in testing, the adequacy of a remedial education program, or the usefulness of assigning "coaches" to reinforce the client at every step in the program? To raise this question is not to suggest that definitive standards will likely be forthcoming in the near future, but experience thus far has not been adequately evaluated or widely reported. The evaluation of the successful program efforts has been directed at proving success with little attention given on how each component was structured and managed to obtain success. The development of some standards is absolutely essential to improved program administration.

(3) A third problem concerns the lack of agreement on how best to deliver the services to those who need them. Who can be counted on to do the best job—the public or private schools, private employers, the employment service, community action, welfare departments, nonprofit organizations run by people with similar ethnic backgrounds to the enrollees, etc? All of these delivery systems have been tried to varying degrees. One virtue of the administration to date has been the willingness to take risks and

experiment with new approaches, but this practice can be carried too far. There has been a tendency to shift from one system to another to avoid criticism or simply to take advantage of a new fad. The present trend seems to shift greater responsibility to private industry on the assumption that by buying training from a private employer it is also possible to buy a job. This assumption is not supported by any appreciable amount of evidence. In considering possible delivery systems, there has been a somewhat spirited discussion on the relative importance of initiative and rapport as contrasted with the need for professional skills. It might well turn out that any of the possible delivery systems could have worked adequately, if given sufficient time and support.

(4) Closely allied with the delivery system problem is the problem of funding. With uncertainty about program content and delivery systems, it follows that federal funding policies are almost assuredly going to be unclear, uncertain, and to impose unrealistic time limits on the development and operation of programs. The amounts of money available to any state or locality are governed by an imponderable number of variables ranging from estimates of need to community capability. There are few reliable standards to assess either community need or capability. The latter is sometimes defined as the ability to stimulate multiple organizational efforts in drafting good proposals supported by influential congressmen or senators able and willing to promote local demands for federal funds. There is no carefully worked out analysis showing present or required federal expenditures for manpower programs on a per-capita basis in each of the states and cities of the country. Indeed, no one knows precisely how many programs are operating in any of the large metropolitan areas. Requests for inventories showing amounts of money, funded slots, and, more importantly, the extent of utilization, have yielded contradictory and confusing reports.

One serious funding problem concerns the time allowed for planning and for program operation. Most programs are limited to one year's funding. This fact makes it difficult to recruit staff and develop facilities that may go unfunded after the year ends. Even where intentions to refund are clearly given, the uncertainty resulting from the failure of Congress to take action on budget matters until the fiscal year is nearly half over introduces an un-

certainty that weakens programs and demoralizes program staff. When new programs are initiated, funding considerations require that proposals be hastily drawn and funded without adequate analysis, and that programs begin operation without adequate preparation. There has been a serious failure to recognize that it takes time to successfully design, staff, and initiate new programs.

(5) Another problem, less serious today than a year ago, results from the fragmentation of program administration with programs spread among a number of federal agencies, each operating with a good deal of independence and autonomy. As a result, it is difficult, if not impossible, for any one program to base its plans on the likely actions of other programs. The trend toward consolidating programs in the Manpower Administration of the U.S. Department of Labor, and the initiation of the nation-wide Comprehensive Area Manpower Planning System, if fully supported by financial incentives and adequate staff, will reduce the significance of this problem substantially.

(6) More important than the diffusion of administrative authority at the federal level is the multiplicity of manpower agencies at the state and local level. The problem is more serious at the local level, because there is no common authority outside the federal decision to fund or not to fund that can bring effective coordination. The major local agencies are the public schools, the State Employment Service, the State Vocational Rehabilitation Agency, the County Welfare Department, and the Community Action Agency. Add to these the city, county and state governmental officials and the assorted private organizations that have been given federal funds to undertake manpower programs. The creation of a large number of private organizations endowed with public funds to run manpower programs may ultimately cause some of the most serious administrative problems at the local level. Organizations such as the Urban League, the O.I.C.'s, the Operation SER, are all laudable in terms of willingness to serve minority groups which public agencies have neglected, but it is difficult to see how the activities of public and private groups can be integrated into a well-organized, comprehensive community manpower program. For multiple agencies at the state and local level, there is no common authority to which they all report for direction. It is hard to imagine the creation of an effective mediator among these agencies outside of a rather

substantial federal involvement at the local level. Some federal agencies seem disposed to undertake this responsibility, while others shy away. At some point the Congress should explicitly recognize this need and support it with adequate funds for staff.

(7) One of the most difficult problems concerns the administrative responsibility to fully develop the legislated problems by developing adequate policies and procedures to govern the conduct of the programs. Because of time pressures, inadequate staff, and the disposition to wage the battle for new programs, little attention has been devoted to spelling out policies and procedures that develop programs to a workable state. Some federal agencies mistakenly leave these matters exclusively to local decision. Agencies which try to develop meaningful policies do so in a piecemeal fashion to meet the emergency situation with no continuing and sophisticated effort to prepare policy manuals and program guides that are reasonably complete and internally consistent. This adds up to a general lack of interest and neglect in attention to administrative duties and details. Policies are loosely formulated and exceptions are granted until the policy is almost nondiscernible. Anyone desiring to make a thorough and careful study of administrative policies and procedures governing federal manpower programs could not locate all the pieces of paper on which these matters are recorded. Should they be located, difficulty would be encountered in obtaining any widespread agreement on the meaning of various policy directives. The Federal Government should assign someone the task of analyzing and codifying all the policies and procedures relating to the present manpower programs. Possibly the Congress will initiate such an activity in the near future.

(8) Another administrative problem is that the Congress failed to provide adequate numbers of staff to effectively administer the new manpower programs. Even with the staff available, the problem of finding able people to administer programs has been difficult. It is interesting that in this connection there is almost no staff training underway to increase the capability of the existing staff. The Employment Service, a notable exception, has undertaken a considerable amount of training, although it has been sporadic. Both the Congress and the federal administrators must recognize that efficient administration calls for larger numbers of better-trained people than are now available. This problem is serious at the

federal level and is critical at the local community level. It is essential that administrators identify the skills and talents needed for the successful administration of manpower programs and train people at the federal and local level who can get the job done.

(9) With inadequate policies, procedures and staff, it follows that federal agencies are not now able and are not equipped to provide the technical assistance needed and desired by local project directors, and there is little evidence that the situation will improve soon. The technical assistance required at the local level varies from one situation to another. It often starts with such administrative fundamentals as: Developing the organizational framework to run a program complete with suggested staffing patterns, record-keeping systems, property acquisition and management, and obtaining and renovating facilities. Beyond these managerial tasks come the problems of program content such as counseling and testing techniques, curriculum materials used in training, techniques useful in job development, etc. Federal initiative created programs and provided money but did not follow through by providing technical assistance to local communities in developing organizational capability to run successful manpower programs. When local communities need help, they often turn to each other with uncertain results. Progress is occurring and "best practice" is being communicated slowly throughout the country. Even so, an aggressive and well-staffed technical assistance program spearheaded by the federal agencies could greatly improve the results of present efforts.

(10) While scholars lament the lack of adequate data to assess the success of federal manpower programs, the present systems do not meet the needs of program administrators. There is no adequate information system reporting on the characteristics of people being served, on the characteristics of the service being given, and on the results achieved from the variety of manpower services. The needs of local project managers and federal administrators surpass the needs of university scholars, if such a thing can be imagined. Admittedly, the problems encountered in developing an adequate system which provides reliable information at the right time and place are infinitely difficult. Past efforts bog down in desires to develop computerized job matching systems and in the unwillingness to assign a high priority to this activity. The U.S. Employment Service, through a pilot program in three states, and

two or three of the community action agencies may yet come forward with reasonable solutions to this problem.

(11) Unwillingness to change old methods or recognize that local problems are extremely serious and getting worse are attitudes of state and local agencies which present federal administrators with impossible choices. What should the Federal Government do when a local school system is unwilling to effectively use federal manpower funds? The negative reactions of a few State Employment Service Agencies seriously restrict the contribution which the entire federal-state system can make throughout the country, thereby partially negating the progress that has been achieved by most states in recent years. Community action agencies, bent on developing a total bureaucracy of, by, and for the poor, seriously restrict the potential of manpower programs at the local community level by providing an unacceptable threat to existing agencies. While we lament the multiplicity of agencies involved at the local level, no specified combinations of agencies can be counted on to produce successful programs over the entire country. A great challenge in the administration of manpower programs consists in being able to build effective capability at the local level by drawing flexibly on the varying degrees of interest and capability found among local agencies.

Some Recent Constructive Developments

Some constructive steps have been taken by the Federal Government to improve program administration during the past year. These developments deserve more consideration than they can be given here. The consolidation of programs in the Manpower Administration of the DOL, including all manpower programs of the Economic Opportunity Act except for the Job Corps and the newly expanded work and training program under Title IV of the Social Security Act, finally gives to one agency responsibility for the greater part of the total federal manpower effort. The development of the Concentrated Employment Program might well provide the flexible delivery system that will bring a higher degree of success in the future. This program consolidates and defines, to a limited degree, administrative responsibility and authority at the local level.

A third development with great potential for improving ad-

ministration is the Cooperative Area Manpower Planning System (CAMPS). Emphasis on better planning can only have a beneficial effect. If the program is supported by adequate staff and with strong built-in incentives to develop effective program plans based on advanced knowledge of available funds, the results should prove most advantageous. The Human Resources Development Program of the U.S. Employment Service will undoubtedly assist in reorienting the federal-state system to provide individualized service to those who need it most.

SUMMARY AND CONCLUSIONS

While the federal manpower programs launched in the 1960's provide the tools and commitment to make meaningful inroads on some of the most serious domestic problems of our day, there has been an insufficient attention to important administrative problems which restrict in a serious way the results achieved. The programs are rightfully gaining in popularity, and while they are not yet operating on a sufficient scale to reduce appreciably the total problem, they point the way to what can be accomplished. The time has come for the Federal Government to take more seriously its responsibilities to administer these programs effectively. Each of the administrative problems outlined above must be given serious attention. The goals and objectives of the programs need to be more clearly defined; alternate methods for achieving those goals need to be explored. The Federal Government must take a stronger initiative in administrative matters in developing adequate policies and procedures, and by providing technical assistance to local program operators.

Recent efforts at consolidating responsibility in the Department of Labor, in developing a flexible delivery system through CEP, and by emphasizing the contribution of planning can all make significant contributions to improved administration. But they are not substitutes for adequate administrative staff with the requisite training, or for information systems that make it possible for administrators to factually know what is happening with the programs. It would be wrong to conclude that the money spent in manpower programs has been wasted. It would be equally wrong to argue against the need for improved administration and to ignore the payoff that better administration would bring.

LEGISLATING MANPOWER PROGRAMS

JAMES G. O'HARA

Member of Congress

It will not be easy, in the space of a few minutes, to do full justice to the subject assigned to me. It will not be easy to summarize the legislative view of manpower policy, because legislative activity in this field accurately reflects a fact basic to our understanding of manpower legislation. That fact, stated as simply as I can, is that the Congress has been more than willing to enact bits and pieces of manpower legislation—it has been happy to provide the building blocks, if you will, of a manpower policy, but it has shown no substantial interest up to now in developing a manpower policy as such.

Federal manpower legislation has grown, like the British Empire, in a series of fits of absent-mindedness. I think a few highlights of the development of manpower legislation will illustrate what I mean. Fifty years ago this year, the congress passed the Smith-Hughes Act, providing the basic structure for assistance to vocational and agricultural education, through our public schools. Some 30 years later, through the George-Barden Act, the vocational education system was expanded to cover home economics, practical nurse training and the like. Again in 1963, the vocational education system was expanded and made more flexible, and this year and next, legislation is under consideration in the congress to further update the vocational education system.

After many years of unsuccessful striving for acceptance of the principle of federal aid to general education, the congress was galvanized into action in 1957 and 1958 by the appearance in the skies of Sputnik. The National Defense Education Act, and the many other major pieces of legislation which have been enacted since to make federal resources available to our school systems, have come out of the realization that manpower is our most valuable resource, that vaunted American know-how is based on a strong education system, and that it has to be made ever and ever stronger simply to keep pace with changing technology. In 1962, we reacted to the threat of automation by passage of the Manpower Development and Training Act—legislation which was clearly envisaged as being primarily intended to retrain people with a history of connection with the labor force who had found themselves out of work due to changes in technology.

By 1963, our concern with youth opportunity was growing, and, though efforts to enact the youth opportunity act failed, out of those efforts grew an ever-expanding youth component in MDTA, and several of the basic parts of the war on poverty. In the poverty war itself, the concept of manpower development and the related concept of job development have come even closer to the center of the stage. This year the congress has enacted, as part B of title I of the Economic Opportunity Act, the closest thing the country has to a comprehensive manpower training system. In that part of the EOA, as approved this year, we have, if I may imperfectly adapt an analogy from another field, abandoned the concept of custommade programs, and turned instead to systems techniques. While I-B can work as a whole to meet over-all manpower needs in the war on poverty, its component parts can be mixed in different proportions in different situations, to meet these differing needs. At the same time, virtually unnoticed, the same Congress enacted as part of the social security amendments, the biggest training program in the nation's history—and virtually no congressional attention was given to the question of how to fit this training program into those already on the books.

Our manpower training programs have, in a few years, grown to proportions undreamed of as recently as 1962, to meet problems to which in 1962 we were dangerously blind. In 1962, when we enacted MDTA, we added an input of \$80 million to an existing vocational education annual level of \$55 million. As 1968 begins, we are looking forward to a total annual investment of \$3 or \$4 billion in the area of manpower training. And yet, we still have nothing that can fairly be assessed as a manpower policy. We have no broad, overall manpower institutions. We have no one area even in the Congress in which manpower policy or manpower legislation is considered in a single context. Let me show you something of the complexity of the problem.

The Vocational Education Act is managed by one office within the Office of Education. Vocational rehabilitation, which since 1965 seeks to train persons who have "social handicaps" as well as the more obvious physical disabilities, is handled by another office. MDTA is jointly administered by the Departments of Labor and Health, Education and Welfare, with the HEW component undertaken through the Office of Education, and the Labor Department's piece of

the action, until recently, distributed between the Bureaus of Apprenticeship Training, Employment Security and Work Training. The social security amendments, as they passed the House, gave responsibility for their massive training program to the social security administration. In conference, it was agreed to give this responsibility to the Labor Department which also has responsibility, together with the Office of Economic Opportunity, for the manpower components of Title I of the Economic Opportunity Act.

Turning from the administrative to the legislative scene, we find that virtually every one of these training and manpower programs is considered in the House by a different subcommittee. The training program under social security is under the jurisdiction of the Committee on Ways and Means. Vocational education is under one subcommittee of The Committee on Education and Labor, vocational rehabilitation under another. The various manpower programs under the poverty legislation are referred to none of these subcommittees. To cap the problem, the Select Committee on Labor, which is supposed to have broad jurisdiction over manpower in general, has jurisdiction over MDTA and over the U.S. Employment Service system, but over none of the other components that I have mentioned. Jurisdiction is only somewhat less diffused in the Senate.

And while this picture of diffusion of responsibility and jurisdiction is somewhat alleviated by the overlap of membership among some of these committees, the fact remains that neither at the policy-making nor the policy-implementing levels is there any mechanism for a single look at manpower policy. It is also an odd fact that while each and every one of the components I have mentioned has, at least in recent years, been able to secure congressional approval on a more or less noncontroversial basis, there seems no substantial congressional sentiment for developing an over-all manpower structure or policy—though, I venture to suggest, such a structure could be built with the parts already in existence on the statute books, and with relatively minor institutional and program adjustment. The necessity for some institutional adjustment seems to be our major stumbling block.

The development of an active manpower policy is held up, not by strong opposition, but by an almost total absence of any strong support. In such absence, the existence of opposition of even a moderate nature becomes formidable. For example, there have been two efforts in as many years to update the public employment service.

Those existing state agencies which have opposed any major change in their own charter have very few dedicated defenders in the Congress. The existing private employment agencies which also, for quite different reasons, oppose any updating of the public system, have, if anything, even fewer staunch friends in the House. Yet these two forces of opposition to the bill, though arguing from different points of view, were able to stop the needed legislation dead because there was no major support *for* it in the Congress. More bills, I suspect, die of "underwhelming enthusiasm" than of any other single cause. And "underwhelming enthusiasm" is even today casting substantial doubt on the viability of a new employment service bill—one which the state agencies have come to support, but which the private agencies oppose.

The outlines of a useful and workable integrated manpower system are not difficult to conceive. It should be an agency which has broad program authority, and broad fund allocation authority over all the various manpower programs we now have on the books. It should have this authority in the form of power to take from one or more of the existing programs and provide a "mix which is right for the community to be served or for the problem to be solved."

It should be able to conduct training to meet skill shortages, placement to find jobs for the displaced, and job creation to meet emergency situations. It should not be limited to a single class of clientele, nor should it be committed too single-mindedly or ideologically oriented against either the business community or the trade union movement.

The public employment service, properly updated, and relieved of its present identification as the "unemployment office" *could* be such a vehicle. It is not, however, the only possible vehicle. And, if the Congress continued to be pressured to maintain the public employment service as it now exists and as it now functions, it is not likely to become the vehicle. There are alternatives, and the Congress remains, of course, free to create a new entity and to vest it with the broad responsibility which such an agency ought to have.

As a matter of fact, a recent report by the Special Subcommittee on Education of the House Committee on Education and Labor suggests considerable support within the committee for creating a new cabinet level Department of Education and Manpower Training. This department is conceived of by its proponents as the repository for

jurisdiction of federally supported education and occupational training programs including among others the vocational education program, the manpower development and training program and the training and adult education aspects of the poverty program.

I doubt that those proposing this course even considered moving the U.S. Employment Service into their new department. It is likely that they see little, if any, relationship between the U.S. Employment Service and federally supported training programs. In their eyes, training is "education" and the U.S. Employment Service is "labor."

In spite of the obstacles there is some possibility that the next session of Congress will take steps toward a comprehensive manpower program. If this does occur, it will not be because the Congress has become convinced that this nation needs a comprehensive manpower program. It will occur as an incidental effect of the integration of several occupational training programs now supported wholly or partly by federal funds in the traditional interests of economy and efficiency.

A strong case certainly can be made for an overhaul of our current policies from this standpoint. An examination of the differing selection, income maintenance, and referral procedures used in federal manpower programs suggests the near impossibility of their efficient administration. Each has a somewhat different clientele, source of funding, methodology, and objective. The difficulties of establishing linkage between such programs helps to explain why it is so seldom done. Thus, it is possible that progress toward an overall manpower policy will be made based not upon past successes but upon past inconsistencies. But events may have overtaken even such a modest proposal. The proponents of the new cabinet level Department of Education and Manpower Training could fasten upon changes of this sort as a vehicle for their more ambitious plans. If they were to do so, their effort could become a focal point of the politics of a presidential election year. The probable net result would be the maintenance of the status quo for at least another year. In the meantime, yet another manpower program may be added to the statute books.

I believe that this country needs a very substantial program of public service employment that will find useful work for the hard-core unemployed. Numerous proposals have been introduced which embody the "employer of last resort" concept. One such proposal

is my own "guaranteed employment act," cosponsored by nearly 80 other House members, which is designed to provide one million public service jobs. Public employment is, I believe, a vital component of a comprehensive manpower program and its urgency in a time of domestic crisis is such that it should be considered and acted upon without delay. I am sure it makes sense to you, as it makes sense to me, to integrate and coordinate programs under a single overall program and policy, and to the maximum extent feasible, under a single administrator. I am sure that you would also agree with me that it would be much better if this could be done before adding significant new elements of such a policy to the numerous education and training programs now being conducted. Yet, today's needs cannot and should not await indefinitely the development of a comprehensive manpower program.

CONCLUDING REMARKS

E. WIGHT BAKKE

At the beginning I suggested that a positive manpower policy must necessarily be based on a consensus on objectives and that the two paramount and interdependent objectives have been the economic strength of the nation and the economic well-being of individual citizens. I am willing to accept the second objective or, the one which has come to the fore in our present manpower programs, as highly important at this time. But I am not willing to accept it as an exclusive objective or even as the paramount objective of a positive manpower policy and program for the future.

The concentration of attention at the present time on the problems of disadvantaged groups and the utilization of new so-called manpower measures not merely with the objective of improving their employability but as a means for income maintenance is a concentration on *one* laudable and desirable objective of a manpower policy. Unless, however, the other objective of manpower policy, namely, the increase in the nation's economic strength, stability, and viability, develops a wider and more comprehensive clientele and operational field for manpower activities, those activities will simply add up to a more sophisticated form of public assistance. In my judgment that is not the end sought by a positive manpower policy and program.

To be more precise I look forward to a time when the meaning of manpower policy and program will be provided by emphasis related to achieving national economic strength as well as the economic well-being of our citizens in the following ways:

1. Manpower programs will emphasize the development of specific demand in the form of jobs geared to the characteristics of the available labor supply, as well as the development of employability in individuals.
2. The supply resources and, therefore, the focus of concern will be *all* potential workers whose productive potential is underutilized as well as the disadvantaged.
3. The maximum development and utilization of productive potential will amplify, though not replace, the objective of removing men from the rolls of the unemployed.

4. Labor shortages will receive as thorough remedial attention as labor surpluses.
5. The needs of and the opportunities provided by the national labor market will receive equal attention to that given to the needs and opportunities provided by local and state labor markets.
6. The anticipation and prevention of unemployment in particular places and in particular seasons will receive attention equal to that devoted to the relief of the unemployed.
7. The total overall direction and guidance of and financial support for all aspects of the manpower effort will be synchronized by a single agency at the federal level and at the local level.
8. This agency will be responsible for keeping the public and public officials informed about the current status and anticipated developments related to the factors influencing demand and supply in creating employment relations supporting *all* goods and services consumed in the nation, and the facilities both private and public for achieving balance in that supply and demand.
9. The modification and development of programs will be guided by built-in and follow-up evaluation procedures so that the primary reliance for progressive improvement will be empirical experience rather than brain-storming sessions.

VI

MANPOWER PLANNING—PRIVATE AND PUBLIC

EMPLOYABILITY DEVELOPMENT LINKING PRIVATE ENTERPRISE AND GOVERNMENT

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Throughout the country today we can see a disquieting paradox in the manpower and employment picture. On one hand, in our urban centers we have a wide variety of job openings for which there are far too few applicants who are qualified—even marginally qualified. On the other hand, we have a substantial number of people chronically unemployed. As more and more jobs require greater skills than ever before, few members of this potential work force are qualified for employment. The only way to bridge the gap between them and the jobs they need is to raise their skills to the level required, for technology cannot be turned back to the level of currently available manpower. In other words the only reasonable way to employability development is through education and training.

Once we agree that employability development through education and training is our objective, we must decide how best we can impart useful knowledge, skills, and experience to the available, trainable manpower. Many factors need to be considered: methods, scope, how to create a realistic work environment, the needs of potential employers and what help can be expected from them, training costs, and numerous other complex ingredients. The ability to organize and staff a program rapidly, simplified property and cost controls, and trainee recruitment also enter the equation.

Although a variety of education and training methods can be and are being employed, the present need strongly urges increased contributions by a relatively recent participant: industry—large industry. It is the purpose of this paper to report on one form of employability development entailing the cooperation of Government and industry.

Industry—in the form of corporations such as RCA, General Electric, IBM, Litton, Westinghouse, and others—is uniquely qualified to make a positive contribution to solving the problem. Such corporations not only possess the basic management and logistics skills needed for success in large-scale new attacks on unemployment and underemployment, but they are all alert to the importance of education and training. For years they have been upgrading their own labor forces through programs ranging from plant vestibule training to executive management seminars conducted by or with the assistance of leading universities. In addition, they have a quick reaction capability that the more constricted public sector can seldom attain; therefore their response to a need or to a change can be rapid as well as effective.

There is a happy blend of altruism and good business in the participation of industry in Government-sponsored education and training programs. Not only does the effort represent sales and perhaps a modest profit, but it is positive action to help resolve a high priority social problem whose solution in turn will help eliminate a high priority industrial problem . . . that of enlarging the supply of employable manpower. Let's take a closer look at how this is done effectively and on a relatively large scale through the cooperative effort of Government and industry.

Industry involvement takes several forms, depending on the charter and programs of the sponsoring Government agency. The initiative and concept for the various approaches have come both from industry and from Government. The Office of Economic Opportunity; Department of Health, Education, and Welfare; Department of Labor; and Bureau of Indian Affairs are all seeking and obtaining help from industry. The companies now engaged in this field typically have a recent history of providing management and manpower services to Government agencies. The transition from their usual product lines to a training environment is comparatively easy because of the many similarities that are encountered. For instance,

the ability to recruit, screen, and place large numbers of personnel is a business ability that can quite readily be adapted to major education and training programs. Other tasks, such as the logistics involved in establishing and equipping a training facility, are routine and have ready applicability to the training and education business.

The term "Employability Development" as applied to the large untrained or sub-trained manpower pool under discussion is apparently self-descriptive; yet it embraces a multitude of well-intentioned plans and programs of greatly varying effectiveness and cost. Any such program, if it is to succeed, must be able to attract, motivate, and hold the interest of trainable people presently unemployable or underemployed, and have the full support of employers. There must be a positive, upward economic step available to the trainee when he has completed the program, and the program must have equipped him with the skills required for that positive upward step. Only fully cooperating employers can provide this opportunity. Employability development therefore presents a stimulating challenge to the corporation electing to join forces with the Government in the design, development, and operation of a training program.

The Job Corps is a program of the Office of Economic Opportunity in which a number of widely respected corporations are participating by operating large urban centers, by employing the graduates of these centers, and by assisting in their placement with other employers. RCA is among the participating corporations, operating a center for 1200 men in Wisconsin and one for 500 women in Pennsylvania. The Job Corps is a well-motivated and increasingly well-run program to upgrade approximately 40,000 disadvantaged young people between the ages of 16 and 22. Since the aim of Job Corps is clearly employability development, discussion of the program will illustrate how one segment of industry—RCA—has approached this somewhat complex Government-corporate joint venture in an effort to enlarge the employable labor supply.

The expression most frequently used by Job Corps staffers in Washington in discussions with their corporation contractors is: "The name of the game is jobs." This is a basic to the Job Corps program, and any corporation undertaking to operate a Job Corps center will initially plan and organize around that single objective. The organization of a specific center will be governed by the type of training to be offered, the facility in which it will be conducted, the

proximity of the facility to metropolitan areas from which professional staff may be recruited, whether the program is residential or otherwise, cost considerations, and, of course, the qualifications and educational and work (or non-work) histories of the prospective trainees.

Let's use the McCoy Job Corps Center as an example. Staffing there was developed jointly with the University of Wisconsin, the institution chosen by RCA to plan and develop the vital educational component of the Center. A unique feature of the organization plan was the complete integration of University and RCA personnel in the instructional area. This was designed as a practical blend of theory and practice, since the RCA members of the team were primarily skilled in vocational training, while the University personnel were oriented more toward basic educational objectives. One of the first challenges of this combined organization was the conjoining of two somewhat different philosophies in a program designed to meet the needs of the Job Corpsmen.

In developing the curriculum for both vocational and basic education, considerable research was required to determine the probable educational achievement level of the Corpsmen that McCoy would be training, the kinds of skills that could be taught and for which there was an employment market, how they could best be taught, and the availability of staff qualified to teach the subjects decided upon as offering the most potential for practical use. RCA, the University of Wisconsin, and Federal and State Government agencies cooperated in developing the information which determined the scope and depth of the McCoy curriculum.

It was an integral part of the planning for the McCoy program—and this is a most essential ingredient of any education and training program for the underemployed and disadvantaged—to create a realistic world-of-work atmosphere in all the classes. It was the objective, insofar as practical in a training situation, to simulate the realities of the job world which the successful Corpsmen would face after leaving McCoy. The creation of such an atmosphere was difficult because the considerable portion of the training staff who had been recruited from conventional educational institutions was not necessarily as fully acclimated to the work-world as were the staff members who came from industry.

It has been our observation that most of the programs sponsored

by government agencies to improve the employability of disadvantaged persons are conceived in high hope and with great expectations. In the zeal to get on with the job and produce rapid results, neither the sponsoring Government agency nor the program operators—whether they be industrial corporations or educational institutions—are always as practical as they might be about the problems that will be encountered and the number of revisions which will be needed before the program can be considered genuinely productive and successful. The objectives for such programs are sometimes unrealistic in that they undertake to achieve in a short space of time results that our conventional systems have been unable to produce over a much longer period. The desired goals are not always specific, and confusion can result from the varied interpretations which are placed on program objectives, costs, and results. One special handicap of the Job Corps which is perhaps common to similar programs is the lack of agreement in the Congress concerning its basic value, its objectives, its costs, and its results. The controversial nature of the program has, among other things, made the recruitment of qualified staff for the program more difficult than it need have been. Courage and dedication are required of those who leave the security of a career in public education to join this crusade against poverty.

Another weakness of the Job Corps and of other similar Government-sponsored training programs is that the selection process is necessarily very broad. The contractor must do his best with a population of trainees who represent every segment of the disadvantaged, every degree of basic intelligence, and have a varied record of limited success or failure in conventional schools . . . trainees who range from very immature to very sophisticated and who manifest a mixture of attitudes and motivation for self-improvement ranging from outright hostility to great enthusiasm.

At McCoy and other centers, the responsible contractors, working with Job Corps specialists in Washington, are striving to overcome the handicaps of background, environment, and substandard education through the use of a systems approach. Overworked though these two words may be, they do describe a comprehensive program which seeks to improve every element of the trainee's life that bears on his continued employability. Employability development is more than vocational training, though this is essential. It must include all of the personality factors whose development engenders confidence

and desire to succeed in the trainee, and it must enhance "social ability," which enables him to function and progress in our productive society.

Because the large majority of the persons whom the employability development programs such as Job Corps are helpful come from minority groups whose academic education has been inadequate, basic courses in reading, writing, and mathematics are necessary, but are presented in a different manner. At McCoy Job Corps Center, we have developed an unusual technique that integrates basic education and vocational training. There are no conventional formal classrooms, and the academic instruction relates directly to the vocational skill. The course material is designed to bring the trainee along in necessary academic subjects, which he generally dislikes, through the incentive of his vocational skill training, which has high interest for him. Trainees develop their skills by working under the supervision of capable craftsmen, who share the instructional responsibility with their teaching partners in basic education. Audio-visual methods, as might be expected, are extensively employed.

One element of the Job Corps not common to other employability development programs is its residential nature. The corporate contractor has undertaken not only to educate young men and women, but also to house, feed, clothe, and counsel them. In addition, the contractor arranges for work experience at the center and in the community, furnishes medical and dental services, provides recreational opportunities, maintains order, and administers discipline. All of these services are required on a 24-hour-per-day, 7-day-per-week basis and further distinguish the Job Corps from the usual public school system. The noninstructional hours—evenings, and weekends—represent perhaps the greatest challenge to the contractor. Resourceful recreational and avocational specialists are required to maximize the usefulness of facilities at the center, because it is often impractical to send large numbers of Corpsmen into nearby small communities for recreation.

Community relations—that process of persuading the community to an understanding of Corpsmen which permits their treatment on the same basis as their local teenage peers—is a contractor responsibility which requires continuous attention. Any corporation considering involvement in a residential type of employability development program should be aware of the publicity which will result. Corpora-

tions such as RCA, with its worldwide public image, must be prepared to face the unfavorable publicity which is certain to follow any serious disturbance in what may only be termed a volatile situation. It is, however, a measure of the growing success and maturity of the program that such unwanted publicity is increasingly rare.

The reader should be interested in results, and how they are measured. Recalling that the objective is to develop people to be employable, it can be stated that the objective is being met. McCoy, for example, which welcomed its first Corpsmen in October 1966, has at this writing graduated approximately seven hundred of them into jobs, the military service, or back to school. Of this number, about 70% are in the "jobs" category, and almost without exception at earning levels significantly above their former income, if indeed they had a record of pre-Job Corps employment. On a national basis, most centers—including women's centers—can report comparable success.

There are, however, at least two unresolved problem areas which are still the subject of study and experimentation. Although the reference here is to the Job Corps, these problems impact equally on other Government-sponsored employability development programs. The first of these is the selection process, which for many reasons must be rather broad, but which if it were more selective as to comprehension level and maturity of trainees would increase program effectiveness and lower the cost. The second is perhaps even more difficult, but important to all those who feel that the true cost and effectiveness of these employability programs cannot be accurately known without it. This is the need for an uncomplicated system of follow-up for the trainees who complete their courses and are employed. Yet to be decided upon is the system to be used and the extent and duration of the effort. There is, however, general agreement that the program—Job Corps or any other—cannot be considered successful if it has taught the trainee how to get a job but not how to keep it.

These Government-sponsored, industry-operated employability development races are being run on a fast track, and they offer both immediate challenges and potential rewards. The word "races" is used deliberately, because the time element is vital both in producing increasing numbers of trained, employable workers for industry's needs (one of industry's rewards) and in helping to relieve the ex-

plosive social pressure which is created by the chronic unemployment of our disadvantaged citizens. The challenges are obvious and many in these "human R and D programs," but they are being met. If Government, education, and industry continue to work together toward the solutions all so earnestly desire, long-term improvement and success are certainly possible.

THE JOB MARKET: FILLING THE CORPORATE INFORMATION GAP

NORMAN MEDVIN

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I. Fundamental Manpower Changes

It is a surprising fact that the collection and study of employment and job market information is a relatively new science which is less than 30 years old. Economists working in the arid thirties can recall at least four "official" estimates of unemployment which ranged between 3 million at the low end and 15 million at the other. It is a vexing thought that we knew how to count bales of cotton, tons of coal, and numbers of hogs long before we knew how to count our jobless workers.

Just as the government was a relatively late starter in the manpower sweepstakes, so the private sector was an even later starter. Traditionally, the labor supply in this country has always been adequate. This amplitude conditioned employers to plan no further than the time it took to post a notice at the gate. Even today, to the extent that employers have been forced into a planning stance, their concern with manpower is largely geared to executive search and to the ups and downs of the business cycle rather than to the strange phenomenon of full employment and persistent labor shortages.

Yet today a fundamental change has occurred. It is a fact today that there exists in the United States a shortage of manpower to man many of the jobs of industry, government, education, and other segments of society. Nationally, some 45 percent of all unfilled jobs listed with the Employment Service are hard to fill, that is, they have remained unfilled for one month or longer.

A number of factors seem to insure that these shortages will remain for a long time: (1) Huge investment in new plant and equipment continues to result in accelerating mass obsolescence of the Nation's productive capacity at the same time that invention, use of new materials, and emergence of new products require new skills; (2) There is a widening spectrum of occupations in the high-talent category; (3) Our determination to raise the educational level of our workers not only keeps our new entrants in

school longer, but also adds to the high demand for teachers; (4) The affluent society adds new jobs and careers in the service-to-people area (5) Mobility of educated manpower and a malfunctioning of the labor market for many categories of professionals cause dislocations and shortages; (6) Discrimination and restrictive hiring specifications impede the utilization of human resources; and finally, (7) There are marked geographical disparities in the labor demand-supply balance.

It is clearly apparent that industry must accept the proposition that manpower shortages in many occupations are a current reality and will increase in intensity in the future. As such, they pose a set of challenges in corporate manpower planning which are prudent to face up to at the earliest opportunity.

II. Corporate Need for Manpower Information

A major dilemma in the manpower information sense is that the government needs data from employers which are either unavailable or, in many ways, not technically adequate. The corporation, in turn, looks to the government for manpower data for its own manpower planning, recognizing that it gets back an amalgam of the inadequate data it and others have provided.

Nevertheless, the need for manpower, changing occupational mix, and competition in the job market requires that planning be done today with the tools currently at hand. Given the current state of the art, it need not be a major limitation. A more substantive limitation is that little systematic thought has been devoted by corporate personnel managers to the operation of their internal and external job markets and the information which can be applied to making them function more effectively. They have been less concerned with manpower as an economic concept such as improving selection techniques, enlarging the supply, and devising substitutions and more concerned with current manpower needs on a day to day basis, establishing procedures, and dealing in human relations.

How may current job market information transform personnel administration as a function into corporate manpower planning? And, how could such planning become the means for both relieving persisting manpower problems and planning to meet future problems?

An authority has defined corporate manpower planning as follows:¹

1. Assessment of available manpower resources within the organization, i.e., the ability and capacity of the present workforce as to its potential for development and its adaptability to the country's changing workforce needs;
2. Assessment of current corporate manpower needs as to numbers, skill or occupational mix, and quality of its workforce;
3. Forecasting workforce needs of the company based upon assessment of the impact of investment and facilities on the manpower mix and manpower training lead times as knowledge and skill levels respond to the technology; and
4. Development of a human resources policy which is fundamentally a matter of enlarging the supply of qualified people to meet forecasted needs.

Assuming the four categories define the need, we can now explore the types of manpower information required to flesh out these corporate objectives.

Assessment of Available Manpower Resources within the Organization—This is an inventory of plant manpower resources, a base from which to assess current and prospective manpower needs. The first step in this procedure is the construction of a list of occupations in the plant and the number employed in each occupation. A mere listing, however, is not sufficient. It would be highly desirable to have an occupational nomenclature which is standardized with the types of information available in the external labor market and which also provides an analytical framework in which to assess plant capability.

The third edition of the DOT, released in 1966, provides a different structure of occupational classification from the two editions preceding it.² Occupations are now grouped according to body of knowledge required, purpose, industry, materials worked with, product, and/or service.

The result is a structure clustering occupations with like charac-

¹ Frank H. Cassell, Inland Steel Co., Chicago, in an address at the University of Minnesota, November 9, 1967, entitled *Corporate Manpower Planning*.

² *Dictionary of Occupational Titles*, 1965, Vols. I and II, Third Edition, U.S. Department of Labor, Bureau of Employment Security.

teristics under a common heading and also which groups occupations in a "skill ladder."

With respect to clustering, the three-digit occupational groups are related to one another in terms of materials worked with, product, etc. It follows, therefore, that at the entry level of all of these occupational groups, the training required is somewhat similar.

With respect to the skill ladder, each three-digit occupational group has within it the range of occupations proceeding from the top skill in the group down the promotion ladder to the entry occupation.

Supplementary types of information such as education, interests, years of service, and other personal characteristics may be gathered on each of the plant's workers to provide selection factors for upgrading and transfers.

Assessment of Current Corporate Manpower Needs—Working from a plant base of occupational employment, the next step is to indicate current occupational needs. Employers have demonstrated their ability to identify and report job vacancies in meaningful terms. Of course, the employer's internal needs may well differ from those which he presents to the external market. Thus, a machine operator's job may be vacant but the employer may fill it by upgrading; his need in the external labor market is the person he intends to recruit from outside the plant. On the other hand, he may have five machines manned by only four workers, each putting in overtime to compensate for the unmanned work station. He and the workers may be totally satisfied with the arrangement, in which case he is not actively seeking a worker and has no viable vacancy. The definition of a vacancy, which has been arrived at with much travail in the USES experimental program, reads as follows: Job vacancies are current, unfilled job openings which are immediately available for occupancy by workers from outside the firm and for which the firm is actively seeking such workers.

An indispensable additive to the job vacancy figure within the firm is information on the duration of the vacancy. Appraisal of occupational shortages in the firm's recruitment posture and in the community is not the *actual* level of openings by occupation but a corollary figure, namely the number of vacancies that have been unfilled for a period of time, say one month or more. These unfilled jobs open one month or more, and their size in relation to

total plant vacancies for each occupation should be evaluated on a periodic basis. The experience should then be compared to a similar compilation on a community-wide basis, about which more will be said later.

Forecasting Company Manpower Needs—The manpower forecasting area has been the subject of serious controversy. Many say that most employers are not capable of making a reliable manpower projection for their establishment. They point out that employers are unsophisticated in economic terms, are congenitally optimistic with a consequent upward bias, may have no control over their long-range business (defense contractors), and are unable to assess technological change and its impact on their occupational structure.

Yet, conceptually, who should be better able to predict his own future than the manager who knows his own markets, his own product, and his own plant?

There is no reason why employers who do manpower planning cannot lend a relatively high degree of sophistication to their projection, particularly in those aspects which are procedural. In establishments with a planned program of capital investment, these projections can be correlated with manpower requirements. Additional sophistication can be built in as for example, an established relationship between output and manhours. Or, the projection may be tied to such indicators as family formation, income, employment, housing, auto production, or gross national product. In any event, the forecast must be predicated on a policy decisions at the highest level and not on middle management who most often are not privy to long-range production decisions.

Changes in future occupational mix are "guesstimates" at best. A compelling case for reliability, however, can be built on the know-how of the plant production manager or department foreman coupled with the technical knowledge of the manufacturer who makes and installs the equipment. Computer technology permits the application of many variables to a forecast pattern. Common to any plant forecast are the necessary estimates for attrition based on turnover, deaths, retirements, and promotions into the occupation.

The foregoing paragraphs are only suggestive of approaches and are not intended to be definitive. There is probably more how-to-do-it literature on the translation of capital investment and general

indicators to labor requirements than in many of the other manpower fields.

Development of a Human Resource Policy—This is fundamentally a matter of enlarging the supply of qualified people available to man the jobs and meet forecasted needs. Qualified workers, in the old sense, frequently are no longer available and there is a need to reach out to those less qualified. Enlarging the supply consists of the management of a series of adjustments between the external and internal labor markets and within each market.

The forms of adjustment consist of: (1) changes in hiring standards to encourage greater employment of women, and the hiring of workers with a lower educational attainment, the handicapped, social offenders, and others. In each of these adjustments, manpower policy should be related to corporate profit consistent with social obligation; (2) changes in job structure either through changes in the components of a job or in reengineering the same job; (3) establishing lines of promotion and pursuing a vigorous upgrading policy; (4) a training program which enables substitution of lower qualified labor for higher qualified but scarce labor; (5) changing recruitment procedures which result in progressively wider circles of supply areas; (6) raising rates of compensation; (7) increasing interplant mobility; (8) reliance on computer selection to increase internal utilization; and (9) to provide company transportation facilities when distances and inconveniences are involved.

III. The External Labor Market

Until now we have discussed internal sources of information for corporate manpower planning and operating procedures to redress the labor demand-supply equation. What manpower information sources in the external labor market permit the rationalization of company policy in manpower planning?

The most significant operating information for a company is the *current state of the job market in one or more specific localities*. Collection of job vacancy information on a local basis and wages attached to each vacancy has proven feasible in series of Employment Service tests. These data, by occupation and by duration of vacancy, provide the best clue on manpower demand-supply balance in an area. The larger the proportion of jobs unfilled for 30 days

or more to total vacancies, the greater the "intensity" of shortage. Wage data reveal the meaningfulness of each vacancy.

The unfilled-one-month-or-more figure reflects, in one concept, the total of several job market phenomena. It represents shortage after taking in-migration and out-migration into consideration. It represents shortage after consideration is given to promotions into the job and those leaving the job. It is a direct measure of failure to meet demand after exposure to available supply—i.e., the unemployed and those presumably qualified in the occupation. In short, the hard-to-fill figure represents the net inability of the community to find workers, the residual after all the various manpower actions have occurred in the market place.

But, job vacancy data are available in only a handful of areas. Can anything be done to fill this information gap? Decidedly so. Data on unfilled job openings by detailed occupation by duration of openings is a statistic which has been available in the Employment Service for many years. The experimental job vacancy surveys showed that for the country as a whole, ES unfilled job openings accounted for between a fourth and a third of the universe of job vacancies, and that they were reasonably representative of the occupational mix of total needs, except in a few occupations.³ In short, ES unfilled job openings by occupation, supplemented by the hard-to-fill concept, is the best and most readily available information on local shortages available to the corporate manpower planner.

Employers also need *wage data*. Again, the best and most geographically widespread source of local occupational wage data is the employment service system. Based on long experience in job order taking, placement specialists in virtually all local public employment offices will know the going rate for most occupations in the community and those rates which are substandard. The Bureau of Labor Statistics (BLS) also conducts wage surveys for selected occupations in selected cities and these can be obtained from the local employment offices in the covered cities or by direct application to the BLS.

A valuable contribution of the BLS in corporate planning is the availability of the consumer price index (CPI) for the Nation and for selected localities. This, in conjunction with wage data by in-

³ Hearings before the Subcommittee on Economic Statistics of the Joint Economic Committee, 89th Congress, May 17-18, 1966, V. D. Chavrid, USES.

dustry and/or locality, are the base for *wage escalation clauses* in union contracts.

Perhaps the knottiest problem faced by the manpower planner is the one of obtaining a reliable *long-range projection of occupational requirements* in his community. Manpower projections in the external labor market provide the benchmark against which internal manpower decisions must be taken.

Until recently the field of local forecasting was dominated by the area skill survey technique which relied heavily on individual employer forecasts of need by occupation for a period of up to five years.⁴ A recent study by the Research Advisory Committee to the U.S. Employment Service recommended that the skill survey technique be abandoned on the grounds that it was too costly, too time-consuming, and too inaccurate.

Some notable breakthroughs have occurred in the manpower forecasting field only within the last year. Two are worthy of mention. The first is the BLS occupational matrix technique on a national pattern. It involves preparation of an economic model by building up demand for each product in an industry, manpower requirements of each industry consistent with this demand, and finally, the development of an occupational matrix. For a grid which has 116 industries in the caption and some 150 occupations in the stub, BLS technicians have painstakingly filled in the cells so that today they have what is tantamount to 116 industry manning tables for 1965, that is occupational distributions of employment for these industries. Applying their know-how of industrial and occupational trends, they have constructed a duplicate matrix for the year 1975. By obtaining the difference from one pattern to the other, they in effect have a demand chart by industry and occupation over the 10-year period.⁵ Work is progressing on its application to a local area; a number of States, notably New York, have experimented along this line.

The other is known as the ES unfilled openings-Occupational Outlook Handbook approach and is based on a pragmatic approach

⁴ *Handbook on Employment Security Job Market Research Methods—Area Skill Survey*, BES No. E-252, November 1965.

⁵ For information on the matrix, see "Long-Term Manpower Projections." Institute of Industrial Relations, University of California, 1966, "Estimates of Employment Requirements by Occupation for Future Periods—Data Sources and Model Development," Harry Greenspan.

to the job market. It is simple, takes demand and supply considerations into account, can be done for the most complex of area job markets in days or weeks by one person, and can be quickly updated on a quarterly or semiannual basis.⁶ The technique has been successfully tried in Milwaukee and Minneapolis-St. Paul; the Wisconsin vocational education authorities incorporated the findings into their State annual plan. Other State tests are about to be completed.

Another significant factor in the corporate manager's appreciation of the external job market is a *systematic flow of manpower data* across his desk. It presupposes, of course, a knowledge of the institutions, both public and private, which are making major contributions in this area of activity. It would indeed be indispensable to have the BLS publications on *Employment and Earnings* and the Employment Service's *Area Trends in Employment and Unemployment* (which includes the job market classification system). Implications of Defense Manpower Policy No. 4 on procurement, based on the classification system, is a must for defense-oriented producers. Wage surveys, job vacancy surveys, ES unfilled openings, and local ES area job market newsletters are key elements in the development of a viable corporate manpower policy.

Close working coordination with the local employment office is a major tool in corporate manpower planning. The local office is the manpower service center of the area. It provides the occupational nomenclature and classification which opens doors to a spectrum of external services. Job analysis, counseling, testing, selection of workers and their referral, interarea recruitment, and labor market information are at the disposal of all comers. ES testing services, if correctly used, can widen rather than narrow the recruitment potential. The Employment Service certifies an employer's petition for the importation of foreign workers. It bridges the gap for the trainee between MDTA and vocational education and the employer.

IV. Information Gaps

Despite the availability of masses of manpower information, there are important gaps which need filling.

ES unfilled openings data by occupation and duration can be obtained as an administrative statistic in all local offices. However,

⁶Norman Medvin, "Occupational Job Requirements: A Short-Cut Approach to Long-Range Forecasting," *Employment Service Review*, January-February 1967.

only about 80 major job market areas compile them on a regular basis. Recently a number of State ES agencies, recognizing their significance, have begun to compile them Statewide and for major areas, but this is more the exception than the rule. It would not only be desirable to collect these periodically and locally on a nationwide basis, but also to publish and make them available to the many claimants who have a need for the data.

The collection and dissemination of job vacancy data should take high priority as a tool for manpower planning. Vacancy data represent the universe of all available jobs rather than a portion of them as in the case of ES unfilled job openings. Hopefully, the Congress will allow this program to make its way from experimentation to full-scale implementation.

Data on employment by occupation by area is a key series which, if collected, would provide a base for analysis of external labor markets, both for current trends and long-range forecasting.

More work is needed on long-range occupational projections. Concentration of emphasis in the last few years has already produced results and a number of techniques in the pipeline hold further promise.

The ES Advisory Committee on Research asked the Employment Service to exploit more effectively the useful information in the local office files on applicants and openings. It also suggested that it provide, on a regular basis, local occupational and wage information.

Census frequency on occupational employment should be increased, at least on a sample basis. While a conversion table of Census occupational codes to DOT codes is largely completed, a single government code for occupations is still years away. A sense of urgency should be attached to achieving a common "language" for job market data.

The reliability of manpower measures should be improved at the local level. Two areas of need are nonmanufacturing employment and local unemployment estimates by occupation, race, and other personal characteristics.

The communication gap between employers and the local employment service needs to be narrowed.

Within the corporation, communication between the policy-makers and the manpower planning unit and/or personnel office also needs restructuring.

COMMUNITY MANPOWER PLANNING: AN ORGANIZATIONAL PERSPECTIVE

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The proliferation of federal manpower programs and the harvest of new legislation enacted during the decade have placed considerable stress upon our local institutions and administrative practices.¹ Similarly, the recent concern for the disadvantaged, which has dominated manpower policies since 1961, has raised issues concerning the extent of community involvement. It is the purpose of this paper to critically examine:

1. The deficiencies in the existing manpower system at the community level.
2. The "popular" preoccupation with planning and coordination solutions.
3. An alternative list of priority issues.

THE EXISTING MANPOWER SYSTEM— CONSTRUCTIVE CRITICISM

Many public administrators, economists, businessmen and program applicants have identified problems of duplication, waste, overlap and inefficiency in the existing manpower system. There is widespread recognition that readjustments in the administrative structure have lagged behind policy and program advances. Our natural preoccupation with program substance has been reflected in the inadequacy of our service-delivery-mechanisms. Concern with these problems has increased. Yet, I believe that this concern needs a different focus, a focus which becomes more evident after reassessing our local manpower system and re-examining planning and coordination experiences in associated fields.

¹ The manpower development efforts and appropriations of the federal government have increased eightfold since the beginning of this decade, from \$275 million in 1961 to \$2.1 billion in 1967. See the budget chart in Sar A. Levitan and Garth L. Mangum, *Making Sense of Federal Manpower Policy*, (Washington, D.C.: National Manpower Policy Task Force, 1967).

1. *A Diffusion of Authority*

When the eight major federal laws² providing support for manpower programs are implemented at the local level, one finds the *State* Employment Service, the work experience and community training programs of the *County* Welfare Department, the adult and vocational education program of the *Independent School Board*, the network of neighborhood employment centers administered by the *private* non-profit Community Action Agency, prime OJT and NYC contracts for the *YMCA* and the *Urban League*, etc., etc., etc. The result of this diffusion of authority is a manpower system structurally insulated from the political process, virtually non-accountable to the local community and without a functional manager or a responsible co-ordinator.

2. *Lack of Interagency Coordination*

Mangum and Levitan cite the testimony of the Secretary of Labor, W. Willard Wirtz, and a study by the N.Y. Institute of Public Administration which document the proliferation of manpower programs operating on the local scene. Secretary Wirtz indicated that there are fifteen to thirty separate manpower programs administered by public and private agencies, all supported by federal funds, in each major U.S. metropolitan area. The N.Y. study enumerates 91 agencies and organizations funded by anti-poverty programs in that city.³ In Washington, D.C., I have identified close to thirty public and private non-profit agencies administering various manpower programs.

In response, some states and cities have established unified Manpower Development Councils. The States of Iowa, West Virginia and Michigan have created councils for manpower planning and coordination. New York City has established a Human Resources Administration and Washington, D.C., a Metropolitan Jobs Council.⁴

3. *Non-Existence of Manpower Planning*

If manpower planning were defined in the same terms as land-use, transportation or urban renewal planning, then we have to admit that it is non-existent. In the human resource field we haven't committed

² The eight major federal manpower acts are as follows: Wagner-Peyser, George-Barden, Smith-Hughes, Vocational Education Act, Vocational Rehabilitation Act, Economic Opportunity Act, Manpower Development and Training Act, Elementary and Secondary Education Act.

³ Levitan and Mangum, *op. cit.*, p. 13.

⁴ *Op. cit.*, p. 9.

the resources or developed the techniques for comprehensive needs analysis, categorization of these needs according to magnitude and intensity and development of alternative strategies for their alleviation or elimination. Finally, last year, the Department of Labor completed the first "gross" approximation of the needs on the *supply side* in a study of subemployment in ten urban ghettos.⁵

On the *demand side*, the situation is similar. Projections of future demand are very primitive and the anticipated changes in industrial and occupational categories portend an even more onerous predictive problem, as regional and metropolitan input-output models become obsolete overnight, the openness of subregional economies make export base models suspect and vertical and lateral employee movements are less predictable than ever.

4. *Excessive Administrative Centralism*

Our economic and social problems are rooted in the local communities but administrative responsibility is centralized excessively in Washington. The field is the actual proving ground for policies and programs conceived in Washington. And the size of the country, the heterogeneity of its cities and towns and the complexity of its problems argue for the decentralization of operational program decisions. The concentration of administrative control at the federal level and the proliferation of overlapping and inconsistent grants-in-aid have contributed to administrative problems and inflexible practices at the community level.

One of the most critical problems in the administration of local manpower programs is the inevitable development of programs on the basis of federal fund availability rather than actual local needs. The preponderant amount of manpower funds are earmarked for youth, while in many cities the retraining of displaced adults or unemployed head-of-households may actually be the most serious problem.

⁵ See "Subemployment in U.S. Slum Areas," U.S. Department of Labor, November 1966. Their subemployment rate includes:

- a. those unemployed who are actually looking for work and unable to find it;
- b. those working only part-time and trying to get full-time work;
- c. those heads of households under 65 years who earn less than \$60 per week working full-time and those individuals under 65 years who are not heads of households and earn less than \$56 per week in full-time employment;
- d. the non-participants in the male 20-65 age group;
- e. a conservative estimate of the male undercount.

Since most manpower programs have barely left the drawing board, the case for local discretion, flexibility and experimental latitude is compelling. Local agencies should be able to tailor programs to the individual employers and employees with whom they will be negotiating.

Probably the most serious consequence of excessive federal control is the limitation placed on local creativity and involvement. The rigidity of "pre-packaged" federal grants minimizes the opportunity for substantive local input. A closer approximation to block grants would allow the local manpower agencies to establish priorities, balance program components and provide meaningful opportunities for business and community involvement in policy formulation and program development.

THE POPULAR PREOCCUPATION WITH PLANNING AND COORDINATION REMEDIES

As previously mentioned, most critics seek to overcome existing deficiencies with more planning and coordination efforts. This year the federally-initiated Cooperative Area Manpower Planning System (CAMPS) effort will involve over one hundred metropolitan areas. All of the local manpower and manpower-related agencies will participate in the development of an area-wide cooperative plan. These local master plans, in turn, will be reviewed by inter-agency groups at the state, regional and federal level. Other attempts to improve planning and coordination involve the creation of unified councils or consolidated organizations at the state and local level.

While all of these efforts are certainly worthwhile, *I believe that our current preoccupation with inter-agency coordination and planning solutions is misplaced.* My belief is based on two propositions. *In the first place, both inter-agency coordination and comprehensive planning are "a priori" unadaptable to the realities of democratic politics; secondly, a more intensive recruitment and in-service training program for manpower agency staff, the creation of a local functional manager and the inclusion of market pressures within the system will make a greater contribution to improved program performance.* My point is not that we should abandon efforts to improve planning and coordination; rather, we should recognize their inherent limitations and place greater emphasis on improving staff competence, creating a local manager and building in market pressures.

Let us now examine the realistic limitations of comprehensive planning and inter-agency coordination and then comment on the three new priorities which I have suggested.

1. *Comprehensive or Cooperative Planning*

Experience in many communities with different functional problems such as housing, juvenile delinquency, land use and poverty, indicate that planning has a limited impact on the decision-making process. Most decisions are based on interest group pressures, clientele demands, crisis responses or bureaucratic interest. In fact, most students of public administration refer to the public decision-making process as a "closed-triangular shop" with the key Congressmen, constituent interest groups and bureaucrats as the key actors. Many critics have pointed to the political impotence of the planning process—the continued inability of planners to really influence local decisions on specific issues and to strengthen the rationality of local development policy. The professional planning fraternity has long recognized and articulated these occupational frustrations.

Other critics, particularly political scientists, have asserted that the comprehensive planning ideal is inherently unadaptable to political facts-of-life and that the ideal of technical rationality posited by planners is neither achievable nor even useful as a model for approximation.⁶ Edward Banfield, David Braybrooke and Charles Lindbloom, for example, list the following as practical limits to comprehensive planning and policy-making:

- man's limited problem-solving capability
- the lack of truly comprehensive information
- the costliness of comprehensive analysis
- the inability to construct a satisfactory method for evaluating values or goals
- the openness of the system of variables
- the inability to discover the goals of the community on which all can agree

⁶ Cited in footnote of Arthur D. Little, Inc., research study, "Local Planning: Performance and Expectations," Cambridge, Mass., September, 1967. David Braybrooke and Charles Lindblom, *A Strategy of Decision* (Glencoe, 1963); Edward C. Banfield, "Political Influence," (Chicago, 1961); and James Q. Wilson, *City Politics* (Cambridge, Mass., 1963); James D. Barber, *Power in Committees*, (Chicago, 1966).

—the fact that decision-making is incremental, remedial, serial, exploratory, disjointed and fragmentary.⁷

It appears inconceivable that any cooperative manpower planning process will be able to overcome such seemingly insurmountable difficulties.

2. *Inter-agency Coordination*

There is some need to reduce duplication, particularly in job development, and to improve linkages among programs but I believe that we have over-responded to these problems. In my judgment efforts to create unified central departments or elaborate inter-agency manpower councils are of minimal benefit. Some time in the future a limited degree of consolidation may be in order, but such unification efforts seem premature at this time.

First of all, as we all recognize, some competition is both necessary and healthy. Our more traditional agencies like the Employment Service and the Vocational Educational system need some competitive catalyst. In the last few years there has been more ferment and aggressiveness on the part of the Employment Service than in any previous period in its history (except for war-time). Even its staunchest defenders, however, will agree that while the ES has been pointed in the proper direction, it has only taken a few initial steps. Let's not abandon this opportunity for change by eliminating the threat of competition and jurisdictional rivalry. In the case of the vocational education system the situation is similar. The need for reform is abundantly clear and well documented. For example, in a recent Health, Education and Welfare publication, *Vocational and Technical Education*, the distribution of enrollment in vocational classes for the year 1964 indicated that over 3 out of every 5 persons were still enrolled in either agriculture or home economics. During the seven years preceding the 1964 report, agriculture showed a gain of 85,000 enrollees despite the rapid shrinkage in its labor force.⁸ Local skill centers and Occupational Industrialization Centers (OIC) provide some minimal stimulus for change. The Administration has recently offered some incentives for private industry to manage skill

⁷ Quoted in Richard S. Bolan, "Emerging Views of Planning," *JAIP*, XXXIII, 4 (July, 1967), p. 234.

⁸ U.S. Department of Health, Education and Welfare, *Vocational and Technical Education*, Washington, D.C., 1964.

training programs, i.e., the so-called 5-city test program headed by the Department of Commerce. I believe that this proliferation of vocational "educators" is healthy and needs encouragement.

Finally, it must be admitted that our knowledge about inter-agency relations is limited. Most organization theory and studies have dealt with individual organizations rather than the relations among organizations. Most organization studies have been confined to units within the same structure or between a pair of complementary organizations such as labor and management.⁹ As a mechanism for coordination, planning and policy-making, inter-agency coordinating councils have been dismal failures. These councils invariably degenerate into a forum for making plans and resolving disputes at the lowest common denominator. There is a common tendency to avoid conflict, controversy and decision-sharing.¹⁰

While inter-agency councils provide some benefits by making bureaucratic struggle more predictable and communication easier, they are ineffectual for decision-making and inter-agency coordination. This is inherently true as agencies, like individuals, cannot be expected to relinquish their administrative controls or allow others to share in decisions for which they are accountable. My experience in two vastly different cities, New Haven, Connecticut, and Washington, D.C., indicates that in the absence of formal authority or, sometimes even in its presence, peer agencies will not be coordinated. Inter-agency councils are unsuccessful since

- there are neither explicit sanctions against non-cooperation or rewards for coordination
- autonomous agencies seek to maintain and enhance their power
- there is a mutual avoidance of conflict
- agencies compete for staff, money and clients

⁹ See Basil Mott, "How A Coordinating Council Operates: A Study of the N.Y. State Interdepartmental Health and Hospital Council," (unpublished Ph.D. dissertation, Columbia University, 1966). In a footnote the author refers to other conclusions which corroborate his own findings in Amitai Etzioni, "New Directions in the Study of Organization and Society," *Social Research* (Summer, 1960); Eugene Litvak and Lydia Hylton, "Intergovernmental Analysis: A Hypothesis on Coordinating Agencies," *Administrative Science Quarterly*, March, 1962; Sol Levine and Paul E. White, "Exchange As A Conceptual Framework for the Study of Interorganizational Relations," *Administrative Science Quarterly*, March 1961.

¹⁰ Mott, *op. cit.* Walter Miller, "Interinstitutional Conflict as an Impediment to Delinquency Prevention," in *Human Organization*, (Fall, 1958).

- agreements are limited to matters acceptable to the collective will
- interest groups, clientele and staff offer pressures against coordination, since coordination involves a degree of compliance and a loss of independence.

SOME ALTERNATIVE PRIORITIES

In attempting to overcome the deficiencies in the existing community manpower system, a concentration on the following seems more profitable than a continual emphasis on planning and coordination :

1. recruitment and training highly qualified staff
2. establishing a local functional manager/catalyst/clearing house.
3. building market pressures into the system.

All three of these priority areas are going to require additional analysis and evaluation before being translated into legislative or executive action. We probably have the most experience and knowledge about recruiting and training competent staff. We certainly have less experience with functional managers, although private enterprise offers some valuable experience. Although there has been some experience and considerable controversy about community participation, and even a rather intense dialogue about building community responsiveness and accountability into the education system, the inclusion of market pressures offers the most serious challenge.

Now let us examine each suggested priority separately.

1. Well-Trained, Well-Qualified Manpower

The need for well-trained, competent staff is obvious. However, the proper method for recruitment and training such manpower is less clear. While a complete blueprint is not available, a few comments are appropriate.

A. We need to give in-service training a much higher priority than ever before. The management responsibilities of local administrators and the recruitment, counseling and job development functions of local staff have become infinitely more difficult. Both HEW and Labor could establish state or regional training centers, contract with universities or consulting firms, increase mid-career programs, etc.

B. The public agencies need to fully exploit the use of sub-professionals for their own purposes. New careers in the ES, the Vocational Rehabilitation and Vocational Education fields

offer an opportunity to meet personnel shortages as well as provide rewarding careers to the poor.

C. The local manpower agency needs to recruit highly competent administrators and technical personnel. However, local salary structures, political pressures and bureaucratic entanglements present serious disincentives. Less permanent one- or two-year arrangements or management contracts with private enterprise may partially overcome this problem. More specifically, private industry may be induced to loan staff on a one- or two-year basis. Possibly contractual arrangements can be negotiated for management assistance or participation monitoring.

D. More in-service training for local administrators in the application of modern systems and management techniques are necessary. Similarly, job developers must acquire the technical skills necessary for job-re-engineering, and personnel test assessments as well as thorough knowledge about the full range of training, education and job coaching assistance. Counselors need more sensitivity training and placement specialists must develop referral criteria for the various training, work experience and pre-vocational programs.

2. *A Limited Functional Manager/Catalyst/Clearinghouse*

As comprehensive planning and elaborate organizational rearrangements are unsuitable and inappropriate, an incremental approach may prove more profitable. For example, a small non-operational unit in the office of the mayor or county supervisor would provide an overall community perspective along with a detachment from programmatic responsibilities. Even without formal authority, this staff unit's proximity to City Hall provides a catalyst/mediator without a threat of political dominance. As major inter-governmental and public-private linkages require the resources and commitment of City Hall, this informal structure would provide a closer and more informed relationship. Finally, this staff unit could be utilized as a clearinghouse for program information. A comprehensive up-dated inventory of manpower programs within the metropolitan area would overcome some agency, employer and employee confusion.

3. *Build Market Pressures Into the System*

The current debate about professionalism and public participation in educational policy-making provides many analogies

for the community manpower system. While the education system is manifestly more insulated, monopolistic and technocratic (a self-perpetuating bureaucracy), manpower agencies also have operated in a relatively closed manner.

In an interesting case study of the N.Y. City education system, it was indicated that almost every study of power in large cities points to functional specialization, dispersion of power to specialists in particular areas and an increased role of the bureaucracy in decision-making. Actual public participation is circumscribed by the lack of visible decision-making, the shortage of information available to the public on most issues and a deficiency in the means of participation.¹¹ In any event, a policy of self-containment and bureaucratic inclusiveness precludes the infusion of outside ideas and external pressures. By excluding private enterprise and ghetto residents in policy-making and program development, the opportunity for meeting the real need of these clientele groups is greatly diminished.

Many of our most successful poverty programs have included the poor in the program development and implementation stage. Among the most successful illustrations are the street academies in the ghettos of Harlem, the OIC program in Philadelphia and the Ford Foundation-sponsored pre-vocational center in Washington, D.C. Also, the ideological case for Jacksonian democracy and the psychological and ethical case for increasing the control of the poor over their own lives are compelling arguments.

On the other side of the ledger, as the final consumer, the business community must be more intimately involved. Their knowledge of job requirements, education and training curriculum, skill and equipment demands, etc., are essential for a relevant manpower policy. The intimate participation of the market consumers, whether through advisory commissions, task forces, panel discussions, contractual relations for program development, consulting or operational control, requires our genuine commitment.

CONCLUSION

I recognize that I am unable, at this time, to provide the specificity necessary for immediate legislative or executive action on any of my

¹¹ Marilyn Gittell, "Professionalism and Public Participation in Educational Policy-Making: New York City, A Case Study," *Public Administration Review*, September, 1967.

three suggested priorities. Yet I believe that an essential prerequisite for an improved manpower system is an accurate identification of the correct priorities. It is partially this failure to weigh the problems and their potential solution correctly which has hampered our progress in the manpower field. A shift in research, analysis and program support from planning and coordination to measures for improved staff, functional managers and inclusion of market pressures will increase the impact of our resource commitments.

VII

MANPOWER AND ITS MOTIVATION

MOTIVATION AND BEHAVIOR CHANGE

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In the economics of social life there is much truth to the biblical maxim: "To him who hath shall be given; from him who hath not shall be taken away even that which he hath." Its meaning is all the more disturbing because programs to raise the status of the poor have not met with great success. A wide range of attempts at social healing by some of the best planned and largest scaled intervention programs have not readily influenced the poor in a way so that they may be beneficially absorbed into the larger society as responsible and productive citizens. There is even reason to suspect that some of the best attempts have produced "boomerang" effects, i.e., Detroit. This may seem a rather harsh judgment, but there is reason to believe that as more investigators with candor begin to report their results, it will become apparent that the widespread patchwork of remedial programs has not done nearly as well as the sponsoring agencies would like it to do. Assuming that this general conclusion has some merit, it would seem important to look for specific and identifiable factors that have reduced the possibility for success.

To produce concentrated behavioral changes in a short time span is not an easy task. In fact, the possibility of modifying human behavior in ways that are intended to be therapeutic for the persons receiving the help under almost any condition is open to question. The problem is by no means limited to social amelioration programs. The accumulation of reports on the whole array of therapeutic efforts reveals a disquieting lack of fit when anticipated changes are viewed in relation to outcomes measured by standard behavioral research pro-

cedures. Most attempts to influence the behavior of others, whether they be deep psychotherapy (Bergin, 1966; Truax and Carkhuff, 1966), less intensive corrective techniques (Krasner and Ullman, 1966), delinquency prevention (Powers and Witmer, 1951; Miller, 1964); Meyer, Borgatta and Jones, 1965), or resocialization procedures (Brim and Wheeler, 1966) produce only very limited change effects when individuals are considered in the aggregate. As Bauer has aptly expressed, man is "an obstinate audience" (1965).

Such research focussed on outcome and evaluation has merit, but what is badly needed is the study of the processes of change and the identification of the variables that either contribute to or impair the efficacy of the specific influence methods employed. In the absence of such information it is difficult to determine which events lead to what outcomes. If an intervention program fails to change behavior—how and why does it fail? What are the impediments? Should an entire approach be jettisoned in the face of repeated negative outcomes or would a few adjustments in the method of treatment make the difference between success and failure? It is the purpose of this presentation to focus upon what I consider to be a major obstacle to successful intervention programming and to speculate about some of the possible motivational aspects of the problem.

Much of the following discussion is based upon information collected in connection with two large-scale social intervention projects which were researched by the Institute for Social Research of the University of Michigan. These projects are: (1) the Chicago Youth Development Project, a six year project utilizing street club work and community organization programs to promote social development among inner-city youth ; and (2) the JOBS I Project (Chicago), a forty-eight week program of basic education, counseling, and workshop training designed to place functionally illiterate and "motivationally unemployable" youth into productive employment. The target populations for both projects resided in economically disadvantaged inner-city areas. The general objectives, working methods, and target population characteristics of these two projects are representative of most large-scale projects in the country today.

Despite the lack of widespread success, it cannot be said that no gains are made among those youth who have been exposed to the project, but whose experience does not result in success as measured by some final objective criterion such as employment. In fact, it is

surprising to see how quickly and how far workers can move youth in the direction of some desired goal even though they may not eventually succeed in achieving the postulated final objective. The JOBS I Project, had a surprising degree of early successes. The average trainee had dropped out of school in the tenth grade, had a sixth grade reading level, and a fifth grade arithmetic level. After six weeks the trainees demonstrated unexpected levels of improvement in reading and arithmetic. Despite all these encouraging signs pointing in the direction of success, with little need for qualification, the program was not a success when measured in terms of the number of trainees who were placed into employment and held onto these jobs.

Research on the Chicago Youth Development Project produced a similar set of findings. Even though the project was successful in producing instrumental goal changes among 80% of youth who were worked with, these in-project changes had very limited survival value in post-project situations. Boys moved quickly through the series of instrumental change steps only to be bogged down at a point immediately before the worker was allowed to capitalize on his effort. Only four percent of these cases terminated in successful changes that were characterized by post-project autonomy (Caplan, N., et al., 1964).

This piling up of cases at the stage just short of success does not mean that the project workers made no effort to advance these youths into the post-project success category. In spite of these efforts, workers often found that success escaped them right at the last minute. A boy about to re-enter school or take a job would often act to blot out months of progress in a spectacular way. The results from these two projects do not reveal major problems in moving the youth through the instrumental goal stages; the real complications ensue only when passing from operational to final objectives. These youth can be "reached" and they demonstrate considerable in-program behavior changes; but, despite considerable preparation for and expectation of post-program transfer of these changes, they repeatedly fail when faced with the test of real experience. When this happens, faced with the meager results of his efforts, the professional social action practitioner is not unlike the distraught parent of erring children who tears his hair and laments, "Where did I fail?"

Where do they fail? What can be done to remedy the situation and increase the chances for success? What seems clear is that the

vast majority of youths who are clients of intervention projects are not simply outright failures; they are, rather "near-misses." They do not achieve the final status prescribed for them by the action agents, but they repeatedly come very close to doing so (Caplan, 1968).

This paradox of the "in-project success-post-project failure" has been selected as the focal point for diagnosis and discussion here because it is presumed to be an expression of some basic incompatibility between final project objectives and certain target population characteristics.

What I have discussed so far seems on the surface much like the traditional transfer of training difficulty. However, the difficulty bears the imprint of a much deeper problem. This is not to demean the importance of providing skills and a sense of competence in the use and application of those skills. The major point to be made here is that even after skills have been learned and employment opportunity has been made available—urban youth are disinclined to perform on the job as they did in the training program; the problem then is one of *performance* rather than one of *learning*.

Taking the typical route of the psychologist, I have tried to find some behavior parallels which may be transcultural and biologically rooted, i.e., something verifiable on mice. Fortunately, during the last year Kavanau (1967) has reported results which neatly fit this requirement. He studied the behavior of the white-footed mouse in an artificial environment which permitted both volitional and non-volitional changes in important features of the environment. He discovered that the mice expressed strong resistance to externally induced changes but would tolerate identical changes when they produced them themselves. For example, the mice would remain in their nests for parts of the day and out of their nests at other times. But, if the experimenter removed a mouse from its nest, the mouse would immediately return to the nest. If on the other hand, the mouse was placed in the nest by the experimenter, then he would immediately leave the nest. Similarly, the mouse could and did vary the level of illumination by moving a lever. But, if the experimenter (unseen by the mouse) produced a change in illumination, the mouse immediately manipulated the level so as to return the degree of illumination back to its original level. Finally, just as the mice produced their own variation in nest sitting patterns and illumination level, they would also vary the speed of a mechanically controlled exercising wheel.

Sometimes a mouse would set the speed of the wheel to move rapidly, and at other times slowly. It would maintain a particular speed for a while and then change the pace faster or slower. If, however, the experimenter altered the speed, the mouse would immediately return the speed to the level that existed immediately prior to the experimenter's manipulation.

Kavanau concluded that "In this relatively clearcut case, an act or situation which is rewarding when carried out volitionally is avoided when initiated by force—the animal responds by doing the opposite." ". . . they have a strong tendency to counteract nonvolitional and 'unexpected' deviations from the status quo (p. 1638)."

The suggestion here is that mice are not merely reactive creatures to external stimulation nor are they "wired" so to speak, for sex and aggression or similar simplistic tissue-based drives; but that they are driven (1) to produce casual effects upon their environment, i.e., to produce their own changes, and (2) to resist externally induced changes to modify their behavior and the conditions in their environment.

These actions by the mice are not very different from some of the recent findings on human motivation. White, for example, in a series of brilliant papers (1959, 1960, 1963) has argued convincingly that "competence" or mastery and control over one's behavior and one's environment is a primary human drive. Kozol, in *Death at an Early Age. The Destruction of the Hearts and Minds of Negro Children in the Boston Public Schools*, (1967), shows very clearly how behavior such as that described by White is discouraged and suppressed by early school experience. Rotter (1966) has shown that behavior is reinforced if subjects believe that their actions caused certain events to occur, but that the same behavior is not reinforced by the same outcomes if subjects believe the outcomes are due to chance rather than their own skill. Brehm (1966) in his book on "Reactance" reported a series of studies involving the effects of favors, advice, and the like and has shown that the recipient will often reestablish his own freedom by showing a negative reaction to noncoercive attempts at social influence even though he may show surface compliance initially; they may produce negative rather than positive influence effects with the recipient doing just the opposite to that anticipated.

Scanning the terrain of recent work on motivation, what I see emerging is *first*, an increasing interest on the part of investigators

and theory builders in the seemingly contradictory behavior such as that which occurs in social intervention programs when an attempt is made to transfer accomplishments to real life situations; and, *secondly*, a growing conviction that the ownership of one's own behavior and free choice to control one's own destiny may be very high in the hierarchy of motivational forces.

Returning now to the difficulties of producing successful social change programs, the foregoing discussion suggests that conceptually and substantively the operational premises of these programs may not be supported. The reason being that, whether we are attempting to directly influence another person by persuasion or even by trying to "help them to help themselves," the influence model being employed is predicated upon a client-change agent dichotomy. That is, in some way or another some outside person can produce asymmetrical influence effects upon another, so as to change behavior in some desired direction. This influence model is based on the assumption of a false dichotomy between client and change agent and has more to do with how people "should" behave rather than how they do behave. What I think we are learning from all of this is that the client must be his own change agent, otherwise any attempt to modify another's behavior may be futile and possibly even dangerous. At best, such attempts may result only in producing superficial adaptation while the client remains in the "power field" of the program or its action agents.

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MOTIVATION OF THE AFFLUENT

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Introduction

This paper is concerned with the motivation exhibited by the affluent in their work effort. Some sample survey findings are presented. These findings have already been reported elsewhere in summary form, and the opportunity is taken here for further elaboration.¹

The sample whose work motivations are analyzed here consists of 957 persons with incomes over \$10,000. At the time of the interviewing, which was undertaken by the Survey Research Center in the spring of 1964, about one-fifth of American households received incomes above this level. The sample is judged to be reasonably representative of these households, geographically, occupationally, and otherwise. The only major bias arises from the deliberate oversampling of persons with the highest incomes, a bias for which adjustments have been made in reporting the statistical results.

Through the method of personal interviewing, the high-income respondents were asked a wide variety of questions in the areas of portfolio management and working behavior. Among the questions in the latter area, there were four which shed some light on the motivations behind work effort:

Do you have opportunities to earn additional income by working more or taking on extra work?

[If "Yes"] How do you decide how much work to do then?

Do you spend more time at your work than you did a few years ago, or less, or what?

[If "More" or "Less"] What are the main reasons for the change?

The answers to the first pair of questions are discussed below under the heading of "Factors Affecting the Level of Work Effort." Subsequently the answers to the second pair are discussed under the heading of "Factors Affecting Changes in Work Effort."

¹ See Robin Barlow, Harvey E. Brazer, and James N. Morgan, *Economic Behavior of the Affluent* (Washington, D.C.: The Brookings Institution, 1966), pp. 136-38.

The nature of the sample was such that all of the respondents had enjoyed considerable success in earning money. It might have been expected therefore that the questions about work effort would show that motivations were predominantly monetary rather than non-monetary. In fact, the opposite was true. The affluent appeared to work for reasons other than affluence. In other words, affluence was seldom a primary goal in itself, but rather an incidental by-product of attaining some other goal.

Factors Affecting the Level of Work Effort

Ninety-three per cent of the high-income respondents were working at the time of the survey, most of the remainder being retired. Those at work were asked the first of the four questions listed above:

Do you have opportunities to earn additional income by working more or taking on extra work?

Of those answering the question, three-fifths claimed that they had no opportunities for extra work. These persons fell into two distinct categories. First, many of them were employees rather than self-employed, and would therefore be expected to possess relatively little discretion over the length of their work week. Second, many of them were already working very long hours, and regarded themselves as working at the maximum and in this sense as having no opportunities for extra work.

In the case of those persons claiming, for whatever reason, to have no opportunities for extra work, no attempt was made to explore the factors affecting the actual levels of work effort. It is possible that some interesting answers would have been obtained if these persons had been questioned about their reasons for not reducing their work effort by some small amount.

Those respondents who did claim to have opportunities for extra work were then asked the following question:

How do you decide how much work to do then?

Prior to examining the actual answers, it is interesting to consider how the answers might logically be classified. One reasonable *a priori* classification is shown in Table 1. The person who has opportunities for working more can be viewed as deciding to work additional hours up to the point where the net utility from working one more hour equals the net utility from not working during that hour. It can there-

TABLE 1
A Classification of Selected Motivations Affecting Work Effort

		Attainment of Rewards	Avoidance of Penalties
Utility of Working Extra Hours	Monetary	Wants income to improve living standards ; wants income as external symbol of success	Wants income to avoid cut in living standards
	Non-Monetary	Wants to enjoy prestige of operating a large firm ; wants to satisfy self-imposed need for achievement	Wants to avoid disappointing clients and partners ; wants to avoid guilt feelings associated with laziness
Utility of Not Working Extra Hours		Wants to enjoy pleasures of spending more time with family	Wants to avoid family disapproval ; wants to avoid physical overstrain

fore be expected that the above questions will elicit some answers referring to the utility of working, and others referring to the utility of not working. Utility may be derived either from attaining rewards or from avoiding penalties. For example, an additional hour of leisure spent with the family may confer utility on one worker by providing positive pleasures, and on another by removing a cause of family disapproval. The utility from working may be further subdivided as involving either monetary or nonmonetary factors.

When we turn to examine the answers given by the high-income respondents, the most striking finding is that monetary factors were seldom mentioned as affecting work effort. The distribution of the answers given by the entire sample is shown in the first column of Table 2. The first three categories of factors could be termed "monetary": in these cases, the respondent talked about the need to earn enough income to cover living expenses or showed in other ways, such as by referring to tax considerations, that he was aware of the net monetary reward for extra effort. But among those respondents with opportunities to work more, only 8 per cent mentioned these monetary factors.

The most common answer was that the respondent worked as hard as he possibly could, the implication in such an answer being that work effort was limited by nothing other than sheer physical or emo-

TABLE 2
Factors Affecting the Level of Work Effort By Income Classes
(Percentage Distributions)

	All High- Income Respon- dents	1963 Family Income				
		\$10,000- 14,999	\$15,000- 29,999	\$30,000- 74,999	\$75,000- 149,999	\$150,000 & over
<i>Has no opportunities for extra work</i>	55	48	57	62	68	62
<i>Has such opportunities</i>	38	43	35	29	22	21
<i>Factors affecting level of work effort:</i>						
Need to earn enough to pay taxes	0	0	0	0	0	0
Need to earn enough to pay other expenses	2	2	1	1	0	0
Tax considerations limit the work done	1	1	1	1	2	0
Does as much as is necessary	8	8	8	4	4	6
Works as hard as possible	11	11	11	11	9	5
Must leave time for leisure	5	5	3	1	0	1
Works as much as he wants to	7	8	5	3	3	3
Other factors	5	6	5	4	2	4
Not ascertained	3	2	3	3	2	1
<i>Does not work</i>	8	9	8	9	10	17
Total	100	100	100	100	100	100
Number of cases	957	122	220	261	198	156

tional endurance. About one-third of the respondents with opportunities to work more expressed themselves in this manner. The next most common answer was that the respondent worked as much as was necessary for the business. References were frequently made to the demands imposed by clients, business associates, and others, demands which these respondent apparently felt compelled to try and satisfy. They were driven by an urge, as one of them put it, "to get it done right." About one-fifth of the respondents with opportunities for extra work gave this kind of answer.

Only 13 per cent of the respondents with opportunities for extra work referred to leisure needs in explaining the level of their work effort. The remaining answers covered a variety of minor motivations or were somewhat uninformative, such as the answer that the respondent worked "as much as he wanted to."

Table 2 also shows how the motivations behind work effort varied between the different income classes in the high-income sample. Two patterns emerge fairly clearly. The first is that the monetary factors which induce greater work effort—the need to earn enough income to cover living expenses—were totally absent at the highest income levels. None of the 354 respondents with incomes exceeding \$75,000 mentioned these factors. The implication of this finding is perhaps that if a similar survey of workers with incomes below \$10,000 were to be undertaken, monetary factors would be found to be somewhat more important than among the high-income sample.

The second noticeable difference among income groups is that references to leisure needs occurred least frequently among the respondents with the highest incomes. Thus the picture emerges of the worker with a very high income, say, \$100,000, as being impelled by various strong motivations, among which the desire for monetary reward is of minor importance, and paying scant attention to leisure.

The motivations behind work effort are also seen to vary significantly among occupational classes, as indicated in Table 3. Of particular interest are the differences between self-employed professionals (doctors, lawyers, *et al.*) and owner-managers of business enterprises. Perhaps contrary to expectations, monetary factors were relatively important for the former group, but not for the latter. At the same time, the professionals were less apt to claim that they were driving themselves to the utmost in their work. To complete the picture, we note that the owner-managers of business enterprises almost never referred to leisure needs in explaining the amount of their work effort, whereas such references were relatively frequent among the self-employed professionals. One obtains the impression that the owner-managers of business enterprises held strong feelings of "company loyalty," while the self-employed professionals were somewhat less obsessive on this point.

As for the differences between the self-employed and the employees, one observes in particular that employees were somewhat aware of their leisure needs. From information collected elsewhere in the interview, it is clear that employees do in fact work shorter hours than the self-employed.

Factors Affecting Changes in Work Effort

A further perspective on the motivations behind work effort can

TABLE 3
Factors Affecting the Level of Work Effort By Occupational Classes
(Percentage Distributions)

	All High- Income Respon- dents	Owner-Managers ¹			Employees			Ret- tiers
		Finan- cial Sector ²	Pro- fes- sionals ³	Other Busi- nesses	Finan- cial Sector ²	Pro- fes- sionals ³	Other	
<i>Has no opportunities for extra work</i>	55	57	43	75	67	60	62	0
<i>Has such opportunities</i>	38	43	57	25	33	40	38	0
<i>Factors affecting level of work effort:</i>								
Need to earn enough to pay taxes	0	0	0	0	0	0	0	0
Need to earn enough to pay other expenses	2	1	4	0	0	0	2	0
Tax considerations limit the work done	1	1	3	1	0	1	1	0
Does as much as is necessary	8	9	7	6	4	6	8	0
Works as hard as possible	12	19	20	10	2	12	7	0
Must leave time for leisure	5	1	4	0	8	8	2	0
Works as much as he wants to	7	5	7	1	4	6	9	0
Other factors	5	6	7	3	8	6	6	0
Not ascertained	3	1	4	3	6	1	3	0
<i>Does not work</i>	8	0	0	0	0	0	0	100
Total	100	100	100	100	100	100	100	100
Number of cases	957	84	144	320	32	81	184	112

¹ An "owner-manager" held ownership interests in a business where he either was the chairman (or president) or considered himself as "self-employed."

² Banking, insurance, stockbrokerage, and accountancy.

³ Physicians, lawyers, engineers, architects, and scientists.

be gained by considering the answers to the second pair of questions mentioned above:

Do you spend more time at your work than you did a few years ago, or less, or what?

[If "More" or "Less"] What are the main reasons for the change?

The answers to these questions are shown in Table 4. One-fourth of our high-income respondents claimed to be working harder than previously, and an approximately equal number said that they were working less. The respondent's answer on this point was chiefly determined

TABLE 4
Factors Affecting Changes in Work Effort
(Percentage Distribution)

	All High- Income Respondents
<i>Spends more time at work now than a few years ago</i>	25
Reasons for working more now :	
Wants more money, because of higher taxes	0
Wants more money, for other reasons	1
Wants business to succeed; trying to expand	2
Business is better now; market has grown	6
Has more responsibility; increase in work load	13
Health has improved	0
In a different job now (no other reason stated)	3
Other reasons	3
Not ascertained	2
<i>Spends the same amount of time now</i>	46
<i>Spends less time now</i>	21
Reasons for working less now :	
Taxes too high	1
Does not need money so badly any more	1
Business is big enough now	1
Business is worse now, not so much work available	5
Wants more leisure	1
Health has deteriorated	2
In a different job now (no other reason stated)	2
Nearing retirement age (no mention of worsening health); getting older	4
Business is better organized now; can get others to assume more responsibility	6
Other reasons	1
Not ascertained	1
<i>Does not work</i>	8
Total	100

by his age. The younger respondents were usually working harder than before, while the older ones were reducing their work effort.

It is again evident that monetary factors were relatively unimportant in explaining work effort. Those who were working more than before seldom explained that they had been driven to greater heights by a desire for monetary gain. Very frequently their explanation was couched in terms of factors which were more or less beyond their control: they had been assigned more responsibility, or the market served by their business had grown rapidly.

Similarly, those who were working less than before seldom offered the explanation that they no longer needed the money so badly. Again, the factors held to be responsible for the change in their work effort were generally outside their control: they were nearing the retirement age, or their business had fallen on hard times, or their health had deteriorated. The analysis of the second pair of questions therefore confirms the earlier analysis on the matter of the relative unimportance of monetary motivations, and in addition suggests that external forces outside the worker's control are of major importance in explaining how hard he works.

Conclusion

It is to be hoped that future research will be conducted on the work motivations of the affluent, and that such research will succeed in establishing the relative importance of the need for achievement, the need for affiliation, the need for power, and so forth. The high-income sample discussed here did not yield much information on the different types of nonmonetary motivations, but it did suggest that these motivations taken together were much more influential than monetary considerations. This conclusion is interesting for its own sake and may also have some relevance for policy decisions. In particular, if monetary motivations are indeed of small importance, then the fears expressed about the disincentive effects of high income tax rates are very likely to be groundless. Increases in tax progressivity, such as might form part of a more radical program of income redistribution, would not apparently lead to much slackening of work effort among the affluent, nor conversely could further reductions in the top rates of income taxation be expected to unleash much work effort which is presently withheld.

VALUE, EXPECTANCY, AND MYTHOLOGY *

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Introduction

The plot line of this paper is reflected in its title—value, expectancy, and mythology. That plot line is abysmally—I hope deeply—simple: It asserts that the strength of a person's tendency to undertake a particular activity will depend upon his expectation that performing the activity will produce certain consequences, and on the attractiveness (value) of those consequences for him. There is a whole class of such value-expectancy theories, the best known and most thoroughly researched being the theory of need achievement as proposed and developed by McClelland, Atkinson, and others (1953, 1961, 1966).

As simple as the motivation-value-expectancy proposition is when stated so generally, I propose that many of the theoretical assumptions and current practices of industrial and governmental management are still more simplistic, since they fail to take into account the twin terms of value (the desirability of an outcome or payoff to the person involved) and expectancy (the likelihood in his view that undertaking the activity will really produce the outcome). I think so badly of motivational approaches that omit either of these crucial terms—either the “rational,” cognitive calculations and beliefs about what outcomes follow what actions, or the evaluative, affective view of such outcomes as desirable or undesirable—that I have referred to such approaches as mythology, stories that are more attractive than accurate.

These assertions become accessible to evaluation and criticism when they are further developed, and when they are viewed in the light of real cases and real data—the more so when the data refer to very different kinds of people and situations. Accordingly, I will attempt some development of these ideas; Dr. Caplan and Dr. Barlow will discuss research that they have done at opposite ends of the eco-

* The treatment of motivation in this paper owes a great deal to the work of McClelland & Atkinson (1953, 1961, 1966) on need achievement, and to the work of Vroom. The proposed manipulations of value and expectancy are specifically derived from Vroom's (1964) treatment of the topic.

conomic spectrum on the behavior and attitudes toward work of successful managers, professionals and entrepreneurs, and (by the same standards) highly unsuccessful young men without jobs. You and, in your behalf, Mr. Kornbluh will consider what relatedness there may be among these three efforts.

The concept of motivation

Motivation is a psychological construct, one of those concepts that cannot be directly observed but is inferred from intuition, from the seeming reasons for observable behavior, or from verbal reports of individuals about their behavior and its causes as they experience them. Motivation can be defined as a resultant force, an impulse to engage or to refrain from engaging in a particular action which is expected to have particular consequences (Atkinson and Feather, 1966). Thus motivation is a concept that speaks to the likelihood or probability that a person will perform a certain act in a certain set of circumstances.

But this is very close to what we mean by influence and control. To say that we influence the behavior of a person is to say that we alter the probability of his undertaking some action, and to say that we control his behavior with respect to that action means that we can influence it enough to overcome other influences, internal or external.

If we disregard the relatively rare circumstances of absolute physical coercion, as when an impatient parent pulls his small child along in a different direction than the child would choose, or when a prisoner encounters bars and walls—if we disregard such physical constraints, it is clear that motivation and control both have to do with the probability of a person's "choosing" under certain circumstances to undertake or avoid certain activities, or to choose one in preference to another.

Every society and every organization is concerned with such matters. What we mean by organization is getting people to do some things and refrain from doing others, and what we mean by organizing, leading, controlling, motivating, and many other terms in an unhappily redundant lexicon is altering the probabilities of certain acts being so undertaken.

The social mechanisms for motivating people, that is, for determining the probability that they will choose some behaviors and avoid others are many. Some of those mechanisms aim at creating deep-seated, enduring preferences in the person. Child-rearing practices

and educational curricula are of this sort and they work to some extent. Beliefs and attitudes about work, indeed the very definition of work, differ in accordance with such experiences of socialization. Weiss and Kahn (1960) found, for example, that the definition of work as duty (required rather than to be enjoyed) was more typical of college graduates than high school graduates, and more typical of high school graduates than those who did not finish high school. Work as duty was more typical also of men who were at least third-generation natives of the United States, who traced their ancestry to northwest Europe, who had lived most of their lives in the northern United States, and in urban rather than rural areas. The implication is that such early experiences affect the motivation to work (as well as tendencies toward and away from many other activities) and that they do so in ways that are general and long lasting rather than specific and momentary. They have the effect, in other words, of creating or strengthening motives—and by motive we mean simply a readiness on the part of an individual to be aroused (motivated) to behave in certain ways.

Other mechanisms of social control and motivation are more situation specific; they are intended to determine more immediate, short-term choices among available alternative behaviors. Much supervision is of this nature, and incentives and penalties in the work situation also are devices for immediate control. The purpose of an incentive is to motivate the worker to perform at a certain pace rather than at a slower one; to the extent that the incentive is successful, his behavior has been controlled by the people who instituted the incentive program.

The value-expectancy proposition

Every mechanism, every attempt at such control, as Douglas McGregor (1960) remarked, involves some theory of human behavior, some set of propositions and assumptions and expectations about the kinds of things people characteristically try to do, the ways in which they learn, the limits of rationality and the areas of irrationality. What is needed, therefore, to make efforts at motivation more successful is a better theory of human behavior. No comprehensive and satisfactory theory of human behavior yet exists, however. We have instead theories that look at different slices of that vast topic, and do so with varying degrees of success. In the field of psychology alone

there are many theories of personality, of learning, of perception, of decision-making, and of motivation.

All of these can become very complicated, and the theories of motivation are no exceptions to the rule. At the very least, however, a theory of motivation requires three terms, as Vroom (1964) has proposed :

- valence* (or anticipated value)—the individual's strength of preference for one of two or more outcomes or states of things ;
- expectancy* —the belief of the individual regarding the likelihood that a particular act will be followed by a particular outcome ;
- motivation* (also called motivational tendency or force) to perform a particular act—this force can be defined as the sum of the products of the valences of all outcomes apparent to the person and the strength of his expectancies that his performance of the act will be followed by the attainment of these outcomes.

We can point immediately to terms that have intuitive relevance, and are nevertheless omitted from this theoretical proposition about motivation. It says nothing explicit about personality, the enduring and characteristic tendencies of different individuals to respond differently to situations. Some people are more easily motivated than others to fight, to achieve, to show affection, and the like.

Nor does the value-expectancy proposition say anything about the difficulty of identifying the complex network of expected outcomes that may intervene between an act and the hoped-for end state that that motivated it. Moreover, one outcome often leads to another that is desired and the first becomes desired itself because of that fact. Habits of work learned long ago to insure job security or satisfy an exacting supervisor come to be preferred for themselves. They acquire valence, or as Allport (1937) said thirty years ago, they become functionally autonomous. Motives exhibit this property, but our value-expectancy proposition does not specify how such a process occurs.

Desired objects or end-states are seldom unique as sources of gratification and motivation. Human nature shows great capacity for substitution, not only the obvious substitution of one food for another,

one job for another, or even one person for another. Substitutive processes may be anything but obvious, and understanding them requires theories in itself. The Freudian description of sublimation is one such theory, and its complications include the assertion that the individual is typically unaware of the process.

Nevertheless, the value-expectancy proposition, by stating unambiguously two determinants of motivation and their multiplicative relationship, provides us with a basis for testing, refinement, and application.

Changing the motivation to work

Let us accept provisionally the value-expectancy proposition and apply it to work. It states that an individual's motivation to work (at a particular task, time, and under particular conditions) depends upon the anticipated values of all the outcomes (positive and negative) of working, each multiplied by the strength of the individual's expectancy that work will lead to that outcome.

It follows that to increase the individual's motivation to work we must either increase the positive value of the outcomes as he sees them, or we must increase his expectancy that work will really lead him to those outcomes, or we must do both these things.

Let us consider the means that might be employed to do each of them:

Increasing the value of work outcomes

Three possible ways of increasing the valence of the outcomes of working at a particular task suggest themselves:

1. *Communicate information about their desirability.* This is so easy, so natural, and affords the communicator such a sense of righteousness that it is extremely widespread. Virtually every company orientation and training program reiterates that outcomes of higher earnings, greater job security, and advancement will follow upon diligent performance. I know of no evidence that such communication increases the valence of these outcomes for the worker, and I do not really expect to hear of any.

Laboratory research on small groups suggests that such communication is effective when the individual is naive about the probable outcomes of his behavior and when he has particular reason to trust the communicator as objective or beneficent. Neither of these conditions seems well met by the manager urging the rewards of work on reluc-

tant employees. The worker is sophisticated about the material rewards of the economy; some he has experienced, and the rest pass before his eyes in a never-ending televised stream. And he knows that in urging him to work the manager is anything but disinterested.

2. *Make the individual more sensitive to available rewards of work; in other words, increase the arousal of appropriate motives.* In laboratory research this is done routinely by means of deprivation. The hunger drive or motive is increased, indeed it is measured, in terms of the length of time since the last feeding, and the animal's work performance in running a maze and getting to the food pellets is correspondingly increased. Some managers have been heard to murmur nostalgically about the motivation of workers during times of substantial unemployment, and many executives speak (metaphorically, of course) of keeping their organizations lean and a little hungry. But this approach to increasing the valence of work can be rejected without discussion; it is neither ethically tolerable nor pragmatically possible. The management that attempts a strategy of deprivation is likely to lose both to the union and the competition.

An alternative way of increasing motive arousal is to make the rewarding outcomes more immediately visible and therefore perhaps more stimulating. Much of the strategy of advertising proceeds from this assumption, and it may have some relevance to the work situation. I am skeptical primarily because I suspect, as I have already suggested, that material rewards are already presented in extravagant detail. The attempts to sell have created and act to maintain consumer sensitivity somewhere near the theoretical maximum.

3. *Link the work outcomes to other rewards or penalties.* Vroom (1964) mentions a third possible way of increasing the valence of a particular outcome, which is to associate it with some already established reward or punishment. In the language of learning theory, this is the familiar procedure of classical conditioning. Its application to the work situation seems remote, unless we include here the possibility of objective additions to the valued outcomes associated with working. Increased opportunity for interaction with peers, increased supportiveness of supervisors of course increase the worker's motivation to hold the job, but not necessarily his motivation to work harder or faster or more accurately. Linking additional rewards to task performance remains, however, an important means for increasing the total valence of outcomes and therefore the motivation to work.

Increasing the expectancy of rewarding outcomes

A second strategy for increasing the motivation to work at a particular task under particular conditions involves changing the expectancy term in the equation—that is, increasing the likelihood of the rewarding outcome following the required behavior, as seen by the individual. Again, three main techniques suggest themselves:

1. *Change the communicated probabilities of the outcome.* Communication, as we have remarked, is relatively cheap and relatively easy; it asks no change on the part of the communicator. It is not surprising, therefore, that there is much talk intended to assure workers that the machinery of reward is really working and that the expectancy term in their motivational equation should be near unity (certainty). The campaigns to keep students in school take this approach, as do some of the efforts to recruit workers to unskilled jobs. The Negro worker is told that if he shows skill and diligence, the rewards of promotion will be as probable for him as for the white. Such efforts will be effective to the extent that the worker really has underestimated the likelihood of such outcomes, and to the extent that he finds the communication credible.

2. *Change the ACTUAL probabilities of the outcome.* If one out of 100 high producing workers is promoted, the effect of the promotional prospects on motivation to produce are much smaller than if fifty such workers are promoted. This approach assumes that expectancy will change because of objective changes. The approach is likely to be effective, but it involves some organizational, managerial change to accomplish. It is in fact a change in the reward system.

3. *Teach the expectancy-outcome connection.* A third possible way to change a worker's expectancy and therefore his motivation is to make the outcome promptly and clearly visible after the act is performed. In terms of information theory, this is the short, direct feedback loop. In terms of learning theory (of the operant conditioning variety), this is positive reinforcement. In either case, the guiding assumption is that expectancy is learned on the basis of direct experience, and the evidence for this is substantial.

Actors and task

The preceding statement of the motivational problem is limited in two important respects: it has posed the problem of motivation as if

a given individual were confronted by a task already specified to be performed for rewards already determined. Given these facts, increased motivation was possible only through increasing the value or the expectancy of the rewarding outcomes. If we waive these limitations, two additional possibilities present themselves, at least in theory: we can change the actor in this hypothetical situation, and we can change the definition of the task.

Changing the actors. Management does a great deal to solve the motivational problem of rapidly-paced, repetitive work with limited prospects for advancement by finding individuals who will respond under these circumstances. Selection is the most obvious device for doing so. Reassigning or laying off the less productive workers is another. The most drastic means for producing a change of actors in the work situation is to move the plant, and this happens not infrequently as managements go in search of wage and tax advantages but in search also of different subcultures and (perhaps wishfully) of different personalities.

I find this effort ironic for two reasons. First, it seems that industries are taking flight from the urban situation, values, and life style that they have done so much to create. One wonders how long it will take to recreate in Arkansas or South Carolina the motivational problems that have been defined by some managements as insurmountable in Detroit or Chicago. The other source of irony has to do with the description some such managements give of the worker for whom they have become migratory. I suspect that their search is in the dimension of time rather than space, and that the highly-skilled, compulsive, middle- or north-European immigrant they seek is part history and part fiction. Such managements remind me, perhaps implausibly, of old prospectors, panning for gold in unpromising streams and remembering or inventing other days.

Changing the task. Perhaps the most direct way to increase the motivation to perform work is to redesign the task so that performing it acquires additional value to the individual. This has been done in part with respect to the physical demands of work; in many respects they have become less burdensome. Tasks can be redefined also in their social aspects, both with respect to supervision and peer interaction. Much of the work that used to be called human relations and now goes by many other names has been concentrated on these aspects of the job.

But there are other aspects of the definition of work that could be modified with considerable gains in motivation, I believe. One of these is the dimension of time. There is something very arbitrary and very limiting about the 40-hour week, and it is a considerable inconvenience, particularly in multi-shift, continuous-process industries that must be operated 168 hours per week.

Imagine instead a modular work unit of, let us say, 3 hours (or 2, or 4), with individual option as to the number of work modules to be undertaken. Young people might enter the labor force, acquire experience, and complete schooling while working a single module per day. Women with families might do the same. Men who wanted to build a variety of experience or relieve the monotony of work might put in one module on one job and another on a second job of different content and demand. Older people might retire by reducing the number of work modules per day or per week to suit their physical and economic needs, rather than working full-time to the 65th birthday and then being ceremoniously pushed over the precipice of retirement. I believe that the effect of such a redefinition of task would increase both the motivation to remain on a job and to work more productively.

Conclusion

Admittedly, this is speculative. We still know too little of human motivation, and of the place of work in human life. As a symbol of our ignorance we see in the labor force the whole range of behaviors and attitudes toward work—from apparent allergy to absolute addiction. And we ask ourselves at once how to get the overloaded executive or entrepreneur to listen to his physician and work fewer hours, and how to get people who have never had steady work to form some kind of responsible attachment to the jobs now available to them.

Solving such problems requires research that gets outside the populations of steady factory workers who have provided most of the data for theories of work motivation for generations. We need to investigate the values served and compromised by working, and the expectancies about work outcomes, as these terms vary in different work situations and among different populations. This range of concern is well illustrated by the work of Dr. Robin Barlow among the prosperous employed, and the work of Dr. Nathan Caplan among the unemployed poor. We will turn now to their research.

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DISCUSSION

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It should be obvious, as Dr. Kahn has stated, that the problem of understanding motivation to work is much more complex than has been recognized by the directions research and conventional wisdom have taken in the past. It is important to further identify some of the probable myths which have developed because of this. These are analyzed by the research presented here which suggests new ideas about the problem as well as some policy considerations.

The myth of economic man—The two research papers in this session indicate that simple assumptions of economic man probably do not fit the upper and lower ends of the socio-economic ladder. Barlow gives strong evidence that the more affluent in our society have motivations other than making money for continuing to work. Caplan theorizes that low-income youth resist what otherwise may be economically appealing jobs because the element of volition is missing in the transition from training to accepting work and performing on the job. In either case, it is obvious that public policy translated into law and program is missing the mark.

The myth of self-made man—All of us like to believe that we are self-made men. For some it comes as a shock to realize that, at best, this is a half truth. Others are spared the problem of facing up to this revelation. But we know enough now about the socialization process in the home, the neighborhood, the school and the peer group and the differential impact of this process on classes and racial groups. We know that some are socialized to be achievers long before they can exercise any free choice in the matter, while others are labelled failures by school and society on or before the first day they walk in the schoolroom door and in almost every test situation thereafter. It takes a great deal to decrease the expectancy of the former group in regard to work and its rewards. It takes a great deal to increase it for the latter. We know that many will be helped to develop attitudes to cope with increasing educational requirements for more prestigious jobs. Others will develop heroic coping mechanisms for ghetto survival which, however, may be ill-suited to schools and the jobs that may be available to them.

We know all this. Or do we? Otherwise, how do we explain the next great myth which underlies widely established personnel policy, rigid professional qualifications and the general popular belief about entry into occupations at all levels?

The myth of equal opportunity through uniform standards for job entry—In many urban areas today the problem of unemployment is a racial one. Many of the institutions controlling entry into jobs have discarded overt racial barriers. Yet, industrial personnel policies which require high school diplomas, high verbal ability, experience, no police record, etc., produce similar results to an overtly exclusive racial policy whether or not this is consciously intended. The standard reason for maintaining this practice is that it gives everyone an equal opportunity to be employed and is the best way to sort out those who can advance in the company. Applying what we now know about socialization in the ghetto and its schools, we are aware that this process does not provide equal opportunity. (As an aftermath to last summer's civil disturbances some companies and civil service commissions are beginning to recognize this.)

These kinds of barriers are not found only in entry jobs in industry. They prevail in entering the skilled trades as well as managerial and professional occupations. Those who have been shut out of jobs and, in more or less degree, the preparation for jobs, need a restructuring of the entry requirements and the jobs themselves. If the value to them of work on a job is to be increased, it needs to offer more immediate success and progressive increments of success. If their expectancy is to be increased, they must see a system of progression into more meaningful work, a career ladder if you will, which, through on-the-job training, can result in incremental advancement and recognition. The potential teacher can be developed in high school, or even earlier, as teacher-helpers, and can be doing incremental practice teaching in the first year of college rather than in the last. The New Career Development concept is based on this kind of approach in social service areas such as health, education and welfare. It is currently coping with, and will no doubt continue to meet the problem of the need to present credentials before its participants will be admitted to the meaningful levels of these occupational structures.

The data on the "near-misses" presented by Caplan might have

been different if training and real work were progressively integrated so that the "test of real experience" was minimized and intimately bound up with training. And the issue of volition may become more irrelevant if satisfaction of the need for peer group support and model identification were integrated into the training.

Yet, we dare not be too optimistic if we continue to underplay the depth of the problem of many low-income workers. For some, it calls for almost complete resocialization as the Job Corps has essentially attempted to do. For others, it means continued massive social services and support well into the period of working on a real job. Only a few job training and educational programs have recognized this. Many vocational rehabilitation projects for the handicapped provide such quantitative inputs, however. We have come to accept such an approach for the physical casualties of our society much more readily than for the social casualties.

We have talked about changes for the individuals seeking jobs; we have talked about changes in the jobs themselves to accommodate the problems of these individuals. We know enough about the anti-social behavior of individuals in hostile environments. It should be commonplace now to assert the need for changes in attitudes on the part of those who will be supervising and working with those we are trying to motivate to work. Where race is involved, attitude change is probably the most important change needed.

Perhaps the most far reaching consequences of the program and research for changing the work environment to adjust to the problems of the underprivileged lie ahead in the application of some of these same principles to the motivation problems of the more stable blue-collar workers. For the picture which emerges of the individual industrial worker's relationship to his work and its effects is hardly one which befits a vital, affluent society. It is one of a humdrum existence in which ". . . most are moderately happy, few are enthusiastic; almost none are intensively alive." *

Are we not at the stage where we can afford to look at existing jobs and structure of technology with an eye towards increases in

* Kornhauser, Arthur. *Mental Health of the Industrial Worker*, (New York: Wiley and Sons) 1965. Also see Blauner, R. *Alienation and Freedom: The Factory Worker and His Industry*, (Chicago: University of Chicago Press), 1964, and Dubin, Robert. "Industrial Workers' World: A Study of the Central Life Interests of Industrial Workers," in Erwin D. Smigel (ed.) *Work and Leisure* (New Haven, Conn.: College and University Press) 1963.

real work satisfaction and expectancies? Have we exhausted the potential for structuring jobs in many areas of private industry to provide a much broader base for career patterns even among more stable blue-collar occupations and providing, where possible, transitions from blue-collar to gray or white-collar? And, further, are we not at the point where the noneconomic expectancies connected with work can be significantly increased for individuals and groups of workers in a wide variety of work situations through greater individual and group power in real decision-making on a broader front than now exists in the ordinary union-management relationship? The new frontier in collective bargaining may well be in the area of satisfying the individual's need for power, control, and participation in significant decision-making on the job. Bob Kahn's imaginative work module idea is one example of a needed "social efficiency mindedness" in planning work and technology.

It is even an imperative that we move quickly and purposefully in these directions. The latent antagonisms between the more stable industrial working population whose work provides little satisfaction for its social needs, and that section of the population which has difficulty relating to work as it is now structured, present us with an extremely explosive situation. We are already experiencing the early stages of this crisis in which the antagonisms between these two groups are expressed along racial lines in urban industrial areas. As the reports on some of the meager results of many programs come into public view, and as high rates of turnover are reported on many relatively high paying factory jobs, the "they won't work" cry can become louder and uglier.

Although we have intended to look at manpower and motivation in microcosm in this panel, we can not leave out of this discussion motivation problems as they relate to the larger social and political economy. There were fewer problems of motivating people to work during World War II when the country had a unified purpose and when the production needs of the country made for full employment. Normal labor market rejects were trained in very brief periods of time for meaningful jobs and were integrated into work forces with much less friction. It was perhaps the era of the greatest advancement of minority groups in the country's history. It presents the greatest challenge to industry, unions and government to duplicate these conditions without the spur of a wartime economy.

VIII

MEASURES OF MANPOWER

ON ASPECTS OF UNDERUTILIZATION OF HUMAN RESOURCES

Harold Goldstein

We worry about underutilization of human resources for different reasons at different times. During a war, when the military build-up takes large numbers of young workers out of the civilian labor force, we beat the bushes for additional workers and try to get the most out of the available human resources. In more peaceful circumstances, when unemployment is low and we are concerned about economic growth without inflation, we again want to get the fullest utilization of manpower. I suspect that it is precisely at such periods—when demand for labor is pressing against limited resources—that labor is most fully utilized, while good utilization is neglected when labor is plentiful. Thus we have the paradox that those of us who make speeches are more concerned about underutilization of human resources when it is at a minimum than when it is really rampant. However, both in good times and in bad, we are also concerned about underutilization in relation to poverty. Finally, it is viewed not only as an economic phenomenon but also in social and psychological terms—the denial of opportunity to serve at one's maximum capacity is seen as contributing to *anomie*, to the alienation from and anger at society that breed riots. A phenomenon that has all these effects is worth serious study.

One can identify several major forms of underutilization of human resources :

1. *Unemployment*—which we usually define as a situation in which people look for work but can't find it.
2. *Involuntary part-time employment*—a situation in which a worker wants full-time work, but can only get part-time work.

3. *Involuntary nonparticipation in the labor force*—a failure to seek work by people who really want it but don't look for it because their health or personal circumstances don't permit it, or because they think the search is hopeless.
4. *Underemployment*—situations in which a worker is employed below his highest skill, capacity, or potential.

In an attempt to identify and measure the total impact of these four aspects of underutilization of human resources, the Department of Labor, in reporting on a November 1966 survey of the employment problems in the 10 seriously disadvantaged poverty areas of 8 large cities, coined the term "sub-employment" to describe the total number of persons falling in any of these groups. Low income was used as a surrogate for underemployment. Also, an attempt was made to estimate how many underutilized persons were missed in the population count. The estimated number of persons "sub-employed" by these standards equalled from one-fourth to nearly one-half of the civilian labor force in these poverty areas.^{8,*}

Of the four aspects of underutilization listed above, I will skip over the first two, which are relatively well documented in the statistics and in the literature. Their combined effect is measured by a figure regularly reported by the Bureau of Labor Statistics—"Labor Force Time Lost." This is a measure of the total work time offered to the economy by workers but unutilized. In making the estimate it is assumed that the unemployed and the part-time workers who want full-time work would be prepared to work a standard work week.¹ The combined measure runs from 10 to 20 percent above the unemployment rate alone, the difference being somewhat greater when unemployment is high.

Involuntary nonparticipation in the labor force

About 4 out of 10 people of working age are neither working nor looking for work at any one time. Among them are housewives, students, retired persons, and those unable to work for reasons of health. Most of these people are outside the labor force because they don't want to work at present, although they form a large potential labor reserve.

There are among them, however, some whose nonparticipation

* References are listed at the end of the paper.

is involuntary—who want to work but are not looking for work because they believe the search would be useless or because some factor outside their control prevents them from working. In many cases the barrier to their working is one that society could eliminate if it set about doing so, such as lack of skill, discrimination in employment, a remediable physical handicap, or a family responsibility that could be dealt with by such facilities as day care centers for children.

Of these involuntary nonparticipants, the men of working age awaken the most concern. In a society in which the accepted role of men as workers is so unambiguous, the man who has no job and isn't busy looking for one becomes the object of indignation or compassion, depending on one's social philosophy. There has, in fact, been a clearly rising trend in labor force nonparticipation among men between 55 and 64 years of age, since 1961, and for nonwhite men since the early 1950's. The increase occurs earlier and has been more marked for nonwhite than for white men—for the former the rate has gone from about 13 percent in 1953 to 20 percent in the mid-sixties; for the latter, from about 12 percent in 1961 to 15 percent.⁴

In part the decline in labor force participation among men over 55 reflects earlier retirement, particularly in the more recent years when disability retirement (1957), and early retirement on reduced benefits (1961) under the Social Security Act became possible. At about the same time private pension plans were widely adopted.

For men below age 55 an increasing rate of nonparticipation in the labor force is more difficult to explain. The rates for white men have not changed significantly over the post-war period, but those for nonwhite men aged 45–54 rose from about 5 percent in the late forties to about 8½ percent in the mid-sixties. The proportion at age 35–44 doubled, from nearly 3 to nearly 6 percent. These trends took place in periods of improving employment opportunity as well as during economic downturns. One factor in the long-term trend may have been the shift of many Negroes from farm (where underemployment is endemic but unemployment less common) to city, where their skills were not adaptable to the needs of industry.

Some students have argued that persons who stop looking for work because they cannot find jobs should be considered unemployed even though they do not meet the usual test of unemployment in that they are not currently looking for work. In its report in 1962 the

President's Committee to Appraise Employment and Unemployment Statistics, after considering the question carefully, reaffirmed the principal of labor force classification on the basis of current activity—i.e., working or currently looking for work—but recommended that those counted as not in the labor force by this procedure should be the subject of continued study and that statistics about their numbers and characteristics should be published regularly.

To make possible a regular count of some of the major groups of nonparticipants, a few questions were added to the monthly interview in the Current Population Survey, to be asked of all persons who were not working or looking for work. These were, in addition to the traditional sorting question on major activity in the survey week, questions on present desire for work, reasons for not looking for work, and intention to look for work in the next 12 months. The first analysis of results of these questions, asked in September 1966, has been published including some data for later months in 1966 and early 1967.⁵ The data will be published regularly beginning in the near future.

It seems clear, however, that, useful as it will be to get a regular series to measure the major dimensions of nonparticipation as they change under different economic circumstances, the subject requires more subtle and complex analysis. The problems involved in studying involuntary nonparticipation were well summarized by Robert L. Stein:

“The challenge to the researcher in this area is to develop objective methods for measuring what are mainly subjective phenomenon. While most of our labor force concepts are based on objective, overt actions (e.g., working, having a job, seeking work in a specific way and within a specified time span), the data on reasons for nonparticipation are subjective, based on desire for work, attitudes, perceptions, and opinions. These more elusive data require careful probing and cross-checking, to explore the depth of a reported attitude or the reality of a reported reason.”⁵

In recognition of these complexities, a number of special studies are being made to explore the problems of these workers more intensively. A special intensive survey of nonparticipation among adult men was made in February 1967 as a supplement to the CPS. Data from the National Health Interview Survey have been analyzed for the relation of health to nonparticipation.⁷

Some of the magnitudes of involuntary nonparticipation are beginning to emerge from analysis of these data. For example, in the survey made in September 1966, 5.3 million persons who were not currently in the labor force said they wanted a job now. Of these 1.1 million were not looking for work because of ill health or disability; 1.2 million because they were in school; 1.5 million (women) because of family responsibilities or inability to arrange for child care; .4 million for personal reasons—such as death in the family; and 750,000 because they believed it was impossible to find work.⁵ This latter group is sometimes referred to as “discouraged workers.” One-third of them were men, and over half of these (140,000) were under 65 years of age.

These data suggest the types and approximate sizes of programs needed to help these people find employment. The greatest *potential* pay-off is in programs to remedy health problems or rehabilitate the handicapped, and programs to provide day care centers for children—but before launching or expanding such programs we would need additional information on the skill resources of, and employment opportunities for, those who say they are kept from working by health or family problems. They may need training or special placement services, for example. On the other hand, the smaller numbers of “discouraged workers” may be the most readily employable with the help of training and placement programs.

One of the significant characteristics of nonparticipants is that a great many of them have a real attachment to the labor force. Some of them participate in the labor force in peak seasons (e.g., students in the summer, housewives in the Christmas shopping season) or enter intermittently. This is true not only of students and housewives, but also of adult men. While we find significant numbers of adult men out of the labor force currently, many had worked in the recent past or intend to look in the near future. For example, of 4½ million men who were not in the labor force in the first 6 months of 1966, one-third had been employed in the preceding 6 months and nearly half had been employed in the preceding 18 months.⁸ One million of the 4½ million were reported as being unable to work at the time of the survey; of the 3.4 million who were able to work, 57 percent said they intended to seek employment within the next 12 months. Even more striking in its indication that nonparticipation is a transitory phenomenon for many adult

men is the fact that, in 1964, of the 5.2 million men 25 to 64 years of age who were out of the labor force some time during the year, only 350,000, or one-sixth of the total were out of the labor force the whole year.³

In summary, the increasing amount of research on involuntary nonparticipation in the labor force has given us some broad dimensions of the problems—showing that it is not as vast as had been imagined, though still of substantial size—but has left many questions unanswered.

Underemployment

It is safe to say that of all the aspects of employment problems the phenomenon of underemployment is one that, despite widespread and continuing concern, not only in the United States but in other countries, has yielded least to analysis and measurement. The problem arises in many different contexts. In developing countries, of which India is a notable example, there has been continued concern about the existence of a large group of university graduates for whom no really professional work can be found and who are forced to work in clerical capacities far below their highest putative skills.

But we don't have to go so far from home to find this. For example, 13 percent of the people in the labor force in 1960 who were 25 years of age or older and had 4 or more years of college education were employed in occupations that do not require a college education.⁹ The ratio for Negro men was 23 percent, nearly double the 12 percent rate for white men—a differential that represents, in part, discrimination in employment. Both white and Negro women had underutilization ratios of 15 percent by this measure. These data, applying as they do only to persons with college education, probably understate the total incidence of underutilization, which is likely to be prevalent among workers with less obvious skill credentials.

In trying to develop clear-cut concepts of underemployment we may distinguish several aspects:

1. Workers employed in occupations below their highest skill.
2. Workers functioning below their capacity, because they work in inefficient enterprises.
3. Workers employed at their highest present skill but below their potential if they had more education or training.

Each of the kinds of underemployment listed above presents problems of concept that involve questions of public policy and value systems. They also present serious problems of measurement.

Public policy in this area is undergoing evolutionary change. The principle that the worker has some right to maintain his skill status was recognized more than 3 decades ago when the unemployment insurance system was set up. In the administration of this system, a qualified worker gets compensation if no suitable work can be found for him; suitable work, differently interpreted in actual practice in different States, generally means work in the person's own occupation rather than one of lower skill level or earnings.

Giving the worker unemployment compensation is one thing; creating a job for him is quite another. Even this we do when there is a clear social benefit. For example, tariff protection is invoked to save the jobs of skilled watch factory workers who can also make fuses for artillery shells. The creation of the National Foundation on the Arts and Humanities in 1965 shows a willingness to subsidize musicians and artists for the public good. And when the frustrations of underemployment are expressed through riots and civil commotion we think about mounting programs to deal with this problem.

We already have adopted some measures short of job creation that deal with major causes of the underemployment resulting from employment below a worker's highest skill level. Such employment can occur when more workers acquire a particular high-level skill than the economy demands, when jobs are reduced by technological change, or when workers who have a skill are kept out of jobs by discrimination on the basis of race, sex, religion or age. One safeguard against excessive numbers of workers entering an occupation is a good program of vocational guidance in the schools which provides young people with information on prospective employment opportunities, such as that contained in the Occupational Outlook Handbook and other publications of the Department of Labor. The incidence of underemployment resulting from technological change can be reduced by retraining workers whose skills do not match the requirements of the economy, as is done under the Manpower Development and Training Act. Finally, discrimination in employment is being approached through fair employment practices and "equal employment opportunities" legislation. While we cannot

be complacent about the results so far achieved, we do know a few things that can be done about this form of underemployment, and a beginning has been made.

The problem of measurement of underemployment of skilled workers has defied solution so far. If we use household surveys to get information about the characteristics of individuals, we would have to rely on the person's own statement as to the highest level of skill in which he is competent. Even academic credentials don't prove a level of skill, as this audience knows; how much less can we rely on the individual's own appraisal? A more objective test would be previous work experience in the occupation in question; but even this is limited proof: the person may have been incompetent in the judgment of objective and unprejudiced supervisors, or the standards of work in the occupation may have risen and he may not have kept up. Thus, while in an individual case it would be possible to evaluate a person's highest skill on careful investigation, the methods available for general statistics would not necessarily give us clear results. Moreover, we cannot always identify a worker's "highest skill." Is the skill hierarchy to be used one based on length of education or training, on wage rates, or on some other value system? Or is it a matter of the values of the worker himself? We don't worry about a dentist who drops his profession and goes into the real estate business, if we know it was a voluntary choice. Are we then reduced to saying that a worker is underemployed if he considers himself underemployed?

The second aspect of underemployment is the situation in which the worker is operating below his capacity, either because he works in an inefficient enterprise or marginal farm, or for personal reasons. Within any one industry there may be a wide range in efficiency among enterprises. In a sense, all workers in an industry employed in plants other than the technologically most advanced, and whose output is lower because of this, may be considered underemployed in terms of known and available technology. By a less rigid standard, plants so inefficient that they cannot pay minimum or prevailing wages and remain in business may be said to be underemploying their workers. Recognizing the relationship of low wages to plant efficiency, the International Ladies' Garment Workers' Union has for many years provided an engineering service to companies with which it has collective bargaining agreements. The technical help

in farming provided by county agents is another attack on this aspect of underemployment.

The third type of underemployment—workers employed at their highest present skill but below their potential if they had education or training—may be the most prevalent aspect of the problem. Efforts to deal with it have included improvement in general education and the extension of vocational education, the development of training programs both on the job and in institutions, scholarships, fellowships and other aids to education, and programs to motivate workers and youth to get additional education and training or to “stay in school.”

The measurement problems in connection with this kind of underemployment are extremely difficult. It is not easy to identify the potential of an uneducated or an under-educated person. Standard intelligence tests offer some clue but they have been rightly criticized because they are not free of the influence of language and cultural factors.

In summary, the various forms of underemployment, while not easy to conceptualize or measure, affect a great many people, and have been the source of a great deal of concern and the focus of specific measures and legislation to deal with them.

It can be said in general of the four aspects of underutilization of human resources that they appear to affect a substantial proportion of the labor potential of the United States; that we now measure with reasonable accuracy only two of them—unemployment and part-time employment—and will soon have more insight into non-participation, but that we are a long way from understanding or measuring underemployment; that even without such knowledge we have adopted measures to deal with it; but that more sharply focused programs would require better information than we now have.

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MANPOWER IN CONSTRUCTION: NEW METHODS AND MEASURES ¹

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Adjustments to Labor Shortages

The labor shortages which occur in construction are generally confined to certain crafts and to specific areas. The simultaneous existence of areas of labor shortage and of significant unemployment results primarily from less than perfect geographical mobility of craftsmen, and from the differing occupational requirements of jobs. The construction industry is characterized by remarkably swift variations in the geographic locus and composition of building activity. Thus, in construction a high degree of worker mobility and labor force elasticity to variations in demand, relative to other industries and occupations, might be inadequate to prevent transitional shortages and surpluses.

In the short run, the construction labor force appears considerably more flexible than is commonly supposed. Indeed, flexibility of the labor force as compared with other industries is an outstanding characteristic of construction.² A considerable degree of flexibility is due to the seasonal expansion of employment which occurs in construction. For example, for construction craftsmen other than carpenters, expansion in the construction labor force has averaged some 76.5 percent of the net increase in employment in spring months, 1961-1966, (reduction in the numbers of the construction unemployed has accounted for the remaining 23.5 percent of the increased number of the employed).

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² There are, of course, limitations to entry to building trades employment in certain areas and among specific crafts. The recent controversy over the proportion of Negroes in building trades employment has been concentrated on the specialty trades, especially the plumbers, sheet metal workers, electricians and ironworkers. See Ray Marshall and Vernon M. Briggs, Jr., *The Negro and Apprenticeship* (Baltimore: Johns Hopkins University Press, 1967).

For carpenters the statistic is identical (76.5); for laborers it is 161.9 percent.³ However, the large non-seasonal variations in construction demand which occur in local areas and rapid shifts in the composition of output also contribute to variations in the industry's labor force. Thus the ratio of persons employed at some time during the year to annual full-time jobs is quite high for construction. In 1963, some 5.4 million workers were employed in contract construction to fill 3.0 million full-time jobs—a ratio of 1.8 workers to jobs. In manufacturing the ratio was about 1.30 for that year.⁴ Certain building trades skills seem widely distributed throughout the economy,⁵ and the construction industry seems able to increase its work force in brief periods at a fairly rapid rate and to a very large degree.

The number of man-hours available to construction firms may be increased within a brief period either by expanding the number of persons available for employment or by more intensive utilization of the existent labor force. This paper is concerned with increasing the supply of labor. However, the number of man-hours obtained by better utilization of the work force (for example, continuing opera-

³ These figures are from the Monthly Survey of the Labor Force and refer to the all-construction definition rather than to contract construction. Wage and salary workers in construction include those employed both in contract construction and government construction agencies.

⁴ These figures are extensions of a series first presented by David Farber and Elsa Loewenstein in *Annual Paid Man-Hours of Employment and Annual Wages, 1946-54* (Washington, D.C.: U.S. Department of Health, Education and Welfare, Social Security Administration, 1962), 40-41; and updated by Farber, "Apprenticeship in the United States: Labor Market Forces and Social Policy," *Journal of Human Resources*, 2, 1 (Winter, 1967), 88. The full-time job measure is actually annual average employment, which Farber argues effectively to be a job—not persons—concept. See Farber and Loewenstein, *op. cit.*, 29ff. (The employment figure is derived from the records of the Social Security Administration.)

⁵ At any given moment, a considerable number of persons trained in construction occupations are employed in non-construction industries. For example, among carpenters, on annual average for 1966, some 30 percent were employed in non-construction sectors of the economy. And, in 1966, on annual average, over 30 percent of all construction craftsmen other than carpenters were employed in non-construction industries. These data are estimates of the number of persons employed in non-construction industries doing work of comparable skill and job content to the work of a building tradesman in construction. They do not include, of course, those persons with building trades skills employed in other occupations.

These data are from unpublished estimates of occupation by industry made from the Monthly Survey of the Labor Force by the Bureau of Labor Statistics. I am most grateful for their being made available to me for this paper.

tions further into the winter than customary)⁶ might be large. In fact, it appears that one might distinguish two construction labor forces.⁷ The one consists of journeymen fairly regularly employed by a contractor or homebuilder—his key men. The contractor is often quite reluctant to allow these employees to go elsewhere, and may even be willing to undertake jobs simply to keep them on his staff during slack in the building market.⁸ Alternatively, there are craftsmen who follow the traditional pattern of the journeyman, following the work and going from employer to employer (and, perhaps, industry to industry). It is possible, if a man is a desirable employee and fortunate, to accumulate considerable working time in this manner—it is also possible to be out of work a good part of the year. Department of Labor surveys indicate, for example, that a construction worker (defined by industry of longest job during the year) who has experienced any unemployment is very likely to have had two or more spells of unemployment during the year. (Only in agriculture is the likelihood of repeated spells of unemployment sometimes higher than in construction.)⁹ Consequently, work scheduling, with a view toward reduced seasonality of employment, for example, could significantly increase the degree of utilization of the existent labor force either in an area or nationally.

Expanding the Supply of Labor

The number of employees of a particular craft working on a particular type of construction in a given area might be expanded by attracting workers from other types of construction, from non-construction industries, from other occupations, or other areas. For

⁶ The degree of employment seasonality in construction nationally has remained virtually unchanged in the post-World War II period. See Robert J. Myers and Sol Swerdloff, "Seasonality and Construction," *Monthly Labor Review*, 90, 9 (September, 1967), 1-8.

⁷ This dichotomy is not original. See A. H. Belitsky, "Hiring Problems in the Building Trades," unpublished Ph.D. dissertation, Harvard University, 1960; also, Maurice Parodi, "Wage Drift and Wage Bargaining: A Case Study of the Building Industry in Marseilles," *British Journal of Industrial Relations*, 1, 2 (June, 1963), 213-227.

⁸ See Belitsky, *op. cit.*, for a discussion of the efforts of contractors to keep their key people.

⁹ See the annual Work Experience Surveys of the Bureau of Labor Statistics, "Extent of Unemployment by Industry: Wage and Salary Workers, by Longest Job in 19—." These data are published annually in the *Monthly Labor Review* or are available from the Bureau.

example, the work force of carpenters on residential jobs might be increased by drawing carpenters from employment on commercial construction in the same locality. Or carpenters might be drawn from the maintenance crews of local manufacturers. Again, carpenters from residential construction in other geographic areas might arrive for employment; or persons employed in other occupations might be induced to take carpenters' jobs. An occupational change might involve mobility from other construction crafts, or from non-construction occupations. Workers might have had prior experience with some or all of the skills required of a residential construction carpenter—or they may have had none. Thus, the mobility of workers may include any or all of the four basic dimensions listed above. In the usual case, the shift of workers into construction jobs probably includes movement along more than one of these dimensions. In analyzing the mobility of construction workers, the most interesting cases involve the interactions among geographic, occupational and industrial mobility.

Currently, we possess only the most rudimentary information concerning the size and character of manpower flows to and from construction. At best, we are able in some cases to measure flows along a single dimension. A very simple calculation indicates that there are some 15 combinations possible of the four basic types of flows mentioned.

The importance of certain types of manpower flows to construction is apparent even from the primitive sources of information now available. For example, the inter-industry mobility of construction workers is relatively high. During 1962, men who were employed in contract construction at some time during the year averaged employment in 1.204 industry divisions.¹⁰ Those employed in manufacturing averaged employment during the year in only 1.090 divisions; those in mining, 1.008 divisions; those in wholesale and retail trade (second to contract construction in this measure), 1.114 divisions.¹¹

The industrial distribution of earnings among contract construction workers also indicates considerable mobility. In 1957, only 72.3

¹⁰ This figure is obtained by dividing the number of men for whom earnings were reported in contract construction into the total number of other industries (two-digit SIC classification) in which they had earnings reported.

¹¹ Sebastia Svolos, "Measures of Labor Mobility and OASDHI Data," *Social Security Bulletin*, (April, 1966), 42.

percent of the approximately five million male wage and salary workers employed in contract construction earned most of that year's income from contract construction employment. With the exception of the service industries, this was the lowest reported percentage.¹² In 1963, for all who worked for general building contractors, median earnings in general building were exceeded by all reported earnings by 62 percent; in highway and street construction by 67 percent; in heavy construction by 72 percent; in blast furnaces, steelworks, etc., by 4 percent; in motor vehicles and parts, by 8 percent.¹³

Apparently there is a great deal of occupational mobility for construction craftsmen. A survey of job shifts by men in 1961¹⁴ indicated that approximately one-third of job shifts by persons initially employed as carpenters were to non-construction occupation groups (e.g., to occupations other than those of construction craftsmen or laborers). Similarly, of 562,000 shifts from construction craft occupations other than carpenters, 25 percent were into non-construction occupations. Conversely, over one-quarter of shifts into carpentry were from non-construction occupations, and one-quarter of shifts into other craft occupations in construction were from non-construction occupations. On the other hand, only 1.5 percent of shifts from carpenters' jobs were to other construction occupations; and 1.2 percent of shifts from non-carpenter construction trades were into carpentry.¹⁵ This single survey, virtually all the available information on the occupational mobility of construction craftsmen, suggests that occupational mobility within the building trades is significantly less important than inter-industry movement.

Considerable research into manpower flows in construction is needed. Investigators might begin by specifying the factors which determine the adequacy of the labor force nationally or in a particular area to an expected level of construction activity. Among the more important are the composition of construction demand, the

¹² See the *Handbook of Old-Age, Survivors, Disability Insurance Statistics: Employment, Earnings and Insurance Status of Workers in Covered Employment, 1957* (Baltimore, Md.: Social Security Administration, 1965), 34 and 42.

¹³ These estimates were made for the Bureau of Labor Statistics from the Social Security Administration's One Percent Sample.

¹⁴ Gertrude Bancroft and Stuart Garfinkle, "Job Mobility in 1961," *Monthly Labor Review* (August, 1963). Note: one person could have had several job shifts, as the terms are used in this study.

¹⁵ Tabulations made from Bancroft and Garfinkle, *op cit.*, Table A-9.

level of employment in non-construction industries, the relative wage between construction and other industries (both among and within occupations), traditional patterns of labor mobility, and the size of the labor pool possessing construction skills.¹⁶ Pressures on the supply of manpower in construction undoubtedly affect the channels and determinants of manpower flows. It is likely, for example, that the tightening of construction labor markets in recent years is directly due to the improved unemployment situation nationally. The 3.2 percent general unemployment rate for males 16 years and older in 1966 undoubtedly reduced the supply of manpower to construction. Presumably, tightened labor markets have been partially responsible for recent rapid wage increases negotiated in the industry. However, models specifying the character of the wage-unemployment connection in terms of craft and locality cannot now be constructed.

The Limitations of the Data

Virtually any hypothesis offered concerning manpower patterns in construction may find support somewhere in the practices of the industry. Consequently, data on manpower become essential to a critical analysis of the industry. Only with reliable data can the relative importance of different labor market patterns and their determinants be assessed. Unfortunately, the existent data are inadequate for many important analytic purposes.

Most importantly, data on construction employment and unemployment by detailed craft are remarkably sparse. In the absence of these data it is virtually impossible to have a quantitative impression of the state and direction of the construction labor market. The only important current sources are the Current Population Survey and the decennial censuses.¹⁷ The Current Population Survey is too limited in sample size to bear extensive disaggregation by craft, locality, demographic features, etc. The Census, of course, occurs only infrequently.

Employment data by detailed craft for persons employed in contract construction are generated by the records of trust funds estab-

¹⁶ See, e.g., Donald E. Cullen, "Labor Market Aspects of the St. Lawrence Seaway Project," *Journal of Political Economy*, 68, 3 (June, 1960), 232-251.

¹⁷ In 1966, the Bureau of Employment Security discontinued collection of monthly employment figures by detailed occupation from the records of the Unemployment Insurance System. Currently, therefore, the only central source of unemployment estimates by craft are those of the Current Population Survey.

lished under collective bargaining agreements in construction. These data include counts of the number of hours worked by craftsmen covered by the funds, hours worked by individual employees, and demographic information concerning these craftsmen. At present, neither the government nor any other institution samples these data on a continuing basis. Such sampling could usefully supplement existing employment data on construction by providing: (1) employment data by detailed occupation; (2) information on the degree of utilization of the employed (in terms of hours worked); and (3) estimates of employment disaggregated by geographic locality, craft, and, in some cases, type of contractor.

Sampling of the records of private health, welfare and pension funds for manpower information would require extensive work in sample design. Most importantly, efforts are necessary to extend estimates based on fund data to the non-union sector of construction. Only about half of the employees in construction are currently covered by the funds.¹⁸ However, coverage in major cities is virtually complete, and the number of funds is increasing. Second, the records of the fund would require adjustment to a wage period basis. Currently employers are often in arrears to funds, and when payment of contributions is made, the contribution hours are included in the current month's total. The simple stratagem of requiring contractors, if errant, to specify the earnings period of contributions could correct the misallocation of hours worked by time periods.

In addition, current employment data do not allow adequate analysis of manpower flows in construction and between construction and other industries. The Social Security Administration's Continuous Work History Sample is the most promising source of inter-industry and geographic mobility data.¹⁹ Unfortunately, the Social Security Administration collects no occupational information. However, extensive

¹⁸ This is the author's estimate, based in part on Daniel M. Holland, *Private Pension Funds: Projected Growth* (New York: Columbia University Press [NBER Occasional Paper 97], 1966), 27.

¹⁹ Social Security data are seriously deficient, however, with respect to analysis of both industrial and geographic mobility. The classification of firms by type of contractor (following the Standard Industrial Classification) restricts analysis by type of construction done, such as residential construction, demolition, commercial construction, etc. With respect to geographic mobility, our sources of employment data are biased in an unknown manner by the character and location of the reporting establishments. Employment is attributed to the place of the reporting unit, which may or may not be near the construction site.

data on industrial and geographic mobility by craft for construction workers might be obtained by utilizing the records of private trust funds and the Social Security Administration in concert. Private fund records normally contain the Social Security numbers of persons reported to the funds. With these numbers, the work experience, in terms of industry of employment, number of employers, earnings, etc., of craftsmen could be traced in the records of the Administration. A final possibility is to tap the records of the Internal Revenue Service (IRS) for occupational information. The IRS collects on an annual basis the occupation of taxpayers as well as considerable information as to their sources of income. Currently, however, IRS does not publish data on an occupational basis.

CONCLUSION

Future research into manpower in construction must undertake to describe and analyze the flow of craftsmen among industries, occupations, and areas. Models relating the flow of construction manpower to the all-industry rate of unemployment, relative wages among crafts and industries, traditional patterns of mobility, training and education efforts, and the level and composition of construction demand are urgently needed. In order to facilitate this research, measures of the flow of manpower must be developed. Data currently available are inadequate to isolate the direction, magnitude, or determinants of these flows. Both the federal government and the industry itself are collecting, in one form or another, a large body of information relating to manpower in construction. Considerable effort is now required to make these data accessible to scholars in a form usable for economic analysis.

THE MILITARY AS A TRAINER: A STUDY OF PROBLEMS IN MEASURING CROSSOVER

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INTRODUCTION

Problems of government employment continue to be of relevance for study by those interested in industrial relations and human resources. Especially vital is a study of the most pervasive as well as the largest manpower activity, the military.

This report is concerned with the impact of military manpower training on the individual. The economic benefits of military service might take either of two forms; general capital advantage, which would increase the marginal productivity of the veteran vis-à-vis the non-veteran, regardless of civilian occupation, and specific capital advantage, which is related to the set of occupations defined as having this capital as a component.

This research is a part of a larger study which treats the military as a variable set and examines the impact of it on a set of dependent factors.* Whereas the purpose of this part of the study is to examine the partial effect of the military on the economy through the direct training system, the method employed may be useful in evaluating alternative training institutions.

I. The Problem

A design was chosen to test the factors accounting for the utilization or non-utilization of skills acquired in the military. It was assumed that age at entry, education prior to service, region, and interest in the

* This paper was supported by grants from the Ford Foundation and the United States Office of Education. It is preliminary to a larger study covering a wide array of topics. It is not to be quoted without permission.

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military for training purposes are significant in the utilization of particular occupational training. The age at entry was interpreted as an index of occupational attachment that varied inversely with transfer. Thus, draftees, who have traditionally been older than elistees, were thought to make less use of their training. It was assumed that component of entry, independent of age, similarly varied inversely with transfer; that is, volunteers leaving the service, who had a wider selection of military occupations, would be more likely to apply their chosen experience. The veteran's interest in the military for training purposes as well as the relation of the military occupation to premilitary experience were both assumed to affect transfer positively, although not necessarily additively. Aptitude, education, and region are variables with a more complex impact on crossover. The set of variables used in the study and the hypotheses with respect to each appear in our forthcoming study.

Both prior research and casual observation suggested that the findings would indicate nontransfer of human capital and the reasons for nontransfer should be probed. Specifically, do the reasons suggest policy parameter adjustments on either supply or demand factors and, in turn, are the variables perceptual or existential?

II. Study Design

Basic to the overall study design is the idea of convergence of occupational structures. Setting aside activities or occupations which are purely military, another set of activities exists in the military, which is obviously transferable to the civilian sector. As a consequence of technological developments in both the military and civilian employment sectors, the occupational structures have converged, with less emphasis on "people-killing" and more on technical, administrative, and service activities. The hypothesis, therefore, was the more alike the occupations, the greater the probability that skill would be transferred. This assumed that convergence is real and that capital holders would pursue the use of the capital and employers would accept and ascribe economic value to a veteran's experience.

The design then became fixed upon a categorization of military skills on the basis of apparent convergence (see Table 1). The ten groups reflect significant areas of the military training effort, yet a variety of occupations, employers, and prospects in addition to varying degrees of openness and trade influence.

TABLE 1
Occupational Classification, Sample Size¹ and Response Rate, 1966

Career Group ^a	Number in Sample	Percent Interviewed
I. Combat-Infantry	712	28
II. General Military-Duty Soldier	173	40
III. Police	478	45
IV. Electronic Data Equipment Skills ^a	209	55
V. Esoteric Skills ⁴	179	55
VI. Radio, Radar, TV, and Auto Repair	504	46
VII. Trades Related to Telephone	160	49
VIII. Operatives—Construction and Repair	560	43
IX. Teamster and General Warehousing	218	38
X. Business and Service Activities	1,228	46

¹ Universe drawn from Standby Reserves, with indicated PMOS 2-5 years from active duty. (Non-career)

² These are composed of series of occupations.

³ Operation and repair.

⁴ High formal training on sophisticated military equipment.

We assumed, following custom, that the military may have a value (positive) abstracted from any occupational benefit that may accrue through the training.* For this reason infantry was chosen as a benchmark and a proxy for the military.

While it would be valuable to generalize results, we are unable to do this because of the self-selective nature of the military. The differences between the services are significant for such manpower variables as procurement and training.

We opted to limit the analysis to the Army and the Navy, which substantially cover all reasonable occupational categories, and to consider only enlisted male noncareerists.

Time out of service was maximized, and it was assumed that utilization as a function of time would vary by occupational category, the constraint on time being the increased likelihood of response loss, hence potential bias in the sample.

As a consequence, the standby reserves were chosen for the defined population. This minimized the task of sample selection. In procedures to be described elsewhere, we sampled, located, and interviewed the population. A telephone survey was chosen because of population characteristics, the nature of the questions asked, and

* We have no evidence on the sign or magnitude of the general capital effect as it relates to occupational or other groupings. It is unlikely to be invariant in the groupings chosen. In this paper benefits when conjectured could be negative or positive.

the higher cost of data acquisition by other means. The response is shown in Table 1.

The data for the study were derived from three sources, two of which are relevant to this report. The Army record was used to supply data on pre-employment education and work experience, aptitude and work experience in the military, and basic demographic data. In the survey, relations between pre-service and service experience were ascribed in dichotomized form, as were the relations between pre-service and post-service occupation, both primary and moonlighting. These relationships were set on a three-point scale. The post-service occupations were not necessarily complete, but covered a maximum of three positions, including the first, current, and prior to current position. The occupations were coded according to the *Dictionary of Occupational Titles (1966)*.

The specific problem discussed below is part of the second stage of the analysis for the Army group. It is intended to illustrate the technique used as well as to illuminate the problem.

III. The Procedure for Analysis

While the impact of military training might take many economic forms, we concentrated on the differential effects of such training on adjusted annual income. The hypothesis was that investment in human capital in military vocational training fields increased post-military individual earnings. The ten occupational groupings referred to above were used to test this hypothesis. Each of ten groups (except infantrymen) represented potential streams of lifetime earnings in excess of the increment yielded by military life *per se*.

This hypothesis was first tested by analysis of covariance. In that stage of analysis, we compared the income of each occupational group with that of the infantrymen, cleansed of six independent variables: Educational level, number of dependents at time of existing service, age, ability index, number of post-service jobs held, and relation of post-service occupation to military vocational training. Two conclusions emerged: (a) The difference between the occupational groups and the base group was nil, and (b) within an occupational group, income was positively related to occupational crossover. These conclusions are inconsistent if the military training caused the post-service earnings to expand. Alternatively, the response may be attributed to other variables which were correlated with (b).

The inconsistency was examined with additional explanatory variables. One set of variables involved pre-military occupational experience and raised the question of effects due to draftee versus volunteer mix. Draftees, as opposed to enlistees, are older and more likely to have had pre-service job experience at the time of induction. It was also observed that the infantry group contained the highest percentage of draftees. This data led to a test of the relation between pre-service occupational experience and post-military economic activity.

This hypothesis was examined for overall patterns by pooling all occupational groups. Then, the data was disaggregated for the ten occupational groups to clarify relations which may emerge from the aggregate.

Four variables directly or indirectly related to pre-service occupational experience used in the test are:

Z_1 = A dummy variable representing the existence or absence of any pre-service job. Coded 1 for affirmative and 0 for negative.

Z_2 = A dummy variable indicating the relation of the pre-service job to military activity. Coded 1 if related and 0 if not.

Z_3 = A continuous variable ranging directly from 0 to 3 according to the percentage of post-service time in occupations held before the service.

Z_4 = A continuous variable ranging from 0 to 6. Summing the post-service experience weighted by time and the degree of ascribed relation to the military vocational training (0=no relationship; 1=somewhat related; 2=highly related.)*

The test was performed with least squares regression lines on the ten pooled groups and then separately for the various occupational groupings. Each of these four variables was inserted separately into four different regressions, in which the effects of the five independent variables had been nullified using the linear effect for the variable. The dependent variable, average annual post-service earned income, was adjusted to comparable 52-week periods. These four variables were inserted into separate regressions because of their relatively high

$$* Z_4 = 3 \left[\sum \left(\frac{R_i M_i}{M_i} \right) \right] \quad i = 1, 2, \text{ or } 3$$

R_i = 0, 1, or 2; Relation of the i^{th} job to the service

M_i = Months in the i^{th} job

M_i = Months covered

correlation to each other and the consequent statistical problems associated with multi-collinearity and interaction.

IV. All Group Results

The corresponding means, partial regression coefficients, and t-value for each of the four variables are shown in Table 2. We note the following:

1. Pre-service occupation was highly significant ($t=3.5$), positively related to income ($b=460$), and held by 88 per cent ($\bar{z}_1=.88$).
2. For 26 percent ($\bar{z}_2=.26$) military vocational training was related to a pre-service job, highly significant ($t=3.1$), and was positively related to income ($b=287$).
3. One-third of the post-service time ($\bar{z}_3=1.0$) was spent in occupations held prior to military service. This variable is significant ($t=3.6$) and positively related to income. The b-value indicated that income would increase \$402 ($3 \times \134) if all post-service employment were related to pre-service jobs.
4. This variable was significant only at the 80 percent level and was positively related to income ($b=29$).^{*} The b-value of 29 indicated that if all post-service time were in a job highly related to military vocational training, earnings would be increased by \$174 more per year ($6 \times \29).

That individuals are benefitting in post-military economic life from their pre-service occupation was indicated by the positive relationship of Z_1 to income. This suggestion was reinforced when we

^{*} When referred to below b should be interpreted as (bZ_1).

TABLE 2
The Magnitude and Significance of Four Variables Related to Pre-Service Occupation for Total Sample
5847 = Average Income

Variable	Mean	(b) Regression Coefficient	$t_{.05} = 1.96$ t-value
Z_1	.88	460	3.5
Z_2	.26	287	3.1
Z_3	1.0	134	3.6
Z_4	1.2	29	1.3

observed that Z_1 was not correlated with the other variables (age, ability index, etc.) used in the analysis.

Two explanations for the high correlation shown in Z_2 , between pre-service occupation and military vocational assignment are:

1. Individual preference for a related occupation.
2. Military preference for pre-service experience.

The positive relation of the variables to income is reasonable. The relation of military to pre-service employment, Z_1 , points toward pre-military service as an explanation for the income gain. This is reinforced by Z_3 , the distribution of post-service time in occupations related to pre-military activity. This is specially true for infantrymen where Z_1 was significant at the 85% level, and the partial regression ($b=628$) was larger than the pooled groups. This may explain the lack of an income difference between the infantry and other groups.

The partial regression coefficients for Z_1 and Z_3 were approximately equal ($b=400$). The income effect appeared invariant to whether or not individuals pursue their pre-service activity; but veterans with related military vocational training (Z_2) had a reduced positive income effect compared with the other group, ($b=287$).

The joint effect of a pre-service job and related military vocational training (Z_2) was less than the effect of a pre-service job and no related military vocational training. This confirms our conclusion (a) that military vocational training was without economic benefit.

Despite this, a positive income effect was evidenced for individuals with post-service time in jobs highly related to their military vocational training (Z_4). This positive effect led to conclusion (b), although the magnitude of the Z_4 effect was relatively low compared with Z_1 and Z_3 (174 versus 400).

V. Disaggregation Results

Disaggregation at the level of the ten occupational groups yielded the results shown in Table 3.

1. Pre-service job experience (Z_1) varied little among the occupational groups. Z_1 was significant and positively related to income as observed in the aggregate.
2. The relation between military service and pre-military occupation showed considerable variety among the groups. The statistic, as in the total group, was positively related to income except in II and X and was significant.

TABLE 3
Mean, Partial Regression, and t-Value for Four Variables by Occupational Groups

Occupational Groups ¹	Z ₁			Z ₂			Z ₃			Z ₄		
	\bar{Z}	b	t	\bar{Z}	b	t	\bar{Z}	b	t	\bar{Z}	b	t
I	0.9	628	1.4	....	....	....	1.1	28	.2	.5	25	.2
II	0.9	566	.9	0.1	-1257	1.4	.9	30	.7	.7	-55	.5
III	0.9	541	1.6	0.1	368	0.9	1.1	69.7	.7	.7	153	√2.3
IV	0.9	562.7	1.1	0.6	550	√2.1	.8	-261	.7	2.3	-31	.5
V	0.8	-314	.5	0.1	749	1.5	1.2	19	.1	.7	-13	.1
VI	0.8	481	1.3	0.3	169	.6	.9	173	1.5	1.3	38	.5
VII	0.9	1407	√2.2	0.4	347	.6	1.3	406	√2.1	2.1	79	.9
VIII	0.9	-740	1.5	0.4	503	√2.1	1.2	8.9	.1	1.9	131	√2.3
IX	0.8	121	.2	0.2	152	.4	1.1	90	.7	.9	-89	.9
X	0.8	622	*2.8	0.2	-104	.5	.9	193	*2.8	1.1	-91	√2.1
Total	0.8	460	*3.5	0.2	287	*3.1	1.0	134	*3.6	1.2	28.5	1.3

¹ See Table 1 for definition of groups.

* Significant to .99 level

√ Significant to .95 level

3. Post-service time spent in pre-service occupations (\bar{Z}_3) also demonstrated little variation among the groups, and was both significant and positively related to income.
4. The proportion of individuals who accepted a post-service job related to their military vocational training (Z_4) was variant among the groups. Z_4 showed a positive relation to income, and was significant.

The problem of the relation of pre-military and post-military experience was broached by dichotomizing the total sample by Z_2 and Z_4 to observe the pre-service experience of these two groups. For Z_4 , a continuous variable, respondents were arbitrarily assigned to the non-transfer group if their value was 0-2.

The comparison of regressions from the two Z partitions revealed that those with a pre-service job related to military vocational training earned significantly higher incomes. However, they were also a little older and had fewer jobs. A higher percentage of veterans with pre-service related jobs were draftees; but draftee status was significant only for those with a pre-service related occupation. The relation of Z_2 to income for the group was large and positive—more than \$400 per year.

The regression comparisons highlighted that a larger percentage of individuals with pre-service jobs related to their military vocation had a post-service job related to their military vocation (Z_4). Moreover, being in a related post-service job was significant and positively related to income for those with pre-service related jobs and the reverse for those without a pre-service related job. Furthermore, individuals without a pre-service related job demonstrated a significant and positive income effect from obtaining a post-service job related to prior service. Thus, these individuals (similar to those who had a pre-service related job) are not benefitting but are using their pre-service occupational experience.

We dichotomized Z_4 at 2—the group that was 2 or greater was called the high-transfer group ($\bar{Z}_4=3.8$), and below 2, the low-transfer group ($\bar{Z}_4=.18$). Average income was greater for the former group—more draftees than volunteers, indicating a higher percentage of pre-service occupational experience. The percentage of the high-transfer group with a pre-service job related to their military vocation was three times as great as the low-transfer group. Relatively more of the high-transfer group had vocational preferences and were trained and

served in these preferences. Finally, a larger percentage of the high-transfer group returned after the service to pre-service jobs (Z_3).

These observations strongly reinforce the argument of the previous section concerning the post-service impact of pre-service occupational experience.

Summary and Conclusions

It is unquestionable that little use is being made of service-related experience, but the cause is moot. While for some the mere association of an occupation with the military is noxious, this does not appear to be significant. Similarly, the argument that the experience is valueless would appear wrong. *Ex post* the experience is not deleterious nor is the training poor, unplanned, or ineffective. For methodological reasons, the explanation should be integral to economic analysis for relevance and to enrich the theory. This is possible in the case at hand.

In other phases of the study, we observed that a primary reason for non-transfer in all occupational groups was low pay, while the vast majority of those who had jobs related to their service indicated they had not received any economic advantage, either through pay or title, from their service experience. The explanation may lie in the hiring practices of firms. Recent studies indicate that employers do not hire semi-finished workers. Whether it is the cost of determining how to use these individuals or the cost of further training them to the level of an internally produced worker, there are costs which, at the margin, including the calculation of uncertainty, diminish the rate of return for a semi-finished veteran compared with the internally produced factor. At the same time, the seniority system encourages employees to continue with their previously set occupations, and discourage outsiders. Further, the training for this group may be below a minimum threshold level.

A major obstacle in this study is the tenuous design by which tasks are aggregated into occupations. Despite efforts to identify occupations of respondents, the use of this data is of little significance. The difficulties lie in the categories *per se*. The degree of crossover and the direct monetary returns are continuous rather than dichotomous variables. Both at a moment of time and through time, transfer and benefits can vary in intensity. Thus, a descriptive variable to cover a period of time is difficult to produce and interpret.

This illuminates a general problem between data gathering and processing on one hand and analytical manipulations and analysis on the other. Whereas the technique employed in this study allowed one to design the data, it also created problems. The intensity of detail was bought at the price of significance. Our ability to collect and maneuver data is below our capacity to digest the surfeit of material.

DISCUSSION

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These three papers represent an important contribution to the burgeoning manpower field, but are too dissimilar to be compared except in a very general fashion. In both comparative and absolute sense I find I am in substantial agreement with the authors of these papers. Having duly performed this rite of expiation I am now free to enter my reservations, observations and caveats in the time honored manner of discussants. Since I am not a statistician either by training or inclination, my comments will necessarily represent a "consumer's" viewpoint.

Weinstein and Jurkowitz have made a substantial contribution to a facet of manpower development that to date has not received broad study: the presumed convergence of military and civilian occupational structures. This convergence has resulted from important changes that are occurring in both the military and civilian sectors. Some have observed that the military has undergone a "civilianization" and that, by the same token, there is a militarization of society.

They make a number of assumptions which need to be more explicit in order to determine the validity of their conclusions. Firstly, they assume that income gain in post-military experience is derived from pre-service occupational experiences. This suggests persons are paid on the basis of skill or merit alone without reference to labor market factors. In this same connection their aggregated career groups tend to dampen out the often important labor market factors for particular occupations at particular moments. Thus, in Category III, Policy, presumably one would find the person whose military training prepared him to be primarily a "traffic cop" as well as other more skilled crime investigators. I would not consider such occupations homogeneous; neither have they received the same amount and type of military training. I do not think these two illustrative occupations fare equally well in post-service labor markets.

It may well be that the scope, amount and type of military training is more important than pre-service training. One could have wished that they had controlled for military training.

The relatively short time span after military service is another facet of the study that might lead to invalid conclusions. Is post

military income derived in the first two or three years significantly different from that obtained after 10 years? Is employer liability and responsibility to ex-servicemen a unique factor in these early post-service years?

Furthermore, I think it particularly important to carry this type of study forward over a longer time span to test the assumption that the infantry is a proper benchmark against which to measure other military occupations. It may well be that the infantry is composed of untrained and uneducated or those who don't qualify for more esoteric skills. It may also be true that the infantry contains many generalists who were assigned to that branch because of the service demands at the time. In many cases it is simply a matter of when you arrive at the distribution point rather than what training you have had. This may simply reflect my myopia acquired in World War II.

Other methodological considerations bear mention. Does the fact that the universe is drawn from the standby reserve affect either the type of service experience or the characteristics of people? What were the questions asked of respondents during the telephone interview? Since the adequacy of the sample is crucial in this type of study one would have preferred more information. As matter of preference I would have elected to explore more of the qualitative aspects rather than confine myself exclusively to this more limited design. The authors have produced a rigorous methodology but in the process have overlooked important nuances and overtones.

Finally, the cost benefit technique as applied to this and other studies should be mentioned. Such studies are currently in vogue. They have forced a quantification of many phenomena which have often been treated on a general or impressionistic basis. But simply to total up annual income is not cost-benefit analysis nor should one infer that all this is human capital and as such related to human investment theory. Too many technical and other considerations are simply not treated.

Goldstein's paper reviews the conceptual, theoretical and practical problems associated with "under-utilized" human resources. I was impressed, reviewing this paper, that we will continue to have considerable difficulty measuring the extent and quality of under-utilization. Although there has been some experimentation we have not yet developed even partial measures of underemployment—something the "Gordon Committee" recommended in 1962.

Involuntary part time employment and unemployment are fairly well measured. In 1966, Goldstein notes there were about one million persons who averaged a little over two days work per week although they wanted full time work. We have less of a measurement problem here and more of a public policy problem.

I would underscore his concern with involuntary non-participants in the labor force. He emphasizes repeatedly that men of working age without jobs face particularly difficult problems in our society. In a job oriented economy where role, status, rewards, and even emotional and mental health depend on one's job it is disheartening to read of a clearly rising trend in involuntary non-participation among both white and nonwhite men under 55.

Of all the categories of "sub-employed" or underutilized that of "underemployed" represents the most challenging phenomenon to both data producers and data consumers. To begin with, there is the tricky problem of whether to measure underemployment against actual or potential skill level. For example, there are people in the labor force who have four or more years of college education, but are employed in occupations that do not require a college education. Very appropriately, this is a matter of concern especially when we suspect the reason for such under use of college training may be discrimination in employment. On the other hand should this be a matter of concern if there is no discrimination? Goldstein doesn't quite take a stand here, but seems to imply that this is underutilization and a matter for concern. I'm not that sure.

His discussion of underemployment highlights another important policy problem, that is, should our active manpower policy strive to create just jobs for our citizens or should we embark on the more complicated task of providing jobs which will challenge individuals to realize their every potentiality? I would agree with what I consider the implied thrust of his analysis—we must provide jobs that will use all human capacities.

Mills' paper is less a report of new methods and measures for construction industry manpower than a careful delineation of the deficiencies of data currently available. He has performed a very useful service by reminding scholar and practitioner that interpretations of the construction industry work force are made on the basis of very skimpy data. It is remarkable how much we do not know about construction industry manpower.

Questions concerning the adequacy of our skilled manpower are rather continuously surfaced. Although it is true the construction labor force is quite flexible, there are many employers who cannot obtain qualified craftsmen when they need them in some occupational categories. What we don't know, is the magnitude of the shortage that may be related to qualitative factors. It is within the realm of possibility that the paradox of simultaneous unemployment and labor shortages may be at least partially explained by the fact that many of the construction unemployed do not measure up to the minimum standards employers specify.

Reviewing expansion and contraction in the construction industry, Mills points out that many persons in the industry do not spend full time there, and we do not yet use this force efficiently throughout a calendar year. He speculates there may be two construction labor forces; one fairly regularly employed as a cadre and another following the work wherever it is. Following this reasoning I think there may be a third force consisting of those partially trained persons who enter the industry by obtaining a work permit in very tight labor market situations. It would be interesting to know to what extent expansion in the construction industry may be due to changing standards and the use of temporary work permits.

Limitations of existing data sources are adequately portrayed but the reader who is looking for new methods will be disappointed. One new source which has great promise he feels, is collectively bargained trust funds. Although only about half the employers in construction are covered by such funds he suggests that by coupling fund data to social security data much could be learned about construction work force mobility. In the event that trustees of such funds could be persuaded to make records available for analysis this might prove to be a fruitful source.

I cannot argue with Mills' conclusion that we need to tap new sources of data at the same time that we extract even more from data already available. Data now inaccessible to scholars should be made available. No one can argue against this. It would be useful, however, to specify more precisely why we need these data: are we interested in changing public policy; are we concerned with efficient allocation of manpower within our labor markets; or are we interested in evolving new manpower theory. Sharpening the focus would have added considerably to the value of this excellent paper.

DISCUSSION

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Since my own current research efforts are largely concerned with underutilization of manpower, I should perhaps have confined my remarks to Harold Goldstein's stimulating paper. However, I cannot resist the temptation to comment briefly on the other two papers as well.

The main thrust of Mr. Mill's paper is that before much headway can be made in analyzing the sources and flows of manpower in the construction industry, new data—some of which are already being collected—must be made available to interested researchers. As an omniverous consumer of manpower statistics in related fields, I can only applaud his efforts to increase our knowledge about this important industry.

At the same time, it must be added that economists have always wanted more and better data, and that the prospects of getting them have often turned on how much the missing information might contribute to policy issues of great moment. Mills mentions one such issue—the extent to which the supply of manpower to construction would support a large scale program to rebuild our cities. Let me mention another one. In comparing the economic effects of monetary and fiscal policies to combat inflation, the point is generally made that reliance on tight money imposes a disproportionate burden on the construction industry. Yet we know very little about the extent to which the various groups of workers in this industry are able to find temporary jobs elsewhere when a decline in building construction occurs. The data Mills seeks ought to yield some tentative answers to these and other important questions.

I would also urge investigators in this field not to neglect the theoretical framework for their research. Constructing models with testable implications should help us to select the key empirical relations to be explored and should also help to clarify what particular kinds of data are needed most. Mills' already persuasive case for more data would have been even more persuasive had he developed more fully some of the specific propositions he wishes to test.

I turn now to the challenging paper by Weinstein and Jurkowitz.

As the authors suggest, the problem here is not lack of data but what to make of the intriguing results that we observe. This paper strikes me as a valiant and ingenious effort to estimate the impact of military vocational training on the subsequent civilian earnings of veterans—an inquiry of major importance; but I am not entirely convinced by the authors' findings that this impact is nil.

While I do not fully understand all of the intricacies of the statistical methods employed, certain aspects of the model are unsettling. One is the technique of interviewing by telephone. Another is the extremely low response rate (28 percent) for former infantrymen, who serve as the "control group" in the interoccupational analysis, and the bias that this low rate of response may have generated. (In this connection, I wonder whether a sample of men with no military service at all would not have constituted a better control group—to guard against the possibility that even infantry training conveys some lasting economic benefits. But this alternative approach may not have been feasible.)

I am also concerned about the authors' choice of control variables in the multi-group analysis (p. 7). Why, for example, was it necessary to control for the relation between the veteran's post-service earnings and (1) the number of dependents he had at the time he left the service, or (2) the number of post-service jobs he had held, or (3) the relation of his post-service occupation to his military vocational training? The flow of causation between family size and subsequent earnings is, at best, obscure; and the other two variables are likely to be by-products, at least in part, of whatever occupational skills the individual may have acquired during military service. At the same time, the apparent failure to include *color* as a control variable is also puzzling.¹ For all of these reasons, I am reluctant to accept at face value the absence of any significant difference between the adjusted civilian earnings of veterans in the infantry group and the earnings of veterans with some in-service vocational training.

Later on in the paper Weinstein and Jurkowitz observe that those veterans who had a pre-service job and *related* military vocational training tended to have lower earnings (on balance) than their count-

¹ After the session, the authors indicated that color had been explicitly taken into account in other phases of their research, but that this characteristic had proved to be statistically nonsignificant. An evaluation of this surprising result must be deferred until the more detailed findings of this study have been published.

erparts with a pre-service job but *no related* military vocational training; and the authors interpret this result as “confirming” the conclusion “that military vocational training was without economic benefit” (p. 12). I am not so sure. The second of these two groups contains those veterans who received military vocational training that was *unrelated* to their pre-service work experience, but it scarcely follows that the latter set of skills would be less valuable in the long run than those skills that were related to previous civilian jobs. Indeed, just the opposite might be true.

Finally, the authors indicate some lack of confidence in the occupational categories and measures of crossover employed—a lack of confidence I share. Specifically, variable Z_4 may underestimate the extent to which veterans with low scores on this characteristic were actually using skills acquired during their period of military service. At any rate, a more precise measure of the *amount* of occupational training **received by servicemen while on active duty** is needed, in my view, before the impact of this training on subsequent earnings can be confidently appraised.

Mr. Goldstein’s paper offers a comprehensive and perceptive discussion of the major forms of underutilization of human resources in our economy, as well as some recent BLS data on the quantitative dimensions of the problem. In the balance of my allotted time, I wish to comment on only one kind of underutilization—specifically, what Goldstein refers to as “involuntary nonparticipation in the labor force.”

Goldstein mentions a number of programs that the government might adopt to reduce the amount of this kind of economic loss, and they have much to commend them. Let me simply mention another policy whose benefits in this regard should not be overlooked, and that is the macropolicy of maintaining a high rate of growth of aggregate demand. A substantial body of recent research by Glen Cain, Alfred Tella, Jacob Mincer, and William Bowen and myself (among others) leaves little doubt that the labor force participation rate of most major demographic groups is inversely related to the overall rate of unemployment in the economy. In short, a policy that succeeds in keeping labor markets relatively tight will not only reduce the level of reported unemployment (especially among disadvantaged groups) but will also raise the overall labor force participation rate.

In this connection, Goldstein cites the results of a survey made in September 1966 indicating that 750,000 persons were not in the labor

force that month because they believed it was impossible to find work. The figure is instructive, if only because it shows that the number of "discouraged workers" does not fall to zero once the unemployment rate reaches 4 percent. But I am confident that a similar survey conducted three or four years earlier would have revealed a much larger number of discouraged workers.

Research on the reasons that persons give for nonparticipation holds considerable promise, and current efforts of the Bureau of Labor Statistics to increase our knowledge in this area are certainly to be commended. But this line of inquiry also has its limitations, in that the reasons people offer for their current labor force status may be related in rather complex ways to the labor market conditions prevailing at the time. One might very well find, for example, that housewives who report they are not seeking market work for personal (non-economic) reasons during a recession year would gladly accept such work if wages were higher or jobs of the desired kind were more plentiful. Similarly, the same chronic health condition which is cited as the reason for not seeking work in a recession may prove to be less of a handicap when job prospects are brighter.

Thus, I hope that major efforts will be made to relate the findings of these household interviews with the results obtained from statistical analyses of ex-post relationships between participation rates and objective measures of personal characteristics and labor market conditions.

IX

INTERNATIONAL EXPERIENCE: U.S. CONTRIBUTIONS AND CONTRIBUTIONS TO THE U.S.

IMPLICATIONS OF WEST EUROPEAN MANPOWER PROGRAMS FOR THE UNITED STATES

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Introduction

Most manpower programs in Western Europe * have been developed to meet problems found in each nation, just as American policies and programs are designed for problems peculiar to our own country. Differences among countries require that, before borrowing from foreign experience, programs must be examined carefully and, if found relevant, adapted to take account of these differences. I am convinced that, for the most part, the United States, Canada and Western Europe have enough in common to learn from each other in the manpower field. The differences in size, population and labor force, and economic and social conditions should not obscure the similarities in other respects. All these countries have as common objectives the achievement and maintenance of full employment, rapid growth and price stability, though they may assign different priorities to these goals. Moreover, despite significant differences in national rates of unemployment, they all have wide divergences in unemployment

* Western Europe, for purposes of this paper, refers for the most part to five countries: Great Britain, France, West Germany, Sweden and the Netherlands.

among geographic areas, sizeable numbers of disadvantaged and handicapped persons, rapidly changing technology, and relatively free product and labor markets.

During the 1960s the United States has made such great progress in developing and implementing an "active manpower policy" that the OECD has referred to this country "as a great laboratory for imaginative experimentation in manpower policy" whose "further experiences . . . should attract the attention of all Member governments."¹

Much of what the United States has done in the manpower field has been based on ideas and programs developed abroad. The purpose of this paper is to take note of several areas in which we have not taken full advantage of other countries' experience and to indicate some directions which should be considered in developing future manpower policies and programs.

Advance Notice on Layoffs

The United States is almost alone among Western industrialized nations in not having worked out an effective program for advance notice prior to sizeable layoffs or dismissals of employees. West European countries require by law or voluntary agreement that employers give advance notification to the appropriate labor market authorities before making "mass" or "collective" dismissals. A few even require that the government give prior approval before such dismissals occur.²

In the United States the desirability of advance notice of large layoffs has long been recognized. In 1962 the Employment Service initiated a voluntary reporting program on mass layoffs, calling for local offices to prepare detailed reports on all actual or impending non-seasonal layoffs of 100 or more workers. A study of mass layoffs during the period July 1963 - June 1965 found that 525 establishments reported layoffs of 187,333 workers to the Employment Service. Thirty-six per cent of the establishments laying off 48 per cent of all workers gave at least one month advance notice; 21 per cent of the

¹ "Implementation of Recommendations on Active Manpower Policy," Report by the Manpower and Social Affairs Committee, OECD, 25 March 1966, p. 20 (mimeo).

² Jack Stieber, "Manpower Adjustments to Automation and Technological Change in Western Europe," Extract from *Adjusting to Change*, Appendix Vol. III, *Technology and The American Economy*, prepared for the National Commission on Technology, Automation and Economic Progress, 1966, (East Lansing: Michigan State University), pp. 69-70, 77-78, 94-95, 106-107, 116-117.

companies with 17 per cent of the workers gave one week to one month notice; 13 per cent of the companies with 11 per cent of the workers gave less than one week's notice; and 31 per cent with 24 per cent of the laid-off workers gave no advance notice of the impending layoffs. Firms anticipating the larger layoffs tended to give longer notice than other companies.³ Considering (1) the high cut-off point for reporting layoffs, (2) the fact that one-fourth of the reporting firms with almost one-half of all layoffs were in defense industries and therefore might be expected to cooperate with a government agency's request, and most important (3) that there was no attempt in the study to estimate the extent to which mass layoffs occurred which were not reported, the results of this voluntary reporting system must be considered less than satisfactory.

The Employment Service has no authority to require employers to report impending layoffs, regardless of size or possible consequences. Yet, in 1965, Congress included in the military construction authorization bill a requirement that a 30-day notice of closing of any military installation, affecting more than 50 employees, be given to the Armed Services Committees of the House and Senate.⁴ I suggest that Congress show the same concern for all its constituents as it has demonstrated for those having the good fortune to be employed in military installations.

Up to now we have been talking about the importance of anticipating mass layoffs because of the effect on the labor market. Extended layoffs and plant closings also cause *individual* hardships. In most West European countries individual employees are legally entitled to prior notice of varying length, depending on service, before dismissal (except for cause). Notice periods usually run from about one week for employees with 6 months service to several months for long-service or salaried employees.⁵ Quite apart from the monetary consideration, there is much to be said for giving a man at least a week to adjust to and prepare for imminent unemployment. In the United States employees are often laid off for extended periods or dismissed on 24 hours notice, and even collective bargaining agreements generally do not provide for more than a few

³ Robert F. Smith, "The Impact of Mass Layoffs, July 1963-June 1965," *Proceedings of the Eighteenth Annual Winter Meeting December 28-29, 1965*, Industrial Relations Research Association, pp. 204-219.

⁴ *The New York Times*, November 13, 1965, p. 1.

⁵ Stieber, *op. cit.*, pp. 59-60, 77, 94-95, 106, 116-117.

days notice. Those employees fortunate enough to work in automobile, steel, rubber and other industries with Supplementary Unemployment Benefit provisions or severance pay care little about advance notice. But these are only a small proportion of all wage and salary employees. Perhaps the time has come to add to existing laws regulating maximum hours, minimum wages, overtime pay, child labor, plant safety, etc., a minimum notice requirement before individuals may be dismissed from employment for economic reasons.

Geographical Labor Mobility

The United States has been more reluctant than other countries to promote geographical mobility subsidized by adequate government grants, loans and other assistance. All West European countries and Canada include relocation assistance as an important part of their manpower programs.⁶ By far the largest and most successful program is Sweden's where 26,000 workers received relocation assistance in 1964. Grants up to \$1200 are available for travel, installation allowances, family allowances, moving costs, etc. The 1965-66 budget for geographical mobility was about \$8 million. By comparison, the United States, with a population and labor force more than twenty times that of Sweden and a much higher level of unemployment, gave grants and loans to 1,200 workers in 1965 under a budget authorization of \$5 million. The U.S. program also compares unfavorably with those in France, Great Britain⁷ and Canada.⁸

It might be argued that financial assistance to encourage mobility from depressed areas to more prosperous regions is more necessary and needs to be more generous in the United States than in West European countries because our unemployment rate is higher, we have more depressed areas, and the distances and costs of moving are greater. Furthermore, housing which has been the major obstacle to geographical mobility in Western Europe, is not as scarce in the United States as in most countries. Experience with pilot mobility projects in the United States has not shown a markedly higher rate

⁶ Martin Schnitzer, "Programs for Relocating Workers Used by Governments of Selected Countries," Paper No. 8, Joint Economic Committee, 89th Congress, 2nd Session, 1966, p. 74.

⁷ *Ibid.*; Stieber, *op. cit.*, pp. 67, 81, 96, 107.

⁸ *The Provincial*, Government Employees Association, British Columbia, Canada, June 1967.

of return to home areas than those in other countries.⁹ However, relocation assistance is not necessarily wasted, even for those workers who return to their home areas, as they may secure employment on the basis of skills acquired during their temporary relocation experience.

Financial assistance to promote desirable geographical mobility has proven its worth in Western Europe and in the United States. It should be made a regular part of our manpower program with stepped-up allowances and increased services to induce unemployed workers to move to areas where employment is available.

International Mobility

More debatable than domestic mobility is a question which, to my knowledge, has never been considered in this country: Should the United States encourage and assist unemployed American workers to accept temporary employment in Western Europe? This is not posed as a scheme for "exporting" American unemployment, but rather as a demonstration or pilot program to provide employment and training for a relatively small number of people—say 10,000 to start with—who have been unable to find work in the United States.

At the end of 1966 there were approximately five million foreign workers in Western Europe. They came from Italy, Spain, Portugal, Yugoslavia, Greece, Turkey, North Africa, and Asia. Only about one out of every seven spoke the language of the country in which he worked, one out of three was illiterate, and two-thirds came from traditional rural areas with different religions and cultures than the host countries.¹⁰

United States manpower experts who have traveled abroad and talked with European employers and labor market authorities have been struck by the willingness and ability of employers to hire, train and make productive use of foreign workers with far less education, training and industrial experience than many unemployed Americans. To use the picturesque language of Arnold Weber: "Compared to Moroccans, Spaniards and Southern Italians who man the steel mills and automobile plants in Western Europe, many of our jobless

⁹ Schnitzer, *op cit.*

¹⁰ R. Descloitres, *The Foreign Worker*, (Paris: OECD 1967), p. 10.

are equivalent to Harvard MBA's.¹¹ Charles Kindelberger has also remarked on "the speed with which ordinary illiterate labor takes its place in the foundry or on the assembly line" in West Germany in contrast to . . . "the widely expressed view in the United States that in today's world one must finish high school to work in a factory."¹² European employers have pointed out that Americans would be easier to absorb since supervisors often speak English as a second language but are completely ignorant of the native tongues of most foreign workers.

The higher transportation cost involved in using American workers would undoubtedly be an obstacle, but not an insurmountable one. In addition to the higher initial cost, it would mean that Americans who choose to work abroad would not be able to return home for holidays and vacations as do most foreign workers. The wage differential between the United States and even such relatively high-wage countries as Sweden and West Germany presents a much more difficult problem. But, if the idea has merit, the United States government should be prepared to subsidize unemployed workers who are willing to accept jobs abroad, just as we do those who stay at home and enroll in the Job Corps, NYC, MDTA, and other programs.

I have, in the limited time available, only sketched out in the very roughest fashion an idea which needs much more thought and consideration. Despite the recent recession in some countries, labor force projections indicate that Western Europe will continue to have serious manpower shortages which will have to be met, in large part, by foreign workers for some time to come. The United States should not be too proud to take advantage of this opportunity, even if it benefits only a small number of our unemployed.

Seasonal Employment

West European countries and Canada have paid much more attention to reducing seasonal unemployment, especially in the construction industry, than has the United States. In West Germany at least 30 per cent of appropriations for Federal construction must

¹¹ "The Role and Limits of National Manpower Policies," IRRA, 1965 *op. cit.*, p. 47.

¹² *Europe's Postwar Growth: The Role of Labor Supply* (Cambridge: Harvard University Press, 1967), p. 191.

be used between November and March; in Sweden a reserve of municipal and state projects is always kept in readiness to be drawn upon in the event of a decline in employment; and in Canada government projects are reviewed with a view to providing a maximum amount of winter employment. Countries which provide subsidies to employers to encourage winter work include West Germany, Canada, Austria, Finland, the Netherlands and Norway.¹³

That seasonal unemployment is significant in the United States is indicated by Thurow's estimate that, if all seasonal unemployment were eliminated, overall U.S. unemployment would have been reduced by 24 per cent in 1965 and unemployment among 16-19 year olds would have fallen by 53 per cent.¹⁴ Construction alone accounts for 10-12 per cent of all U.S. unemployment on an average annual basis. The construction industry presents the anomaly of having both the most serious manpower shortages and the second highest industry unemployment rate in the United States. Seasonal workers draw more unemployment compensation than employers contribute, thus giving these industries, especially construction, a "subsidy," limiting the accumulation of reserves and reducing the ability of the funds to aid long-term unemployed.

Up to now the United States has done little to even out seasonal patterns in construction. Myers and Swerdlof have suggested the following measures to reduce seasonal unemployment in the United States: better timing of public construction which accounts for one-third of all new construction; wider use of technological improvements to permit more winter work; subsidies to stimulate more construction in winter; improvement of data on seasonality in different industries, year to year changes in construction costs, etc.; review of unemployment compensation systems as they relate to seasonal industries; efforts to improve mobility of construction workers to reduce loss of time between jobs.¹⁵ Seasonal unemployment represents one area in which the United States has borrowed nothing from other countries but where significant efforts might yield large dividends.

¹³ Robert J. Myers and Sol Swerdlof, "Seasonality and Construction," *Monthly Labor Review*, September 1967.

¹⁴ Lester C. Thurow, "The Role of Manpower Policy in Achieving Aggregative Goals," in *Toward A Manpower Policy*, Robert A. Gordon (Editor) (New York: Wiley & Sons 1967), p. 82.

¹⁵ Myers and Swerdlof, *op. cit.*

The Employment Service

The key to an effective manpower program lies in the U.S. Employment Service or more accurately in the employment services of the various states. We already know a great deal about what needs to be done to improve the Employment Service. The 1966 unanimous report by the tripartite Employment Service Task Force made a series of moderate recommendations which, if effectuated, would go far towards giving the United States a much improved agency.¹⁶ The report was written with a view toward minimizing criticism from state administrators and obtaining Congressional approval, and at the same time accomplishing needed reforms in the Employment Service.¹⁷ But bills incorporating the recommendations drew considerable fire from the Inter-state Conference of Employment Security Agencies and failed of passage in the 89th Congress. It is unlikely that the report will be acted upon in the 90th Congress.

The Employment Service in the United States ranks behind similar agencies in several West European countries. With respect to placement penetration rates—jobs filled by the Employment Service compared to total openings—the United States proportion of 16 per cent is exceeded by all countries except France. Experts are of the opinion that penetration rates of no less than 25 to 30 per cent are necessary for an employment service to do an effective placement job and to provide the proper labor market information to job applicants.¹⁸ Most important in this regard is the absence of good vacancy information and inadequate facilities for inter-area recruitment. Alfred Green, after a study of employment service operations in Western Europe, concluded that “in all six countries [the five noted above plus Yugoslavia] there is more knowledge of vacancies and available job-seekers than in the United States; also (except in France) more is done about any imbalance in the labor markets by way of inter-area clearance.”¹⁹

The Task Force proposal for nationally coordinated “multi-market clearance centers” and, though not mentioned in the Task

¹⁶ “A Report to the Secretary of Labor from the Employment Service Task Force.” in R. A. Gordon, *op. cit.*, pp. 143–173.

¹⁷ “Discussion” by George P. Shultz in R. A. Gordon, *op. cit.*, pp. 174–177.

¹⁸ Alfred L. Green, *Manpower and the Public Employment Service in Europe*, December 1966, p. 19; see also “Discussion” by Leonard P. Adams and Daniel H. Kruger in R. A. Gordon, *op. cit.*, pp. 178–192.

¹⁹ Green, *op. cit.*, p. 11.

Force report, requiring that at least government agencies and private employers holding government contracts list vacancies with the Service, would help to improve the Employment Service's information on vacancies and lift its penetration rate.²⁰ I also wish to add my voice to the muted chorus which believes that much of what is wrong with the Employment Service can only be corrected by federalization of the system. This obviously is not politically feasible at this time, but then neither were the more modest recommendations of the Task Force.

Other Programs

A number of other features of manpower programs, found in one or more West European countries, which are worthy of consideration but cannot be discussed in this paper because of space limitations are: government support for sheltered workshops; better ways of bridging the transition from school to work; higher training allowances and unemployment compensation; more involvement of labor and management in manpower programs; incentives for increased training by private industry; and creation of a unified federal manpower authority.

Conclusion

It should by now be abundantly clear that I am in favor of bigger, better and more manpower programs in the United States. I disagree with those who believe that the time has come to stand back, reflect upon, tidy up and consolidate existing programs before we increase expenditures on manpower programs. This is not because I think that all existing programs have been run well and efficiently. They have not! But then, neither have other less worthy government programs—foreign and domestic. Vietnam—whether one is a hawk or a dove—presents an interesting perspective on the allocation of federal funds. We are currently spending about \$2,000 per year per South Vietnamese and \$57 per year on each American living in poverty.²¹ When a plane is shot down in Vietnam we spare no expense trying to rescue the pilot. I like to think that in doing

²⁰ Herbert S. Parnes, "Employment Service Task Force Report," *IRRA Proceedings*, December 28-29, 1966, pp. 34-46.

²¹ Charles C. Killingsworth, "Jobs and Income for Negroes," a paper prepared for a symposium on Social Science Research in Race Relations, 1967, p. 85 (mimeo).

so we are motivated as much by the fact that a human life is at stake as by the very heavy investment the government has in him as a highly trained manpower asset. I favor this policy in Vietnam and would like to see it applied to each disadvantaged American. One way to do this is to expand our manpower programs as long as there is a likelihood that additional expenditures will help to salvage more human beings. I know of no cost-benefit or other studies which provide evidence to the contrary.

LESSONS FOR THE UNITED STATES FROM WESTERN EUROPEAN EXPERIENCE WITH THE HARD-TO-PLACE *

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The traditional *caveat* about the dangers of transferring experience from one nation to another must be emphasized in any discussion of the hard-to-place. Certain categories which figure prominently in American definitions of this group have simply not fitted that description in Europe. There, teenagers, minorities, foreigners, rural migrants, the uneducated, and the unskilled are not considered hard-to-place in themselves, nor even when they have a combination of these attributes. To the Europeans, the hard-to-place are primarily those who fall in one or more of the following groups: the physically, mentally or socially handicapped, the long-term unemployed, or displaced older workers.

Importance of Full Employment

The most pervasive lesson from European experience appears to be that high full employment or overfull employment is the greatest stimulus to the absorption of marginal workers. Tight labor markets undermine both employers' prejudices and trade union restrictions. They do more to minimize the number of hard-to-place than any set of manpower policies operating under higher unemployment rates.

Whatever one may think about the appropriate level of full employment as regards prices, incomes, the balance of payments, productivity, and unit labor costs, it is clear that the potentially hard-to-place are better off at 2 percent than at 4 percent unemployment. And many of the northwestern European countries have maintained 2 percent unemployment or less for years. Even during the latest deflationary period unemployment rates have not exceeded 2.5 percent.

One of the most satisfactory aspects of the very low European unemployment rates has been the reduced disparity of regional

* This paper summarizes parts of a study conducted under a contract with the Manpower Administration of the Department of Labor.

rates of unemployment up to 1965.¹ Conversely, as unemployment rates increased under recent deflationary measures, the impact on the weaker regions was disproportionate, highlighting the need for selective economic and manpower measures.

Under high full employment, such differential unemployment rates as do exist for the unskilled, uneducated, minority groups,² or teenagers³ tend to go unrecognized and unpublicized in the European countries because the absolute numbers of unemployed are small, the average duration of idleness is brief, and there does not appear to be a group unemployment problem.

As a further accompaniment to the very low European unemployment rates, relatively few people have remained unemployed because they do not want to work. Britain and West Germany, among others, have rehabilitation centers and job training for the employable work-shy. Social benefits have been cut off if a suitable job was refused, and legal prosecution has been undertaken in cases of fraud. Occasionally, workers have been persuaded to take jobs

¹ As the West German unemployment rate dropped from 9.0 percent in 1951 to 0.7 percent in 1965, the standard deviation of regional rates declined from 5.6 to 0.34. In The Netherlands, the unemployment rate for the male labor reserve stood at 3.6 percent in 1958, but by 1964 it had been reduced to 0.9 percent. The standard deviation of regional rates declined from 3.7 to 1.1 in the same period. (Computed from West Germany, *Jahreszahlen zur Arbeitsstatistik, 1951-1965*; The Netherlands, *Arbeidsmarktbeschrijving, 1959-1965*.) Reductions in seasonal unemployment, both through increased work in the winter months and the omission as unemployed of certain idle construction workers in Germany (*Schlechtwettergeld* system), have contributed to the narrowing of regional disparities. The Netherlands also had an impressive shift in industrial employment toward the depressed agricultural and mining areas. (OECD, *Manpower Problems and Politics in The Netherlands*, Report by the Examiners, MO(66)18, (Paris, 1966), p. 41). Great Britain has a continuing regional unemployment problem.

² In Britain the colored unemployed—West Indians, Pakistanis, Indians and Africans—constituted 3.6 percent of all unemployed in October, 1964, but the colored population was only about 2 percent of the total population, which is the closest to a labor force estimate one can obtain. A special survey by PEP (Political and Economic Planning, Report on Racial Discrimination, (London, 1967), p. 19), showed a 6 percent unemployment rate among their sample of colored people at a time when the national rate was about 2.5 percent, but it is not clear that the sample was chosen to reflect the total colored unemployment.

³ Unemployed boys in The Netherlands, one of the few north European countries with relatively larger increments to the teenage working population than the United States, moved up from 3.6 percent of all unemployed males in 1960 to 7.6 percent in 1964, although the overall male unemployment rate was declining from 1.7 percent to 0.9 percent in the same period. Contrast this with the American situation in 1966 when almost one-third of the unemployed were teenagers. (OECD *Economic Outlook*, July 1967, pp. 39, 40; data from the Ministry of Social Affairs and Public Health).

which paid very little more than social benefits. But European countries do make public assistance payments to needy women with young children, including the illegitimate ones, without any requirement that the woman register for or seek work.

The reasons for the European ability to achieve much lower unemployment rates than the United States are complex. Whatever the causes, it is clear that the European marginal groups have benefited and have not imposed a severe test of special programs.

Preventive Measures

Some European countries have social policies which tend to prevent people from becoming hard-to-place. One example is education. While the northwestern European countries do not yet match us in wide access to secondary and higher education, most are superior to us in the provision of a uniform basic education of good quality and the avoidance of illiteracy. This is only partially due to their homogeneity of population, small geographic area, and strong central governments with parliamentary systems. The extensive new programs in Sweden providing education, housing, and vocational training for local gypsies are a good example of a quick response to the problems of a minority. Similarly, Britain's colored youngsters are said to receive the same quality of compulsory education and to learn as well as comparable white children.

It may be that a greater equality in the distribution of income and especially in the distribution of public services, such as education, health, recreation, and housing, is more important than a very high level of *per capita* GNP in the effort to limit the future numbers of the hard-to-place.

Another type of anticipatory action, more directly in the manpower area, tends to prevent displaced workers from becoming hard-to-place. The underlying premise is that labor is a scarce and valuable resource, that many people need help in the complex world of work, that the costs of economic change and growth must not be borne exclusively or disproportionately by the displaced workers, and that assistance should be directed toward new employment rather than subsidized security in contracting industries or occupations.

Two major examples may be cited. The first concerns those northwestern European countries which have devised policies to

ease the transition from agriculture to other work. The Netherlands, Sweden, and France, among others, do this in spite of the availability of relatively more jobs for the unskilled in construction and manufacturing than we have in the United States. The programs involve some or all of the following: the preparation of rural people for change, adaptation of rural education to employment trends, remedial education and subsidized training courses *in advance* of movement, the direction of and financial assistance to movement toward suitable industrial employment and housing, regional development programs to provide alternative employment within daily travel distance, the deliberate creation of public service jobs in areas of surplus labor, restrictions on the further expansion of the largest urban areas, creation of new towns and subsidized housing, and improvement of the status and earnings of the remaining agricultural labor force.

A second example occurs in the programs recently sponsored by the European Coal and Steel Community. They may have the effect of forestalling the creation of a hard-to-place groups of unemployed coal and iron miners and steel workers. Efforts are made to place workers before they lose their jobs. A distinctive feature of the ECSC approach is the treatment of unemployment as a forced waiting period during which the displaced worker receives a very high percentage or all of his former wage. Handicapped or older miners and steel workers are given extended "waiting allowances." ECSC approved programs also offer subsidies to wages when workers take lower-paid work, generous training and mobility allowances, loans and wage subsidies to new employers who promise to hire the displaced miners and steel workers, aid in housing, and lump sums to older workers who are unlikely to be reemployed.

In Sweden, manpower programs to aid those in danger of losing their jobs are well developed, especially advance warning by employers of group dismissals. Sweden also has special methods of maintaining employment levels in specific industries and firms when demand slacks off.

Programs for the Hard-to-Place

The European countries remain with a truly hard-to-place population even when full employment prevails and preventive measures have been taken. Great variation exists among the countries of

northwestern Europe in the assistance given to these residual cases; Sweden probably has the best all-round program.

The most effective efforts for the hard-to-place usually are conducted by countries which also have well-developed governmental and private manpower policies for the entire labor force. Such programs for the hard-to-place tend to be permanent, comprehensive, well-financed, and well-administered. Government initiates and administers the programs because so many of the hard-to-place have no contact with internal labor markets. General acceptance of government agencies is fostered by the use of tripartite and multi-partite policy-making, advisory, or administrative bodies which draw management and labor organizations into day-to-day issues.

It is a hallmark of an advanced manpower policy to recognize formally all kinds of hard-to-place individuals as a special category and to provide both general and individual measures for them. In Sweden the hard-to-place include refugees, alcoholics, those with criminal records, and gypsies, in addition to the more standard disabilities. Contact men from the Employment Service assist potential cases in medical, penal and other institutions.⁴

Several European countries have made special efforts to promote the employment of the hard-to-place in the competitive job market through financial incentives and legal compulsion. The countries which have offered subsidies to employers for on-the-job training or supplements to wages of selected hard-to-place candidates have been surprised to find that these subsidies have been sought by very few of the eligible employers. Sweden is now trying to expand greatly such subsidized employment and its record may be suggestive.

⁴ The Rehabilitation Service for the hard-to-place of the Swedish Labor Market Board handles over 75,000 difficult cases a year. This would be the equivalent of over 1.5 million cases annually in the United States. In 1965, these cases were divided according to the chief cause of the work handicap as follows: 18.5 percent mental illness or defect; 9.5 percent social handicaps; 9.7 percent alcoholics; 1.7 percent older workers; 3.3 percent miscellaneous handicaps; and 58.3 percent physical handicaps. The high proportion of non-physical causes indicates the Swedish success in reaching the less visible hard-to-place.

The cases were disposed of as follows in 1965: 15,446 placed in open market; 14,797 in sheltered work of various kinds; 11,529 in vocational training and adjustment courses; 1,849 in self-employment; 678 in psycho-technical testing; 3,058 in work assessment and work training; and 24,772 not considered for vocational rehabilitation. (Data from the Swedish Labor Market Board.) In addition, a large number of less difficult cases are placed by the Employment Service directly.

Legal compulsion to employ certain physically and mentally disabled takes the form of a quota system, or reserved or preferential employment, or licensing for self-employment. The countries with a quota system, under which about two million workers are covered in western Europe, are satisfied with the results. But the smaller nations which reject the idea of legal compulsion assert that equally good results can be obtained by high quality rehabilitation and training efforts. Supporters maintain that the quota system is needed in periods of rising unemployment in order to protect the disabled from dismissal. The quota method may have its uses in the United States.

Job Creation

Perhaps the single most important lesson about the hard-to-place is that even under the most stringent labor shortages ordinary private and governmental enterprises are not willing to absorb all of the hard-to-place who can work. As a result, permanent programs for special job creation exist in several European countries.

A type of job creation is found in several northwestern European countries for employable unemployed who cannot be placed in the competitive labor market because of regional, seasonal, or cyclical factors. In practice, the workers tend to be hard-to-place because of age and immobility. As many as a third of Sweden's unemployed males have been employed at standard wage rates on special public works. This program constitutes one of the largest single items in Sweden's generous budget for manpower policy.

The traditional idea of public works has been modified in Sweden by provision that infrastructure projects should be undertaken to encourage regional development, that some projects should be located in labor shortage areas, away from the workers' homes, in the hope of finding them permanent jobs, and that specialist teams should review persistent cases and find ways to transfer them to regular employment. Job creation has been criticized on grounds of expense, inefficiency, and interference with geographic and occupational mobility. But no practical alternative to special public works has yet been devised for its particular beneficiaries.

The creation of jobs in a sheltered environment is particularly directed toward the hard-to-place. At present, The Netherlands has

the largest such program, the most complete coverage of potential cases, and a highly developed business approach and organization.⁵

Rehabilitation is not ignored in sheltered employment, but it occurs largely in the course of work rather than through the attention of special personnel. For those who seem likely to obtain competitive employment but need work training or toning up, other institutions, some organized as workshops, are available. Therefore, the rate of movement out of sheltered workshops in the European countries is now very low—considerably less than 10 percent in Britain and Holland and about 12½ percent in Sweden which lags behind Holland in numbers and organization.

The lesson for the United States in this instance is not to convert all of its workshops to permanent employment. Those which are functioning competently as rehabilitation or demonstration centers should be supported, enlarged, and increased in number. But the stigma should be removed from American institutions which chiefly provide employment under sheltered conditions, and consideration should be given to the establishment of a national network which would give us the 500,000 or more work places needed to correspond to the Dutch level of performance.

⁵ A calculation for November 1964 indicates how many of the Dutch unemployed were on created jobs. At this time the male unemployment rate was 0.9 percent, and over 85,000 vacancies for males were listed.

	<i>Male</i>	<i>Female</i>
<i>Fully Employable unemployed</i>	16,442	3,307
Suitable for additional employment (public works)	(3,064)	(0)
1. on additional employment (public works)	1,419	0
<i>Reduced Employability unemployed</i>	9,328	1,319
1. on additional employment	79	0
2. in sheltered workshops, outdoor projects, and white collar projects	6,356	855
<i>Registered but not counted as unemployed because of poor employability</i>	16,094	2,536
1. in sheltered workshops, etc	14,595	2,206

When unemployment rose sharply in 1966, the men on additional employment increased from 1,106 in October 1966 to 4,129 in February 1967, while the various types of sheltered work available to those of reduced employability increased by almost 1,000 for males and females. (Computed from data of The Netherlands Ministry of Social Affairs and Public Health.)

Conclusion

In evaluating the European experience, we should recognize that none of these countries has as yet fully utilized its marginal groups, either in the quantitative or qualitative sense. Nor has any country achieved the OECD's high goals for the hard-to-place—the “fullest personal development and socialization” of individuals within society. Sceptics may say that the European countries have shown too little dissatisfaction with the menial, low-paying, and dead-end jobs which go to the hard-to-place, among others.

Conversely, one can point to a few fields in which American activities deserve attention across the Atlantic. The most advanced European countries do not match us in governmental and academic collection and analysis of manpower data, basic manpower research, studies and evaluations of programs, and cost-benefit analyses.

But for all their limitations, the best of the northwestern European programs suggest both specific and general lessons for the United States. They employ preventive measures which reduce the need for later remedial action. They institute full-scale programs instead of experimental or token measures. They establish permanent agencies in limited numbers and have a minimum of emergency, hand-to-mouth operations. They supplement placement in competitive employment with special job creation. They place a high value on participation in the world of work. They support a manpower as well as a welfare approach to the hard-to-place, and operate through a strong national employment service. And, contrary to the American shift in the 1960's away from the methods of the 1930's, most of the northwestern European countries have retained deep respect for the powers and uses of government.

RELEVANCE OF UNITED STATES EXPERIENCE IN MANPOWER PROGRAMS FOR DEVELOPING COUNTRIES

EDGAR C. McVOY
U.S. Department of Labor

I. *The Needs of Developing Countries in Manpower Planning and Administration*

Many developing countries share basic problems and constraints in their efforts in manpower planning and administration, among them those described below:

1. *An unfavorable ratio of population growth to food production and overall economic growth.* Implications of this for the labor force are: high proportion of children in relation to persons of working age, with collateral burden on mothers; high per capita cost of education and social overhead; rural underemployment, spilling over through migration to urban overcrowding and unemployment. Thus, in the early stages of industrialization/modernization, developing countries in this era have population and surplus manpower burdens which did not plague most countries now classed as developed.
2. *Large rural populations, living in traditional, largely subsistence economies* having high levels of illiteracy, poor nutrition, and limited facilities for communication. Cultural factors enter into resistance to change. Many of the more vigorous and able youth go to cities, leaving rural areas impoverished for leadership. Food production lags, and it is difficult to generate other economic activities. Levels of productivity and income remain at subsistence level or below.
3. *Employment effect of industrialization overestimated.* Modern capital-intensive industries have provided few new jobs, and labor-intensive industries, for the most part, have proved non-competitive with imports or even domestic modern industries.
4. *A serious imbalance in manpower supply as related to demand.* Many developing countries have excess high school or university graduates who are unemployed or underem-

ployed, usually in law, arts and humanities, but lately even in scientific and technical fields. At the same time, shortages exist, especially of technicians, teachers, skilled workers, managers and entrepreneurs. Along with this type of imbalance of high and middle-level manpower, there is a growing surplus of unskilled and partially-skilled manpower, both rural and urban. Rates of unemployment are rather low, but levels of underemployment as reflected both by seasonal or periodic unemployment and by marginal incomes, is characteristic of a large portion of the population.

5. *Outmoded and inadequate system of education, training, and other means of diffusion of new technology and attitudes.* Usually developing countries suffer both from traditional rigidities and from inadequate resources (teachers, extension agents, equipment, buildings, communications media). Related to this situation is the fact that villagers usually are not accustomed to taking initiative for solving their own problems.
6. *Poor manpower data, often both inadequate and inaccurate.* Few developing countries have even one-time recent data of a comprehensive nature on population, labor force, employment and unemployment, and almost none have reliable trend data on these factors. Occupational information especially is weak, partly because the concept of occupational specialization is not well-developed.
7. *Confusion compounded by planners and advisors.* Governments of developing countries have been confused and pulled in competing directions in manpower policy and programs, both by their own planners and administrators, and by their foreign advisors.

These are some of the common issues in human resources development, and the countries of Asia, Latin America, and Africa need guidance and training in means of approaching solution to these problems as well as technical and material assistance in programs and projects which contribute to their solution. This leads us to the question to which this paper is directed: to what extent is United States experience relevant to manpower programs of developing countries?

The answer to this question is yes, if our experience is transmitted selectively, with appropriate modifications and perceptiveness, and if it is translated into communicable ideas and techniques.

II. *Elements of U.S. Experience Which Are Not Applicable to Developing Countries.*

Suppose that when Columbus discovered America, he found it populated by some 20,000,000 people, in geographical empires each with a highly-developed culture and political system, and with a settled agriculture and village life. Suppose that the Europeans had colonized the American "natives" under these conditions, with Europeans remaining a small proportion of elites governing the territory, while the native population continued to grow and to man the plantations, mines and other extractive activities to feed the industries and trade of Europe. Suppose that this native population in 1945 had grown to 200,000,000, mostly rural, and had an annual growth rate of about 3%; and had during the 19th or 20th century by resistance and revolt wrested independence from the European mother country. Then the experience of America would be almost completely relevant for other developing countries.

I don't need to go into detail about how our actual history differed from this. The colonizers were already developed people, as well as being adventurous types. They came to a land very sparsely populated by a people who had only a few of the rudiments of modern technology. Their numbers, weapons and machines soon overwhelmed the native population. By a combination of foresight and luck, they developed a prosperous agriculture, and early in our history as a nation, gave considerable attention to innovation and training both in agriculture and in industry; population pressure was not a problem in the period of development.

How can we find any parallels in our experience which are useful to developing countries? Let me first relate what we should *not* try to export. To begin with, our highly urbanized and industrialized society cannot be transplanted bodily. The structure would be completely out of balance and too capital-

intensive and too costly for any developing country. It is equally ridiculous to maintain that all underdeveloped countries must go through the same stages as we did.

Our system of education and training is not exportable as a whole, though parts of it are. It is based on a proportion of secondary and higher education which probably is too high even for us, but is obviously impossible for any developing country. Further, we have come to realize that our education programs, while purporting to be mass education, have tended rather to cater to elites, though the elite may be half the population. We have had a number of successes in our educational approaches, such as the land-grant colleges and extension services, and in our vocational, technical, apprenticeship and on-the-job training programs. Few of these, however, can be reproduced from the same mold and operate successfully in a typical Asian, African or Latin American country.

Our Neo-Keynesian approach to full employment, partially successful here, has very limited applicability to a largely traditional agricultural society, where functioning labor markets hardly operate even in the major cities, and where idle capacity is largely the potential capacity of masses of unskilled manpower. The macro-economic model becomes largely irrelevant. Also, countries beginning from a low economic base, and wishing to foster rapid growth will have to tolerate a higher rate of inflation than we consider desirable. There are some elements of the New Economics which can apply to developing countries; e.g.: the need for growing consumer demand and purchasing power as a stimulus to production.

Now let us consider some of the approaches, tools and techniques in manpower distribution and utilization. Despite many constraints and imperfections, we have here basically a market economy, in which labor markets operate rather effectively in the distribution and allocation of manpower. We have had, comparatively speaking, a minimum of government interference in or manipulation of the labor market, except in wartime. Many of our public services are designed to minimize or eliminate artificial barriers to free choice of, and eligibility for, available jobs. Compared with most other countries, we have

a high degree of geographic, occupational, and job mobility of workers, which has been an asset to our development. But our free-market system and its attendant institutions have very limited applicability to a typical developing country, which, in my opinion, requires a much more active and centrally directed policy than ours.

Our tools and techniques in the manpower field are, on the one hand, too sophisticated, refined and expensive for application in developing countries; but on the other hand, they lack the depth and sensitivity to measure some of the significant phenomena of these countries, such as underemployment. E.g., our Dictionary of Occupational Titles contains more than 35,000 titles. It took more than a decade to complete and in spite of continuing efforts to keep it current, it is always out of date. Imagine the initial cost and continuing overhead needed in an Asian country to maintain this kind of occupational code, not to mention the fact that their occupations are not nearly so specialized. We have a monthly sample household survey of population and labor force. Few countries have either money or trained personnel to do such a survey even once a year. Our statistics of wages, earnings, cost of living, employment, hours of work, labor productivity, population, births, and deaths, and a host of other things we take for granted, are much beyond the capacity of most developing countries. Further, our approach to getting statistics of employment in establishments, which covers 90% of our employment, might cover only 10% in a typical Asian country.

Finally, our whole culture, and our economic, political, social, and religious institutions are unique in many respects. Our culture contains some positive qualities, which, in a modified form, could become assets to developing countries, but an effort to transfer the whole system intact could only lead to frustration.

III. *U.S. Manpower Program Experience Which Is Exportable to Developing Countries.*

Despite the negative elements in trying to apply our experience to developing countries in the human resources field, there are a number of ways in which our know-how can be applied effec-

tively, with appropriate adaptations. Some of these are described in the sections below.

1. *Approach to manpower planning and control*

There are elements of U.S. manpower approaches which can be very helpful to developing countries, especially to planners and administrators who are overimpressed with the process of central planning and control and of the macro-economic models of development. Ours is often characterized as a pluralistic society. It somehow hangs together by a combination of public and private, national and local initiatives. There is considerable waste, but neither is there often a gross miscalculation in the allocation of resources. There are built-in incentives, which do not depend on a complicated set of national controls and directives.

Many countries which have tried to apply totalitarian approaches to economic development have been forced to modify their methods in the direction of providing incentives and of decentralization of decision-making. It is possible that the American pattern has influenced some of these countries in their modifications. This pluralistic pattern can be useful to some of the newly emerging countries, particularly those with large areas and population and a history of diverse local cultures and political polarization.

2. *Approaches to full employment*

As suggested in the previous section, the kinds of sophisticated measures applied in the United States to accelerate or put a brake on economic growth in the interest of increased levels of employment without undue inflation, cannot be applied as a package to developing countries, though certain aspects of this policy are relevant. In particular, the concept of building consumer demand, and thereby increased incentives for production, is appropriate, when other conditions are not thrown too far out of balance.

We have some other approaches to problems of unemployment and low income which are relevant for developing countries. The programs of the Farm Security Administration in the middle 1930s and early 1940s were generally imaginative and

effective. For poor, landless farm families, these programs provided a combination of grants, low-interest, long-term credit, and technical assistance which enabled the majority to become self-sustaining within a few years. The tenant-purchase program made farm owners of a large number of struggling renters and sharecroppers. In addition, the migrant labor program was a sound, if controversial, approach to many of the problems of seasonal and migratory farm labor, and many of its features have become standard elements of our current efforts to assist this disadvantaged group of workers. Even the much-criticized Works Progress Administration has been emulated with success in some countries. Finally, the many facets of the recently-initiated poverty and manpower development programs offer, with minor adjustment, exportable models for bringing people with lack of education and incentive into the mainstream of the job market.

Application of these models to varying conditions in developing countries requires much perception to fit them into local conditions. In some cases, constraints which limit programs in the United States are absent; e.g. the construction industry patterns which make use of unemployed difficult. But in most instances, lack of funds and administrative competence tend to make such programs in developing countries either highly inefficient and corrupt or too small to make an impact. These problems challenge the ingenuity of planners, and they can find a number of useful ideas from American experience.

3. *Education and Training*

I will describe briefly a few of our education and training approaches which have relevance for developing countries.

Our system of land-grant colleges, vocational agriculture at the secondary level, basic science and agriculture at elementary and junior high school levels, and the later development of vocational schools for industry, have a good deal to offer. In applying these concepts, most developing countries should place major emphasis on elementary and secondary levels and on pre-vocational basic knowledge and skills. We might also hope that newly-emerging countries could do better than we

have done in relating such training to needs of their own labor markets.

In recent years we have tended to overinflate educational requirements for employment, but are now beginning to balance that tendency with such measures as special training courses for school drop-outs, the high-school equivalent certificate, and job-engineering to bring requirements to a more realistic level. The comprehensive high-school is a further constructive contribution of the American scene. Some developing countries need the application of job-engineering even more than we do, and they cannot afford as well as we can the waste of over-qualification. Also, many of the less-developed countries have more rigid barriers between the academic and vocational tracks than we have had, and are greatly in need of some system resembling the comprehensive high school.

Our various programs of adult and continuing education offer useful models. Integration of women into our secondary and higher education and vocational and technical training is impressive, and could well be emulated abroad. Finally, programmed learning has a good deal to offer overseas, and can be utilized effectively without the type of complex and expensive electronic equipment often associated with the process. It is a truism that the American apprenticeship training approach is too elaborate for developing countries, and takes too long. Also few such countries have the type of trade unions or labor-management relations which make this type of apprenticeship training appropriate. Some of the principles and approaches of our apprenticeship system, however, have definite value and applicability in most countries, in particular, the cooperation between school and shop. More directly exportable are our more informal and shorter-term in-service training programs, for learners, supervisors, and executives.

4. *Manpower distribution and utilization*

It is in the realm of manpower distribution and utilization that the tools and approaches of the American scene have perhaps the most to offer to developing countries. This is not to minimize the limitations and imperfections of our own pro-

grams. While our lack of central planning and national controls mean that we have almost no national manpower planning in the sense it is usually understood internationally, the very fluidity of our job markets is an asset in manpower distribution and utilization. Further, the United States has pioneered a number of basic tools and approaches for increasing occupational, sectoral and geographic mobility of workers in response to the needs of the changing job market. Many of these are exportable, with the usual caveat of appropriate modification and simplification. Among these tools and approaches are the following: (a) occupational classification, job standardization and job evaluation; (b) job market analysis; (c) occupational testing; (d) employment opportunity forecasting; (e) vocational guidance and employment counseling; (f) communication (through both government and commercial facilities) among employers and workers about jobs.

Some modifications are suggested here: occupational classification might better follow some of the precedents established by the International Labor Office, in using less-specialized and more universal occupational titles and descriptions, as well as short-cut approaches to preparing a national classification; job market surveys and analysis would have to be adjusted to the less-fluid nature of markets and to the special needs of rural areas, as well as the general unfamiliarity of employers and workers with the concepts involved; occupational testing should be developed within the framework of local culture and should minimize use of written language; vocational guidance and employment counseling would have to take into account the family system and limited independent choice of individuals.

5. *Summary*

In brief, our manpower policies, programs and tools cannot be exported to developing countries *in toto*, but selected portions of them have considerable relevance when applied with imagination and with sensitivity to local culture.

DISCUSSION

BRUCE HERRICK

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An examination of U.S. experience in manpower programs with an emphasis on the exportability of the same programs to developing countries is indeed a difficult task. Some of the complexities relate to the common problem of transferring techniques from one society to another. But that problem is sufficiently well known, even if the answers are not, that I need not elaborate on it here.

More perplexing to the researcher is relating the different goals set for manpower programs by the U.S. to those set by developing countries. The U.S. programs to date have been aimed at specific groups of workers. These programs, such as MDTA, ARA, and OEO are focused primarily on increasing incomes of groups isolated culturally, occupationally or geographically. Compare this orientation with that of manpower planning as practiced in the developing countries, or more accurately, as they wish they could practice it. Here the primary goal might be characterized as increases in production for the society as a whole. The plans generally deal sweepingly, if not completely convincingly, with global visions of educational reform, complex projections of total labor force availabilities, and concern with the sectoral allocation of the most expensively obtained skills. Of course, many of these same preoccupations are present in the U.S. but they are seldom combined to form guides for legislative or executive action.

Thus at the outset we must recognize that we are likely to be speaking conceptually different languages when we converse with manpower planners from the developing countries. In the U.S., the microeconomic nature of manpower programs, their lack of overt coordination, and the cooperation and support obtained from private industry may have many of the same effects of reforming society and increasing production that are desired in the developing countries. Similarly, the developing countries' programs with their macroeconomic emphasis, explicitly desired coordination, and focus on newly created public institutions may increase incomes of especially poor laborers. But since almost every worker in the developing countries might with some justice be labeled disadvantaged, a

“pockets of poverty” approach is usually and quite correctly disdained there.

A second very general but equally relevant point concerns the evaluation of U.S. programs. We have very little concrete information about the degrees of success enjoyed by these programs, especially those less than a decade old. This lack of knowledge hampers going ahead at full speed with domestic extensions or amplifications of these programs. Thus, clearly, we should be even more cautious when recommending the adoption of half-tested programs in nations whose capability for field experiments in the manpower area is even more limited than our own.

Let me turn now to comment specifically on some of the points contained in McVoy's paper. Our Association's name implies an orientation toward research. At least one desirable characteristic in such endeavors might be empirical testability. Tautology, while perhaps pedagogically or heuristically useful, is not accepted by this criterion.

In this spirit, I submit that the paper is marred by a number of tautologies. We are told that U.S. experience in manpower programs will be relevant to the developing countries “if it is transmitted selectively, with appropriate modifications and perceptiveness, and if it is translated into communicable ideas and techniques.” As it stands, this statement cannot be refuted by any imaginable evidence. Neither researchers nor manpower administrators are likely to find much meat in it. Any program which does not work abroad clearly was not selectively transmitted, or was exported with inappropriate modifications, or was formed in terms of uncommunicable ideas.

In another vein, McVoy approaches incautiously the problem of the relation between wages, production, and inflation. Using a model which is in effect an accelerator model, although he never calls it that, he says, “the concept of building consumer demand, and thereby increased incentives for production is appropriate, when other conditions are not thrown too far out of balance.” The last phrase converts the sentence into a tautology, but I pass on to more substantive and more complex matters. One's first impulse upon reading such a statement is to think about inflation, and we are reminded that “countries beginning from a low economic base and wishing to foster rapid growth will have to tolerate a higher rate

of inflation than we consider desirable." The facts, as documented by the I.M.F.'s *International Financial Statistics*, show that almost every country, developed or underdeveloped, fast growing or slow, is undergoing a rate of price increase that would be politically if not economically disastrous in the United States. Thus for the developing countries, the choice is really not one of fast-growth-with-inflation versus slow-growth-without-inflation.

Furthermore, the use of rapidly rising consumer demand to stimulate increased productive capacity through capital accumulation depends precisely on the response to such a stimulus. On the side of private industry it has frequently been asserted that the private sector in developing countries is fundamentally unresponsive to demand shifts; the pervasiveness of inflation in these countries is thus sometimes explained by the inelasticity of their supply curves. More important, however, is public investment's role in total investment. In most developing countries, public investment makes up half or more of total investment. This large fraction of total investment might be characterized as almost completely unresponsive to growing consumer demand and purchasing power. In short, I think the assumptions that surround the accelerator model vitiate its usefulness in applications to developing countries as we know them today, a hypothesis whose testing I leave to someone who might find further research in the area congenial.

Because of the limitations of time, I've said little about the felicitous features of the paper. To repeat, point by point, all its evident merits would probably be out of place here. It quite properly emphasizes concern for better labor market information, the problem of competent administration of the programs (an even more pressing problem in the developing countries than in the U.S.), and the gains to be made by discarding many of the irrelevant formal education requirements for job entry. The further research potentials in all these areas are obvious and Mr. McVoy has given us a concise account of where many of them lie.

DISCUSSION

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A United States national could reasonably conclude from the three papers before us that we were running a serious net deficit in our manpower programs trade balances. For clearly Mr. McVoy presents a manpower policy "export" menu which is far more limited in scope or content than the Stieber-Reubens roster of desirable manpower programs and practices imports. My own net conclusions would probably coincide with this overview of our international position vis-à-vis manpower programs, but I feel less certain that I would assign the same "high marks" for "imports from abroad" as did Professor Stieber or Mrs. Reubens. In short, I would probably arrive at the same general findings as did McVoy, Stieber and Reubens but would probably come out with a somewhat lesser imbalance in this evaluation of the mutual relevance of domestic and foreign manpower programs.

I would like to include in my comments a few specific and *ad hoc* reactions prompted by this set of papers (although in the interest of conserving some time at the meetings I have given more attention to Mr. McVoy's paper which arrived earliest) and to make a general observation elaborating my own qualification just noted concerning the general conclusion of the papers.

* * * * *

Mr. McVoy's discussion of what is and what is not relevant in United States manpower program and policy experience for developing countries is one with which I find myself in general agreement. It is, to be sure, understandably and necessarily a cursory outline. It is thereby (also necessarily and understandably) in large part a rather general and often less than fully qualified set of evaluations on the exportability of U.S. experience.

Examples:

1. What specific operational translation, for example, can Indian leaders today make of Mr. McVoy's conclusion that the U.S. "pluralistic pattern can be useful to some of the newly emerging

countries, particularly those with large areas and population and a history of diverse local cultures and political polarization?" The general thrust of Mr. McVoy's injunction entails a clear *caveat* against over-centralization or rigidity in planning or control. It is quite clear too, as my friend and colleague Charles Myers pointed out in a recent piece on the exportability of American labor policies, that U.S. labor and manpower policies and approaches are as much a *product* of relative freedom for private interest groups in our pluralistic society as they are a factor contributing to this freedom. Simply to extol the virtues of this interaction, however, fails to underscore the really enormous tasks of slowly bending and adapting any *non-pluralist* heritage of culture, polity, society, or economy.

2. Similarly, Mr. McVoy's general recommendations on education and training are again somewhat excessively comprehensive and inadequately qualified: "Most developing countries," he says, "should place major emphasis on elementary and secondary levels and on prevocational basic knowledge and skills." Also, he cautions earlier in his paper and at several spots against excessive emphasis on higher education and particularly on higher education in the humanities, the arts or the law.

There is little here with which to disagree *en principe*, but in the succinctness of the charge, the gravamen of the point eludes the policy-maker. For the *real* challenge to a nation is, of course, the evolution of a meaningful and effective *strategy* of human resource development related to the economic, cultural and political imperatives facing that nation at a particular point in time. And the concomitant and equally enormous challenge is the integration of such a manpower strategy with the national strategy for general economic development. It is not enough to state that there are many things it would be nice to place emphasis upon or to shun. What *priorities* are to be set, for example, with respect to the balance among primary, secondary and higher education? What balance is to be struck between quality improvement and efficiency on the one hand and expansion of quantity of students or number of schools on the other? What allocation of resources is to be made for formal adult education through a variety of instructional techniques including some of those like agricultural or cooperative extension work noted by Mr. McVoy? How does one reorient specialized training and higher education to yield more subprofessional, technical and professional

people in science and technical fields and away from an overconcentration in humanities, arts and the law?

Beyond my uneasiness about the generality of some of Mr. McVoy's recommendations, there are a number of points made which I feel fail to include the appropriate qualifications and stresses.

Examples:

1. It is reasonable, particularly in the wake of the relatively recent spate of study and discussion preceding and accompanying the passage of the Vocational Education Act of 1965, to question Mr. McVoy's relatively strong stress on the historical success of American vocational education. I would similarly want to qualify his underscoring of American apprenticeship programs as the model for the world at large.

2. I would also question his failure to append a strong qualification to the recommendation for expansion of consumption expenditure in his general discussion of development strategies. Mr. McVoy is, I am certain, aware of the *conflicting* claims of economic development between required increased savings and capital formation on the one hand and workers' demands for immediate wages and benefits and consumption gains on the other. Clearly, higher wages or increased consumption expenditures may yield *some* improved productivity, but this band of policy is indeed a more difficult one to traverse than is suggested in Mr. McVoy's terse recommendation for "consumption now."

There is a cautionary note in Mr. McVoy's brief appendage to this recommendation for building consumer demand as an appropriate approach to productivity and full employment. He suggests this approach but only "when other conditions are not thrown too far out of balance."

Mr. McVoy's listing of exportables when it really gets specific is fine. His two paragraphs, for example, on the propriety of American tools and technical know-how and approaches in the realm of manpower distribution and utilization are clearly put and condense a number of valid points. An elaboration of these sections would, I am certain, be very valuable and operationally interesting.

In short, there is no debating Mr. McVoy's general conclusion that "our manpower policies, programs and tools cannot be exported to developing countries *in toto*, but selected portions of them have

considerable relevance when applied with imagination and with sensitivity to local culture.”

But this only tells us that it is crucial for policy-makers and their consultants to put their fingers on the imaginative and the sensitive and on the proper balance between a policy's application and “other conditions.” The results of all this are indeterminate for as Professor Fellner was wont to stress in his own inimitable injunction on effective policy-making: “Good results will of course depend only on how good is your finger.”

* * * * *

The Stieber and Reubens papers are up-dated versions of the now quite general consensus on the need for a broad strategy of creating and maintaining generally high levels of expenditures to employ more people. They include as well the increasingly familiar encomia to the relative wisdom of western Europeans in devising and administering *selective* expenditure programs and manpower policies dealing with the training, retraining, rehabilitation, placement and general sustenance and support of specific, variously disadvantaged and hence hard-to-place persons.

Again, there are a number of occasional points that are individually sticky. I have time only to illustrate here. I wonder, for example, whether Stieber's proposal to export 10,000 unskilled workers to western European labor markets is really a serious or feasible proposal; and I question the long-run desirability of Mrs. Reubens's implied recommendations that we exhort employers, public or private, to take on or to keep more workers than they need.

But surely these portraits of the policy balance are reasonable in the main and they do underline opportunities for revision in U.S. manpower policies. I do feel, however, that despite the occasional recognition that “law and practice are not always identical,” the gloss and the patina may be just a bit overdone.

The western Europeans may be all *that* good and we all that much poorer, but I don't think the evidence is really in. What we do need and are now beginning to get are serious and solid studies of *both* U.S. and foreign manpower experience. To date, there have been even more flash in the pan, “quickie” quasi-scholarly projects precipitated by the urgency of action-now oriented policy-makers than there were quickie flash in the pan policies proposed. But we have also begun accumulating some serious task force and individual

studies and there will continue to emerge some solid research programs to help us better understand and assess the proprieties and improprieties, the effectiveness and ineffectiveness of manpower programs—here and abroad. Both Stieber and Reubens might, for example, have added one further concluding point to their paeans to western Europe—a conclusion which is the standard, indeed the traditional qualifier of proceedings papers: the recognized need for more and more thorough study if we are to judge the more wisely in shaping manpower policy and practice.

DISCUSSION

SYLVIA OSTRY

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A few weeks ago the Dominion Bureau of Statistics received, after an understandable delay, two letters—one addressed to the Bureau of Labor Statistics, Government of Canada, Ottawa, and the other to the Bureau of the Census, Government of Canada, Ottawa. This occasioned some initial amusement which was, however, soon replaced by a more reflective appraisal. After all, it was pointed out, since we have borrowed so much of our statistical system from the U.S. a layman could hardly be blamed too severely for assuming we had also borrowed the names of two of the major statistical agencies in Washington.

For reasons too obvious to elaborate here it has been and is rational and efficient for Canada to borrow heavily in the statistical, as in other “technological” fields, from the United States. The term “borrow” should not suggest, however, that programs and methods have been simple duplications in Canada of American systems. They have been adapted, revised (and sometimes even improved!) in the process of satisfying Canadian needs under Canadian conditions. But the fact remains that much of the *developmental* work underlying the evolution of the Canadian statistical system in the past 25 years or more has taken place in the United States.

In this historical context our Job Vacancy Survey, which the D.B.S. is presently undertaking on behalf of the Department of Manpower and Immigration, is somewhat atypical. As a result of circumstances, both economic and political, in both countries, Canada has initiated a national job vacancy survey and the United States has not. Thus while we benefitted greatly, in the early stages of our developmental activity, from the U.S. experiments up to the end of 1965, our major efforts in launching a national survey in the past year have of necessity been carried out with little or no reference to the ongoing American experimental programme (which may turn out to have been a mistake!) It is extremely difficult, within the confines of a brief discussion paper, to describe even the broad outlines of a survey which is, without doubt, among the most complex ever undertaken by the D.B.S. It is even more difficult,

in the absence of such a description, to analyze the importance and significance of the U.S. contribution to the Survey. All I can hope to do is review a few of the more important aspects of the Canadian job vacancy definition and survey design to illustrate the relevance of the U.S. experience in its evolution. Before proceeding, however, I must stress that there are a number of difficult conceptual, technical and operational problems still to be solved and we regard the first year of the survey's operation as essentially experimental, in the sense that modifications of any or all aspects will be made as and when dictated by an evaluation of the results of each survey cycle.

Definition

The first stage of the Canadian developmental programme consisted of a pilot experimental survey in seven Ontario communities in the summer of 1966. The definition of current vacancies, by two categories of duration, which appeared on the mail questionnaire, was taken from the B.L.S.-B.E.S. schedule used for their 1965 experiments. Analysis of the results of the follow-up interview survey (also adapted from the B.L.S. Response Analysis design) revealed two "soft spots" in the definition which gave rise to very considerable response error. One concerned vacancies for easily-filled jobs (i.e. surplus labour jobs) which could be called "instant vacancies." The other, at the opposite end of the market spectrum, involved "shortage" or hard-to-fill vacancies of long duration. As a consequence of the Pilot experience two changes were made in the definition. The first, and minor alteration, was to establish a minimum duration (24 hours) criterion. The second, and more important was to elaborate more fully and more stringently the activity criterion. In both the redesigned mail questionnaire and the interview phase definition focuses strongly on activity so as to exclude all vacancies for which no recruiting action has been taken within a specified period of time (4 weeks) preceding the reference date. In the case of long-duration vacancies this stringent criterion, strictly applied, does not always accord with the more subjective criteria used by employers to define "hard-to-fill" jobs. However, the estimates of long-duration vacancies thus derived are, for this reason, expected to be more stable. (The parallels with the unemployment measure—especially the "inactive seeker" problem—are obvious). It should be noted too that the survey also covers "future starting

date" vacancies¹—those for which employers are presently recruiting staff to start work at some specified later date—and for these the stress on the activity criterion helps reduce another type of response error, the inclusion of short-term forecast vacancies.

Survey Design

The job vacancy survey is a three phase operation of which the first phase is essentially non-recurring (as I will explain shortly) while the latter two phases recur in regular bi-monthly cycles. The data output are in the form of three-month moving averages and at full operation the survey will yield statistically reliable estimates for a data matrix of approximately 1000 cells. The survey design provides for two fully computerized subsystems; one for master file maintenance and sample selection and the other for data processing. The latter system will enable the user to specify any two or three way cross-classification of job vacancies, for which the necessary identification has been read into the records, at any desired level of aggregation within the overall constraint defined by the sample size. The characteristics identifying the various categories of job vacancies are occupation, location, industry and size of firm.

The first phase of the survey we have called the "profile." The "profile" phase is confined to multi-establishment firms and to large single establishments. Our pilot experience and subsequent small-scale testing suggested that in this sector a major source of response error in a Job Vacancy survey was the absence of appropriate records plus the dispersion of the hiring and personnel function along occupational and/or geographic lines. In order to minimize response error in the mail survey—and to maximize the effectiveness of the subsequent interview phase—it was decided to conduct a "profile" survey of such firms to determine the response points, i.e. the portion of the firm defined both occupationally and/or geographically, for which current recruiting information was available. These response points we have called Job Vacancy Reporting Units or JVRU's. Our sample population, then, is made up not of firms or establishments, but of JVRU's which will aggregate to a firm or enterprise but (except for large singles) not to an establishment. (The JVRU for small singles is, of course, the establishment.) The profile phase

¹ These vacancies were not included in the Pilot Survey but were added to the redesigned mail questionnaire as a consequence of the Pilot experience and after discussions with B. L. S. and the National Industrial Conference Board.

is, as I have said, essentially nonrecurring although a system of regular updating, for maintenance of the master file, will be incorporated into the ongoing operation. The decision to adopt the JVRU as a basic unit in the survey had important implications for questionnaire design, respondent reception, data output, etc. which, however, I am unable to detail here.

As has already been implied, the ongoing survey will consist of two-phase, bi-monthly cycles, consisting of a first-phase mail sample of JVRU's, a subsample of which is interviewed in the second phase. The interview survey is designed to increase the reliability of final estimates through the correction of response error and the direct estimation of vacancies for non-respondents of the mail phase. Moreover, a very important determinant of the basic two-phase design was the consideration that the interview phase will provide a unique and potentially very valuable survey capacity which will be used periodically to collect a variety of information on the labor market activity of enterprises in much the same way as the monthly labour force survey is used with respect to the activity of individuals and households.

The relevance of the United State's experience to the present Canadian Survey Design is very difficult for me to assess. Thus the germ of the idea of the Profile Phase, which so far as I know has never been considered in any of your government or private surveys in this field, stemmed from our evaluation and interpretation of our Pilot Survey results—but our Pilot Survey was based on the first round of the American experimental programme. The two-phase design has evolved from the Response Analysis Survey of B.L.S. but in the process of evolution has changed in many fundamental respects while the Response Analysis Surveys have, I understand, been dropped in recent U.S. experiments. These examples might be multiplied but for the time available. Clearly no precise weight, labelled U.S. contribution, can be attached to this or that aspect of the overall design. Our debt to the U.S., in this as in other statistical areas, has been a heavy one. A special combination of circumstances in the case of this survey has enabled us to mount a large-scale development programme before such programmes have developed in the U.S. and elsewhere. Thus we are learning more from our own experience—and our own mistakes—instead of yours, for a change!

DISCUSSION

MEREDITH B. GIVENS

Washington, D.C.

There is no doubt that many critical difficulties which obstruct national and international efforts to accelerate the development of poor countries are connected with the manpower and human resources dimensions of these problems. My comments on these matters are mainly supplemental to Mr. McVoy's paper, since I agree with his basic general analysis.

It is important that developing countries should learn from U.S. failures as well as from our successes. They should learn to identify contrasts between our history and accomplishments and their problems in any attempts to adapt our experience to their own.

In the case of vocational education, for example, these countries need to carry the cooperative idea much further than we have, avoiding costly commitments to expensive schools and over-deliberate apprenticeship procedures, building closer linkages between formal schooling and work experience, and between training and actual employment. These countries cannot afford to concentrate secondary school programs primarily on preparation for college and university, certainly not as most of them do, and far less than we can afford to do.

There is great need for effective terminal school programs at intermediate levels—an area in which the United States has not been notably successful. School dropouts must be assets not liabilities, and in this context the experience in our poverty programs should be watched.

Great care should be taken in new and developing countries to avoid premature and emulative adoption of social security schemes when the economic and employment base and the state of administrative know-how are insufficient. New and different concepts of "employment services" should be substituted for the western models which traditionally have stressed reduction of the lag between jobs in dynamic labor markets. Perhaps more attention in this area should be given to European experience, and to countries where a far more unified overall manpower organization has been achieved than we have attempted or found necessary. In some developing countries

there is a fairly close administrative relationship between industrial training and employment services—which would have been desirable in the United States at earlier stages.

In the area of international participant training I believe recipient and aid-giving countries should work together in giving far more attention to the cost-benefit dimension, especially by means of systematic and intensive accumulation and analysis of individual work histories to determine the final pay-off in utilization and productive employment, to identify wastages and their causes, and generally to tighten upon the scrutiny of relationships between education and training and national development.

While avoiding both irrelevancies and mistakes in western experience, societies which seek to accelerate social and economic development should be helped to utilize our special strengths—notably, for example, in the application of American research methods at their best, but in innovative and imaginative ways which are geared to their own problems. I do not share a conservative view of the application of sample survey techniques in developing countries, as I am convinced that these methodologies have a special relevance where they can be substituted for more expensive (and less exact) attempts at comprehensive enumeration and reporting. As for statistics of employment, earnings and production for employing establishments, these have a special importance for even small-scale modernizing sectors, both public and private, in measuring growth rates and employment potentials on a continuing basis from early stages through periods of expansion.

In agricultural development and in the field of management, where American success is pre-eminent, much greater effort should be given to achieve more useful techniques for effective transfer under prevailing conditions in developing societies, through education and training, communications media, and especially through participant demonstration activities in projects and programs which attain positive and visible results.

Perhaps most important, there are vital attributes of our open and pluralistic society which have particular relevance to the needs of developing countries. Flexibility and interchangeability of skills and training in fluid and mobile labor markets in the environment of changing occupations and technologies are characteristics of the American scene which need to be understood and interpreted in

new or backward countries which are entering an era of accelerating change. The spontaneous functional organizations of an open society—professional, business and labor organizations and the innumerable membership groups in civic, cultural and welfare fields—are patterns in social behavior with vast creative potential for stimulation of popular participation in widening communal life. In this context particular mention should be made of the role of women in an open society—in education, in productive and gainful employment, and in community and public affairs as well as within the family, in step with the growing significance of middle classes in developing countries.

Finally, mention may be made of the growing western application of the “systems approach” to problem solving and decision making, rather than the fragmentation of planning and programming and the prevalent compartmentalization of effort among agencies and programs especially in the tradition-bound and status-oriented societies.

CONCLUDING REMARKS

SOLOMON BARKIN

University of Massachusetts

Our national debt to Europe in the development of public manpower goals, policies and modes of administration is immeasurable. We have borrowed and adapted their innovations and techniques because we have only belatedly undertaken public measures both to correct the failings in the operation of our labor market and to realize recent public goals.

In the early post-war years we made distinctive contributions primarily in the fields of statistics and administration and shortly thereafter began to export these experiences and results to developing countries. Unfortunately, these offerings have not always been appropriate for the receiving peoples. American initiatives in the manpower field in the last seven years are too little known in advanced industrial countries and too recent to have produced transferable results. However, the new directions are sufficiently distinctive so that other countries should follow them closely.

The export of American experience and know-how has taken place first through non-directed means such as printed literature or the findings collected by visitors to this country. Mrs. Sylvia Ostrey's paper illustrates the influence of American research and discussion in stimulating the Canadian government to initiate a program for the collection of statistics on job vacancies before the United States had adopted one. The second method of transmission has been through directed efforts such as the preparation of special reports by official or unofficial American groups for use abroad, technical assistance or organized visits of foreigners to the United States. Mr. Edgar C. McVoy's organization is particularly relevant since it operates a school for labor department officials of other countries, particularly in the developing category, in which American manpower experience is presented and discussed in detail.

McVoy's paper and three of the commentators appraised the usefulness of American advances in the manpower field for developing countries. They agreed with the broad conclusion that "our

manpower policies, programs and tools cannot be exported to developing countries *in toto*, but selected portions of them have considerable relevance when applied with imagination and with sensitivity to local culture." But this generality is of limited usefulness if there are no precise definitions and evaluations of the individual items to be transferred. No such all embracing critical presentation is as yet available for the manpower field. It is sorely needed particularly as the manpower and labor authorities in developing countries have been overwhelmed, confused and led to make serious errors as a result of the profusion of recommendations produced by the changing fads, and emphasis in approaches and nostrums offered by experts received from different international agencies and countries. The overriding inclination has been for experts to offer their national experience whether it is appropriate or not.

The enthusiasm for European experience and innovations has been met by skepticism and opposition. In this country where ideas, tools or programs have been considered, they have been substantially modified so as to take on a new character. On the whole most of what we can learn from Europe in this field dates back to former eras since there have been few recent innovations except in Sweden. It is only now under the pressure of changing industrial structures, appearance of unemployment, and the work of the OECD Manpower and Social Affairs Committee that the countries are reexamining their manpower systems and programs for their usefulness in serving an expanding economy.

The governments of several European countries have made definite commitments to help individuals adjust to changing economic tides. This principle is only now being adopted and cautiously implemented in the United States. We can learn much about the degree of commitment which can be effectively made though only a limited number of the techniques developed in these lands will be directly transferable to this country. Among the areas where more recent innovations will have much to offer are seasonal stabilization of employment in the construction industry; adjustment of the rural population in industry and urban areas; area and regional redevelopment; financial aids to geographical mobility; and enterprise manpower projections. Probably the greatest lesson which can be relearned from Europe is that in periods of full employment, the prob-

lems of hard-to-place groups are diminished and become amenable to cooperative constructive handling by the public and enterprise authorities.

The two papers by Mrs. Beatrice Reuben and Mr. Jack Stieber reflect the judgments on practices to be considered in the United States based on their studies abroad. Others have also acquired considerable insight and experience by serving in international agencies. The documents published by the latter organizations are becoming an increasingly important fount of knowledge and analysis, in which efforts are often made to define the types of experience which could be easily transferred to specific types of countries. Many foreigners are visiting our country and their observations and analysis of their own country's experience particularly in relation to our problems can be most helpful.

One cannot but agree with Mr. Abraham Siegel that many appraisals of foreign experience in this field result from "‘quickie’ quasi-scholarly projects" which produce hasty conclusions, lacking adequate background in the economic political and social setting of the regions on which they are reporting. Particularly as the United States is innovating and administering public and enterprise programs in this field to promote specific goals, it is important that foreign programs and experience be described precisely and evaluated carefully. The international organizations like the ILO and the OECD have in particular a real responsibility for using their resources effectively to present accurate analytical comparative reports on the overall and specific manpower policies, programs and organizational techniques. The former should revitalize its own studies and interest in manpower programs in the advanced industrial countries.

X

INVITED PAPERS

THE SUPPLY OF SELF-EMPLOYED, A STUDY OF RETAIL MANAGERS

IRVING LEVESON *

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INTRODUCTION

Large declines have taken place since the turn of the century in the proportion of nonfarm employed persons in self-employment, particularly in managerial occupations. These changes raise important questions about the availability of opportunities for disadvantaged groups, training needs, the competitiveness of industry, the distribution of income, and the nature of work. In order to assess whether these declines require public attention and to anticipate future changes, it is useful to determine whether changes have taken place because of a shift in supply or a movement along a supply curve. In order to show that such large declines could have occurred by means of a movement along a supply curve, it must be demonstrated that persons shift readily between self-employment and salaried employment in response to changes in opportunities.

* Research Economist, New York City Health Services Administration. This study was conducted at the National Bureau of Economic Research. The author wishes to thank the Ford Foundation, the National Bureau of Economic Research, and Columbia University for their support. The findings reported herein have not yet undergone the full critical review accorded the National Bureau's studies and are therefore to be considered solely the views of the author. The comments and suggestions of Victor R. Fuchs and Jacob Mincer are greatly appreciated. Thanks are also due Charlotte Boschan for her programming efforts.

Data used in this paper are derived from a 0.1 per cent sample of the population of the United States, provided by the Census Bureau and the Population Council, neither of which assumes any responsibility for their validity.

Earnings of the self-employed are examined and a supply curve estimated by multiple regression analysis across city sizes and regions. Use is made of new information from the *1960 Census of Population* one-in-a-thousand sample.

The choice of retail managers for detailed study was based on a number of considerations. One-eighth of all nonagricultural self-employed are managers in retail trade. Their behavior may be representative of workers in managerial occupations in other industries or of salesmen and other non-managerial self-employed in retailing. Knowledge of behavior of managers is particularly relevant for understanding determination of the number of firms.

THE SAMPLE

The *1960 Census of Population* one-in-a-thousand sample provides a wide variety of information in a form which enables extensive cross-classification. The sample includes 766 observations for the self-employed at work and 639 for salaried managers. The analysis was restricted to white males in order to eliminate the effects of color and sex on patterns of behavior.

Data on the number of weeks worked and earnings was provided for the year 1959. Information on employment status, class of worker, and the number of hours worked per week was available for a single week during April 1960.¹

The sample sizes and per cent self-employed by city size and region are shown in Table 1. There is a clear tendency for per cent self-employed to be lowest Standard Metropolitan Statistical Areas (SMSA's).

SOURCE OF DIFFERENCES IN EARNINGS BETWEEN SELF-EMPLOYED AND SALARIED MANAGERS

Hours of Work

The average number of weeks worked per year is 50 for both self-employed and salaried managers. The self-employed work a greater number of hours per week, 55 compared to 50, resulting in annual hours of 2,800 and 2,500 respectively. Work weeks for the self-employed are larger in smaller SMSA's and outside SMSA's,

¹ For a discussion of the procedures used and the validity of the data, see Irving Leveson, "Nonfarm Self-Employment in the U.S.," unpublished Ph.D. dissertation, Columbia University, January, 1968.

TABLE 1

Self-Employed as a Per Cent of All Employed White Male Retail Managers, by City Size and Region, 1960

		Number of Self- Employed	Number Salaried	Total Number	Per Cent Self- Employed
Outside SMSA :	NE	47	29	76	61.9%
	NC	100	67	167	59.9
	S	137	74	211	64.9
	W	42	27	69	60.9
SMSA under 1 million :	NE	52	35	87	59.8
	NC	50	42	92	54.3
	S	84	68	152	55.3
	W	40	49	89	44.9
SMSA of 1 million or more :	NE	80	106	186	43.0
	NC	63	57	120	52.5
	S	27	34	61	44.3
	W	44	51	95	46.3
Total		766	639	1,405	54.7%

Source: 1/1000 sample.

where store sizes are smaller than in large SMSA's, but this is not so for salaried managers.

The differences in hours within the occupation are small compared to the difference of 20 per cent for all nonfarm occupations combined. The self-employed would have to be compensated more than 10 per cent more for the higher hours if there is an increasing marginal disutility of work. However, they would be compensated less for either voluntary or involuntary idle time. We will assume that the additional compensation required is in proportion to the difference in hours.

Skill

If there are large differences in skill between self-employed and salaried workers, they may represent non-competing groups. This is likely to be far less important here than for professionals. Information on skill will be used in later comparisons of actual earnings. To some extent, skill variations are already limited by considering a particular occupation, industry, color, and sex group.

The most readily available indicators of skill are age and edu-

cation. The self-employed are somewhat older and have less formal education than the salaried managers as a whole. In order to evaluate differences in characteristics, taking into account their joint distributions, the measure "expected" hourly earnings, developed by Victor Fuchs,² is used. "Expected" earnings is the hourly earnings that would prevail if all persons in a group had the same hourly earnings as all nonagricultural employed persons of the same color, age, sex, and education.

"Expected" hourly earnings of all self-employed retail managers were \$2.89 in 1959 compared to \$3.02 for salaried managers. These are shown in Table 2 along with actual hourly earnings. There is little variation in "expected" hourly earnings by city size and region for either class of worker group and little difference by class of worker in each city size and region. Skill differences by class of worker within the occupation do not seem to be very large. While no strong geographic pattern exists for either class of worker, "expected" hourly earnings of the self-employed may be positively associated with those of salaried managers. The zero order correlation coefficient is .45. This may be the result of either common skill requirements or availability of skills in some areas.

Another possible measure of skill is nativity. The foreign-born may either earn less than expected because of discrimination or earn more, if immigrants were among those with more ability and initiative. Among retail managers, both self-employed and salaried managers who were foreign-born have higher actual earnings relative to "expected" earnings than others, to a much greater extent than implied by geographic distribution. Self-employed managers with both parents foreign-born also have high earnings for their age and education. While these comparisons are subject to large sampling variability, the relatively high ratio of actual to "expected" earnings for the foreign born self-employed managers is consistent with data for all foreign born self-employed.

"Expected" earnings may understate the skill of salaried managers relative to self-employed managers. At any educational level, since salaried managers are younger and have attended school more recently, they will have received more advanced knowledge and

² *Differentials in Hourly Earnings by Region and City Size, 1959* (Occasional Paper No. 101), New York: National Bureau of Economic Research, August 1966.

TABLE 2
Actual and "Expected" Hourly Earnings, White Male Retail Managers, by
Class of Worker, by City Size and Region, 1959

		Self-Employed		Salaried	
		Actual Hourly Earnings	"Expected" Hourly Earnings	Actual Hourly Earnings	"Expected" Hourly Earnings
Outside SMSA :					
	NE	\$2.37 (.34)	\$3.10 (.11)	\$2.74 (.37)	\$3.15 (.17)
	NC	2.69 (.32)	3.03 (.07)	2.40 (.20)	2.90 (.10)
	S	1.96 (.18)	2.90 (.06)	1.90 (.13)	2.89 (.08)
	W	7.88 (.17)	2.98 (.09)	2.37 (.17)	2.60 (.11)
SMSA under 1 million :					
	NE	2.35 (.32)	2.79 (.09)	2.66 (.22)	2.96 (.10)
	NC	2.84 (.31)	3.20 (.12)	3.42 (.44)	3.12 (.14)
	S	2.33 (.39)	2.78 (.06)	3.25 (.34)	2.96 (.09)
	W	3.39 (.57)	3.12 (.12)	3.54 (.35)	3.12 (.11)
SMSA of 1 million or more :					
	NE	2.30 (.17)	2.98 (.07)	3.22 (.20)	3.09 (.09)
	NC	3.74 .53	2.88 (.09)	3.48 (.24)	3.09 (.11)
	S	3.28 .44	3.09 (.14)	2.56 (.22)	2.92 (.12)
	W	4.06 (.73)	3.17 (.13)	3.60 (.26)	3.22 (.10)

Note: Standard errors are in parentheses.

Source: 1/1000 sample.

attended school for a greater number of days per year. Also, since they are employed in larger firms they supervise more people. The magnitude and direction of unmeasured skill on earnings differences is uncertain.

Other Sources

Annual earnings of self-employed and salaried managers are similar. The former earned \$6,600 in 1959 while the latter earned \$7,200. Differences in hourly earnings are more sizeable, \$2.41 compared to \$2.86. Only \$.13 of the \$.45 differential is explained by the greater "expected" hourly earnings of the salaried managers.

If allowance were made for the inclusion of returns to capital in the earnings of the self-employed, the relative hourly earnings of self-employed retail managers would be much lower. Exclusion of the returns to the labor of unpaid family workers would further widen the gap.

There are several possible explanations of the low relative earnings of retail managers. Those who enter self-employment may have entered because they had poorer alternatives than salaried managers of the same age and education. In view of the much lower actual hourly earnings relative to "expected" hourly earnings of self-employed managers in retail trade than for self-employed managers in other industries,³ it is possible that the poorest quality self-employed managers gravitate into retail trade. This hypothesis is supported by their relatively low measured quality, and is consistent with information for all workers in retail trade. Differences in geographic distribution do not contribute much to the difference in earnings by class of worker. If salaried managers had the same distribution of man-hours by city size and region as the self-employed but their own hourly earnings in each geographic unit, their average hourly earnings would be lower by only \$.06. Underreporting may contribute to the low earnings of self-employed managers. Psychic income may be important but we cannot empirically distinguish it from underreporting.

THE SUPPLY OF SELF-EMPLOYED

Conditions are favorable to identification of a relative supply curve of self-employed in geographic comparisons of per cent self-employed. In identifying a supply curve, we would like to have its position fixed while the variation of the demand curve traces out the function. This situation is likely to be approximated in examination of the variation of the relative number of self-employed and salaried retail managers across city sizes and regions. Variability of self-employment opportunities reflects variation in the optimum size distribution of firms in response to geographic differences in income, urbanization, automobile usage and other factors. David Schwartzman in his unpublished N.B.E.R. study of productivity in retail trade has shown that such factors significantly affect firm size variation across SMSA's.

³ Irving Leveson, *op. cit.*, Chapter IV.

*Foregone Earnings of Self-Employed Managers
Relative to Salaried Managers*

It is not possible to measure the difference in earnings between self-employed and salaried managers directly because of the inclusion of returns to capital in earnings of the self-employed. Firm sizes are larger in large cities, and since capital per proprietor (and perhaps also the appropriate rate of return) is likely to be greater in large firms, the difference between earnings of self-employed and salaried managers tends to be negatively related to the per cent self-employed.⁴

An alternative is to measure opportunities of the self-employed by earnings of salaried managers alone. If the returns to labor of the self-employed do not vary systematically with city size, which would be consistent with a lack of a relationship between city size and their "expected" earnings, the difference in earnings between self-employed and salaried managers may be systematically related to the earnings of salaried managers. Earnings of salaried managers may also be positively linearly related to the difference between self-employed and salaried managers in returns to labor if the returns of the former rise less rapidly with city size than those of the latter. The indirect measurement of the difference is crucial to the subsequent analysis.

In order to allow for variation in skill levels, rather than use average hourly earnings, the difference between actual and "expected" hourly earnings is used. The variable is shown in Table 3 along with the other supply variables.⁵ The zero order correlation with per cent self-employed of -0.65 is highly significant.

Foregone Earnings Relative to the Community

To test whether opportunities in other occupations and industries have a differential effect on self-employed and salaried retail managers, we examine the difference in hourly earnings between

⁴ Average hourly earnings of self-employed managers rise with city size faster than earnings of salaried managers, even though expected hourly earnings do not rise with city size for the self-employed and do for salaried managers. The rise in earnings cannot be due to variation in per cent foreign born because the per cent foreign born varies a maximum of 16 percentage points across city sizes and variation in earnings by nativity status is relatively small.

⁵ Measures in money terms may in part reflect price variation, "but intercity differences in the cost of living appear to be small relative to differences in hourly earnings." Fuchs, *op. cit.*, p. 34.

TABLE 3
Independent Variables in the Supply of Self-Employed

	Actual Minus "Expected" Hourly Earnings of Salaried Managers	Difference Between Hourly Earnings of Salaried Managers and All Nonagricultural White Males	Average Income of All Retail Managers	Difference in Annual Variability	Difference in Hourly Variability
Outside SMSA :					
NE	-\$.41	-\$.16	\$6,729	1,158	.37
NC	- .50	- .18	6,760	683	.40
S	- .99	- .42	5,661	870	.27
W	- .23	.03	5,749	353	.10
SMSA under 1 million:					
NE	- .30	- .19	6,899	1,086	.31
NC	.30	.15	8,490	- 1,405	- .29
S	.29	.43	7,476	90	.17
W	.42	.48	8,581	- 115	.14
SMSA of 1 million or more:					
NE	.13	- .14	7,007	- 177	- .02
NC	.39	- .07	8,978	1,021	.68
S	- .36	- .56	7,008	1,121	.45
W	.38	- .02	9,759	1,042	.62

Source: 1/1000 sample.

salaried retail managers and all white males employed in nonagricultural industries, adjusted for skill differences by subtracting the difference in "expected" earnings. The zero order correlation coefficient between the measure of foregone earnings relative to the community and per cent self-employed across city size and region is .17. The relationship is not statistically significant. The sign of the correlation coefficient implies that the self-employed move more readily into alternative opportunities than do salaried managers.

Income

The effect of income on the supply of self-employed is also examined. To the extent psychic income is greater than elsewhere, the sign of the coefficient will indicate whether the income elasticity for that type of consumption is greater than or less than one. The measure used is the average income, including property income, of all retail managers. The zero order correlation coefficient with per cent self-employed is $-.60$. However, income is positively correlated with hourly earnings of salaried managers.

Variability of Earnings

If incomes of the self-employed are more variable than wage and salary workers, this may attract or deter entry into self-employment. In order to remove variability introduced by differences in characteristics of workers, the standard deviation of the ratio of actual to "expected" earnings is used. A question arises as to whether the variability of annual or hourly earnings is appropriate. If differences in hours variability between city size-region cells represent voluntary idle time spent at work or measurement error, variability in annual earnings should be used. Both the standard deviation of the ratio of actual hourly to "expected" hourly earnings and the standard deviation of the ratio of actual annual to "expected" hourly earnings are used, since the source of differences in hours is uncertain. (The latter will be referred to as annual variability.) Earnings of the self-employed are clearly more variable across individuals than earnings of salaried managers, even after adjusting for age-education composition as is seen in Table 3. The correlation coefficient between the difference between self-employed and salaried managers in hourly variability and the difference in annual variability is .89.

Not only must variation in the characteristics be considered, but also variation associated with the characteristics. It has often been observed that earnings variability across individuals increases with age.⁶ Since the self-employed are older than wage and salary workers we would expect the difference in standard deviations between the two class of worker groups to be influenced by the age composition of each group. However, inspection of the standard deviations for salaried managers by age (which are not affected much by capital) reveals that little increase in earnings variability with age remains after removal of the effects of variations in educational composition. Also, hours variation has little effect on differences in the variability of annual earnings by age.

Capital is a major source of earnings variability for the self-employed. If capital is greater where stores are large and self-employment less prevalent, this could introduce a negative relationship between variability of earnings and per cent self-employed. Reporting error undoubtedly introduces variation in earnings. If

⁶ For example see Gary S. Becker, *Human Capital*. New York: National Bureau of Economic Research, 1964, pp. 104-5.

TABLE 4
 Linear Regressions of Variables in the Supply of Self-Employed Against Per Cent Self-Employed Across City Size and Region, White Male Retail Managers, 1960

	\bar{r}^2	Constant Term	Actual Minus "Expected" Hourly Earnings of Salaried Managers	Difference Between Hourly Earnings of Salaried Managers and All Nonagricultural White Males	Average Income of All Retail Managers (hundreds of dollars)	Difference in Annual Variability (hundreds)	Difference in Hourly Variability
Eq. 1: b		53.49*	-18.77*	15.99*			
S _b		(1.57)	(5.12)	(7.66)			
t		34.08	- 3.67	2.09			
β			- 1.10	.63			
partial R	.52		- .77	.57			
Eq. 2: b		47.28*	-21.01*	18.14	.08	.08	
S _b		(22.04)	(10.60)	(9.86)	(.29)	(.30)	
t		2.15	- 1.98	1.84	.26	.27	
β			- 1.23	.71	.13	.08	
partial R	.40		- .60	.57	.10	.10	
Eq. 3: b		49.65*	-20.63*	18.32	.04		3.18
S _b		(23.50)	(10.62)	(9.71)	(.32)		(8.46)
t		2.11	- 1.94	1.89	.12		.38
β			- 1.21	.72	.07		.11
partial R	.41		- .59	.58	.05		.15
Simple R			- .65	- .17	- .60	.20	- .02

* Significant at the .05 level in a one tail test.

Source: 1/1000 sample.

it is greater where firm sizes are small and records more poorly kept, this would produce a positive relationship between the difference between self-employed and salaried managers in per cent self-employed. The zero order correlation coefficient between per cent self-employed and the difference in standard deviations of the ratio of actual to "expected" hourly earnings between self-employed and wage and salary workers is $-.02$. When the difference in annual variability is used the correlation is $.20$. Neither is statistically significant.

The Supply Curve

The results of a multiple regression analysis across city size and region are presented in Table 4. A significant part of the geographic variation in per cent self-employed is explained by the independent variables. There is a statistically significant tendency for persons to remain in salaried status when the earnings of salaried managers are high. The beta coefficient of -1.10 in equation 1 indicates this has a large effect on the per cent self-employed. There is also a significant relationship between per cent self-employed and foregone earnings relative to the nonagricultural economy. This indicates that the self-employed shift industries more readily than salaried managers. Income has no significant effect on per cent self-employed. Since variability may not be measured accurately, it is reassuring that the results on opportunity costs are little affected by its introduction. There is no significant relationship between earnings variability and per cent self-employed when either measure of variability is used. These results are in sharp contrast with attempts to measure earnings of the self-employed directly. When the per cent self-employed was regressed on the difference in annual earnings, the difference in "expected" hourly earnings, the difference in annual hours, foregone earnings relative to the community, income, and the difference in variability, none of the regression coefficients was as large as its standard error.

SUMMARY

1. Annual hours of the self-employed managers are only 10 per cent greater than salaried managers, all as a result of differences in weekly hours rather than the number of weeks worked per year.

2. Measured skill differences between self-employed and salaried retail managers are not great.

3. Annual earnings of white male self-employed retail managers are below those of salaried managers. Since hours of the self-employed are greater, the difference in hourly earnings is even larger. Measured skill differences and geographic composition do not explain much of the difference in hourly earnings. If returns to capital used in the business and returns to the labor of unpaid family workers were removed, the gap would become much larger. Possible explanations of the difference are that persons with poorer alternatives than salaried managers enter self-employment, that lower than average quality self-employed managers find their way into retailing, that self-employed retail managers earn large amounts of psychic income and that they significantly underreport incomes. Each of these factors may contribute to the explanation of the observed difference.

4. Regression analysis across city size and region suggests that there is a significant and strong tendency for self-employed managers to change to salaried status within their occupation and industry when earning opportunities in salaried status are good.

5. Self-employed retail managers seem to leave their occupation and/or industry much more readily than salaried managers when alternative opportunities are good.

6. There is no significant relationship between the income of managers and the per cent who are self-employed across city size and region.

7. Earnings of self-employed managers are more variable than those of salaried managers, partly due to the inclusion of returns to capital. There is no significant relationship between the difference between self-employed and salaried managers in the variability of earnings and the per cent of retail managers who are self-employed.

These findings imply that it is quite possible that changes over time in the relative number of self-employed as large as observed were in response to changes in opportunities rather than supply shifts. The analysis supports the notion that the number and earnings of the self-employed are largely determined by the usual market processes, even in this atypical case where psychic income may

be present to a significant extent. There has been a tendency in recent literature to treat the self-employed as a group for whom special theories are required. A more correct view is that the main stumbling block to understanding the self-employed has been inadequate information.

EFFECTS OF MASS LAYOFFS ON LOCAL UNEMPLOYMENT RATES *

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Introduction

The "sudden rise" clause of the Public Works and Economic Development Act of 1965 provides for federal assistance to areas where curtailment of productive activity by a major employer has caused, or may reasonably be expected to cause, a significant rise in the unemployment rate of the area.¹ The key phrase of the act states that, upon request, an area may be eligible for designation as a Redevelopment Area if

the loss, removal, curtailment, or closing of a major source of employment has caused . . . or *threatens to cause* within three years . . . an unusual and abrupt rise in unemployment of such magnitude that the unemployment rate for the area at the time of the request exceeds the national average, or can reasonably be expected to exceed the national average by 50 per centum or more unless assistance is provided. (Emphasis added.)

Thus, the exact qualifying criterion is that the local unemployment

* This paper is based on portions of a research project conducted by Kirschner Associates, Inc., Albuquerque, N.M., under contract with the Economic Development Administration, U.S. Department of Commerce. Final evaluation of the product of that research has not been completed, and there is no indication regarding how the results might be used by the sponsoring agency. The authors are indebted to Robert M. Rauner and other Economic Development Administration personnel for their assistance in this study. The conclusions and findings are solely those of the authors and do not necessarily reflect the viewpoints of the Economic Development Administration or any other organization or individual.

Portions of preliminary analyses were reviewed by Sanford Cohen, University of New Mexico; Darwin Daicoff, University of Kansas; Stanley Lebergott, Wesleyan University; and Oscar Ornati, New York University. Professor Cohen, Gilbert Bonem and R. W. Kirschner provided helpful comments on this paper.

¹ Public Works and Economic Development Act of 1965, Sec. 401(a) (4) of Title IV.

rate rise to at least 50 percent above the corresponding national rate; that is, the local unemployment rate as a ratio of the national unemployment rate (hereafter referred to as the Ratio) must be at least 1.50.

This paper is a derivative of a larger study to provide guideline criteria for area designation for the Economic Development Administration (EDA). Such designation is accompanied by Federal assistance to prevent or correct the adverse economic conditions that are hypothesized to accompany mass layoffs. This paper first discusses a method to measure the effects of mass layoffs and, therefore, tests the hypothesis that area assistance is necessary. Secondly, since prevention requires knowledge before the fact, we will discuss a model that can be used for projecting the effects of mass layoffs on the Ratio.

Measuring the Effects of Mass Layoffs

Previous literature was of limited assistance in guiding the approach of this study. Existing studies of the impacts of mass layoffs have concentrated on the level of local employment, regional income, and the experiences of the unemployed rather than on the unemployment rate.² The detailed case study approach was discarded because of the possibility that the selected cases would be influenced by particular experiences and conditions that might or might not be replicated in other areas. Also, the case study approach would provide only a method of analysis. EDA would then be involved in relatively lengthy and costly studies of areas applying for designation.

An alternative to the case study approach is a comparative analysis of a large number of areas that have experienced mass

² For example, see Leonard P. Adams and Robert L. Aronson, *Workers and Industrial Change* (Ithaca, N.Y.: Cornell University Press, 1957); Mary Blanche Fitzpatrick, *Response to Unemployment: Manchester, New Hampshire, 1950-1959* (Boston: Federal Reserve Bank of Boston, Research Report No. 33, 1966); William H. Miernyk, *Inter-Industry Labor Mobility: The Case of the Displaced Textile Worker* (Boston: Northeastern University, 1955); Ian Donald Turner, *The Economic Impact of a Military Installation on the Surrounding Area: A Case Study of Fort Devens and Ayer, Massachusetts* (Boston: Federal Reserve Bank of Boston, Research Report No. 30, 1965); U.S. Arms Control and Disarmament Agency, *Reemployment Experiences of Martin Company Workers Released at Denver, Colorado, 1963-1964* (Washington: Government Printing Office, 1967); and Richard C. Wilcock and Walter H. Franke, *Unwanted Workers: Permanent Layoffs and Long-Term Unemployment* (New York: The Free Press of Glencoe, 1963).

layoffs. This type of analysis does not involve a detailed examination of any of the layoffs, but compares the impacts in the light of general labor supply and demand characteristics. The model that we will describe provides general parameters. These parameters can then be applied to readily available data for each applying area to project the Ratio.

The comparative analysis required identification of a large number of layoffs. From the U.S. Bureau of Employment Security and its affiliated state employment security agencies we obtained detailed histories of local unemployment rates and area employment by industry. Approximately 30 states supplied necessary data. Unemployment rate series were available for approximately 600 labor areas (SMSA, county or multi-county).

Two methods were utilized to identify mass layoffs. The first involved a search of mass layoff reports to the U.S. Department of Labor.⁸ The second involved examining historical trends of employment of industries in each of the local areas. Layoffs were defined to occur when industry employment, ignoring seasonal fluctuations, declined by at least one-half of 1 percent of total local employment and remained depressed for three years.

A total of 128 mass layoffs were identified by these methods. Of these, 36 were excluded from the analysis because of extremely high or low local unemployment rates. Those areas with unemployment rates of 10 percent or more immediately prior to the layoff most likely would be qualified for assistance under another section of the act and, thus, were considered irrelevant for this study. Preliminary examination also revealed that areas with prior unemployment rates of 2.5 percent or lower were unlikely to qualify under any circumstances. Therefore, the areas with unemployment rates between 2.5 percent and 10.0 percent, inclusive, immediately prior to the layoff were incorporated in this study. These 92 layoffs occurred in 19 states in all regions of the country with starting dates ranging from 1951 through 1964; however, only 9 began before 1957. This sample represents all relevant layoffs for which

⁸ Since late 1962, local public employment offices have been responsible for identifying layoffs and reporting them to the U.S. Department of Labor. The "Establishment Report of Mass Layoff" reports actual and impending permanent and temporary nonseasonal layoffs of 100 or more workers. For further discussion of this procedure and a statistical analysis of the layoff reports, see Robert F. Smith, "The Impact of Mass Layoffs, July 1963-June 1965," reprinted from *IRRA Proceedings* (1965).

adequate data could be obtained. The layoffs represent a wide diversity of industries, states, and areas. They include 68 in manufacturing and 24 in mining and transportation services. The size of the labor force of the areas ranges from about 2,000 to more than 2.5 million.

To measure layoff impacts we calculated for each of the 92 areas running average 12-month unemployment rates—e.g., January 1960 through December 1960, February 1960 through January 1961, etc.—covering 1 year prior to and 3 years following the start of the layoff. These local rates were divided by the corresponding national rates to obtain the Ratio for each of the 12-month periods. The 12-month period was chosen for two reasons. First, EDA assistance is for the purpose, as implied in the Public Works and Economic Development Act of 1965, of preventing or correcting long-run economic hardship. We felt that any layoff of sufficient severity to be followed by a rise in an area's Ratio to the qualifying level for at least a year should meet the long-run purpose of the act. Second, the 12-month period eliminates seasonal influences on the unemployment rate.

The effects of the 92 layoffs were measured by comparing the Ratio at the start of each layoff with the maximum Ratio obtained within the 3-year period after the start of each layoff. Figure 1 presents a generalized picture of the change in the Ratios associated with mass layoffs. The values presented in Figure 1 are the mean values of the 92 cases. A Ratio of 1.13 immediately prior to the

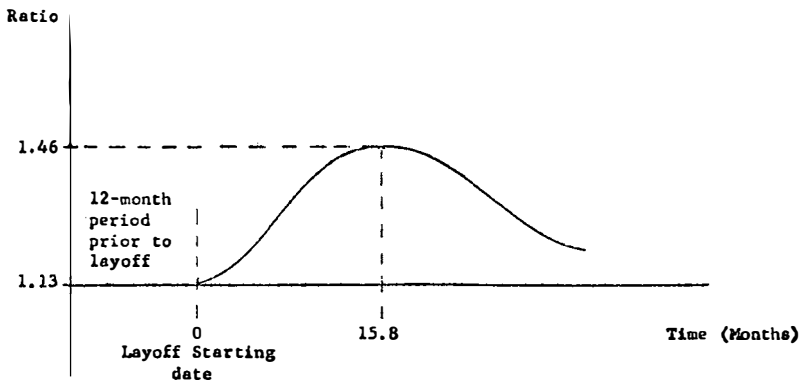


FIG. 1. Generalization of the Changes in the Local Unemployment Rates as a Ratio of the National Unemployment Rate (The values are the mean value of the 92 areas.)

layoff indicates that on the average these 92 areas had unemployment rates slightly above (13 percent higher than) the national rate. The mean maximum Ratio that was attained after the layoff was 1.46, only slightly below the level required for designation. The graph is a generalization and does not imply that all areas experienced uniform effects; the maximum Ratios differed greatly from area to area. Table 1 displays these differences.

TABLE 1
Frequency Distribution of the Effects of Mass Layoffs on the Ratio

Negative change	8
0 to .18	32
.19 to .49	26
.50 and greater	26
Total	92
Mean	+0.33
Median	+0.23
Range	-0.45 to +2.91

Estimating the Effects of Mass Layoffs

As earlier stated, a purpose of this study is to develop a model for predicting the effects of a mass layoff on the Ratio of a particular local area. The following linear multiple regression model was adopted:

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_mX_m,$$

where the dependent variable, Y , is the maximum Ratio; the independent variables— X_1, \dots, X_m —are the factors hypothesized to influence the effects of the layoffs.⁴ The independent variables can be separated into four groups:

⁴The independent variables, X_1 through X_{18} , are: X_1 —percentage of total local employment involved in layoff; X_2 —duration of layoff (months); X_3 —rate of layoff (X_1/X_2); X_4 —existing local unemployment rate; X_5 —change in national unemployment rate between period prior to the layoff and period of the maximum Ratio; X_6 —existing Ratio prior to layoff; X_7 —proportion of total local employment in industry of layoff; X_8 —size of area (total local employment); X_9 —median family income of area; X_{10} —proportion of total local employment in manufacturing; X_{11} —proportion of total local employment in white collar occupations; X_{12} —median school years completed by residents of area, 25 years and older; X_{13} —proportionate number of females employed locally in industry of layoff; X_{14} —proportionate number of white collar workers employed locally in industry of layoff; X_{15} —proportionate number of white collar workers plus craftsmen and foremen employed locally in layoff industry; X_{16} —median age of workers employed locally in industry of the layoff; X_{17} —proportionate number of Negroes employed locally in layoff industry; X_{18} —median annual earnings of workers employed locally in layoff industry.

1. Characteristics of the layoff (X_1, X_2, X_3),
2. Existing characteristics of the labor market area ($X_4, X_7, X_8, \dots, X_{12}$),
3. Characteristics of the workers involved in the layoff (X_{13}, \dots, X_{18}), and
4. Characteristics of the national labor market and its relation to the local area (X_5, X_6).

The hypothesis governing the first group of variables is that a layoff involving a large number of workers relative to total area employment and occurring over a short period of time will result in a relatively large increase in the Ratio. The second group of independent variables incorporates the hypothesis that areas experiencing economic hardship prior to the layoff, having few alternative sources of employment, and dominated by an unskilled labor force will also experience a relatively large increase in the Ratio. The third group of variables is derived from the hypothesis that the more employable and more mobile the workers displaced by the layoff, the less severe will be the effects of the layoff. The fourth group of independent variables was included to isolate changes in the Ratio associated with the behavior of the national unemployment rate.

Since our objective is development of a model that results in accurate predictions, the analysis of the regression results emphasizes the standard error of the estimate. If two models yield the same estimating error, we will accept the model requiring the least time and expense to apply.

One problem necessitated double testing of the model. In 30 of the 92 areas the layoff industry was not known exactly, i.e., to the 2-digit SIC level. In those 30 cases the third group of independent variables and X_7 could not be ascertained; therefore, the model was tested with these variables deleted. This test will be referred to as the test for 92 areas. To test the model including all independent variables, those areas with undefined industries were deleted. This latter test is referred to as the test for 62 areas. Tables 2 and 3 present the results of the tests for the 92 areas and 62 areas, respectively.

Comparison of the multiple coefficients of determination for the 2 tests ($R^2 = .830$ for the 92 areas; $R^2 = .835$ for the 62 areas) reveals that there is little difference in the degree of the variation

TABLE 2
Regression Results, Maximum Local Unemployment Rate as a
Ratio of the National Rate and Related Variables,
92 Layoffs

Variable	Partial Regression Coefficient	Standard Error of Regression Coefficient	Zero-Order Correlation X vs. Y	t Value
X ₁	4.574	(1.473)	.481	3.104 **
X ₂	0.004	(0.005)	.162	0.858
X ₃	-3.438	(11.817)	.252	-0.291
X ₄	-15.264	(3.498)	.576	-4.364 **
X ₅	-16.583	(4.401)	.232	-3.768 **
X ₆	1.686	(0.162)	.830	10.402 **
X ₇	0.000	(0.000)	-.070	0.532
X ₈	0.0001	(0.00006)	-.147	-1.829 *
X ₁₀	0.861	(0.329)	.377	2.618 **
X ₁₁	0.512	(0.776)	-.256	0.659
X ₁₂	-0.005	(0.017)	-.418	-0.277
Intercept (A Value)			= 0.352	
Multiple Correlation Coefficient, R			= .911	
Multiple Coefficient of Determination, R ²			= .830	
Standard Error of Estimate, S _e			= .315	
F Value			= 35.343 **	

* Significant at the 5 percent level.

** Significant at the 1 percent level.

in the maximum Ratio accounted for by the variations in the independent variables. This implies that the deleted independent variables add little, if any, explanatory power to the model.

Examination of the standard errors of the regression coefficients for the 62-area test reveals that several of the parameters are not significantly different from zero. Only X₁, X₄, X₅, X₆, and X₁₀ are significant. The test for the 92 areas differs only in that X₉ is also significant. Thus, the model was tested for the 92 areas utilizing only those variables that are significant. The results of this test (not shown) are similar to the earlier results but with a slightly reduced correlation coefficient. Further examination revealed that independent variables X₄ and X₆ included in this last test are highly correlated with each other. Thus, X₄ was excluded as being redundant. Moreover, since X₉ and X₁₀ were available only for census years and did not necessarily correspond with the periods of the layoffs, they too were dropped. Thus, the model is reduced to only 3 independent variables—X₁, X₅, and X₆. This version of the model was tested for the 92 areas with these results:

TABLE 3
 Regression Results, Maximum Local Unemployment Rate as a
 Ratio of the National Rate and Related Variables,
 62 Layoffs

Variable	Partial Regression Coefficient	Standard Error of Regression Coefficient	Zero-Order Correlation X vs. Y	t Value
X ₁	7.026	(3.342)	.536	2.102 *
X ₂	0.0003	(0.008)	.180	0.038
X ₃	-10.983	(16.087)	.231	-0.683
X ₄	-15.763	(5.693)	.437	-2.769 **
X ₅	-19.089	(7.355)	.260	-2.595 **
X ₆	1.558	(0.236)	.794	6.610 **
X ₇	0.178	(0.874)	.389	0.204
X ₈	0.000	(0.000)	-.150	0.462
X ₉	-0.00013	(0.0001)	-.317	-1.344
X ₁₀	1.063	(0.575)	.205	1.850 *
X ₁₁	0.649	(1.375)	-.425	0.472
X ₁₂	0.023	(0.028)	-.470	0.826
X ₁₃	-0.357	(0.601)	-.150	-0.595
X ₁₄	0.535	(1.152)	-.303	0.464
X ₁₅	-0.549	(0.937)	.302	-0.586
X ₁₆	0.025	(0.025)	.406	1.002
X ₁₇	-0.203	(0.726)	-1.53	-0.279
X ₁₈	0.00002	(0.0001)	-1.41	-0.186
Intercept (A Value)			= -0.397	
Multiple Correlation Coefficient, R			= .914	
Multiple Coefficient of Determination, R ²			= .835	
Standard Error of Estimate, S _e			= .368	
F Value			= 12.051 **	

* Significant at the 5 percent level.

** Significant at the 1 percent level.

$$I. Y = -0.121 + 4.236X_1 - 6.961X_5 + 1.207X_6$$

$$(0.938) \quad (4.437) \quad (0.091)$$

$$R = .869; \quad R^2 = .755; \quad S_e = .361$$

The coefficients for X₁ and X₆ are significant at the 1 percent level, X₅ at the 6 percent level.

Note: Values for X₁ and X₅ are entered decimally.

Only about 76 percent of the variation in the maximum Ratio now is explained by variations in the independent variables as compared with 84 percent before. Regarding accuracy of estimates, the first models have standard errors of the estimates of .37 for the 62 areas and .32 for the 92 areas. The simplified model with only 3 independent variables yields a standard error of the estimate of .36. In light of our goals, this latter version is more desirable than the earlier, more complicated models.

The model of equation I is based upon 2 independent variables, X_1 and X_6 , that are known or can be estimated with a high degree of accuracy at the time of the layoff and 1 variable, X_5 , that must itself be projected. X_5 is the change in the national unemployment rate between the period prior to the start of the layoff and the period of the maximum Ratio. The national rate at the start of the layoff is known, but projecting the rate three years hence is a knotty problem. Moreover, due to the variability of the time lag until the period of the maximum Ratio, the time period may be unknown for projecting the national rate. For these reasons, X_5 was deleted from the simplified model, and the following results were obtained for the 92 cases:

$$\text{II. } Y = -0.058 + 4.281X_1 + 1.153X_6$$

$$(0.945) \quad (0.086)$$

$$R = .865; \quad R^2 = .747; \quad S_e = .364$$

The coefficients of X_1 and X_6 are significant at the 1 percent level.

Examination of these results shows that equation II compares favorably with equation I. An advantage of equation II is that it does not require an estimate of future national unemployment rates; therefore, it is more desirable than equation I.

The standard error of the estimate of equation II, .36, indicates that if the estimated Ratio is 1.50 the actual Ratio would be between 1.14 and 1.86, inclusive, approximately two-thirds of the time. This range of error might be considered too large if the exact value of the Ratio were needed. Our present concern, however, is principally to determine whether the Ratio attains a specific level, i.e., 1.50. Thus, the degree of accuracy of the estimate is often irrelevant. An examination of the estimates and the actual values of the maximum Ratios reveals that relatively few "critical" mistakes (errors that would lead to incorrect designation decisions) result from the application of the model. Also, the number of critical errors does not differ significantly among the alternative models. The 3-independent variable form yields 8 critical errors while the 2-variable form yields 10. Thus, the application of either model would result in incorrect designation in approximately 10 percent of the cases.

CONCLUSIONS

Mass layoffs involving at least one-half of 1 percent of total local employment generally are associated with significant changes in the local unemployment rate relative to the national unemployment rate. In the areas studied, layoffs were followed, on the average, by an increase of the local unemployment rate from a level only slightly greater than (13 percent above) the national average to 46 percent above the national rate.

Application of the model developed for projecting the maximum Ratio results in relatively few (approximately 10 percent) "critical" errors, i.e., incorrect area designations.

One word of caution. The authors suspect a downward bias in the estimates of the model. We have assumed that the measured effects would occur in the absence of private or public assistance. But it is known that some of the areas in our sample did, in fact, receive some types of preventive and/or corrective aid from various sources. Such assistance may have reduced the impact of layoffs on the local unemployment rate and, consequently, reduced our measurement of the effects. Thus, in practice, it may be suitable to increase the predicted Ratio somewhat, say, by 0.05 to compensate for this bias.

NEGRO WORKERS IN THE MISSISSIPPI DELTA: PROBLEMS OF DISPLACEMENT AND ADJUSTMENT *

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In many respects, the racial dimension of Southern economic activity is better characterized by the term "white supremacy" than "segregation." Segregation describes the economic structure of many Northern cities where Negroes are confined to a ghetto area that has little import for white economic life. Were these ghettos to suddenly disappear, the white economy would continue, relatively unaffected. In the South, Negroes and whites have been part and parcel of a single economic entity. The racial distinction defines a division of labor. That division relegates to Negroes the menial, unskilled jobs; in the Delta of Mississippi, these jobs have been the picking and the chopping of cotton. But, however menial and unskilled, the jobs have been critical to the productive process upon which the society depends for its livelihood.

The plight of Negroes in the Delta today is the result of changes in that economic system. Suddenly, in the space of two years, the Negro part of the economy has been eliminated. In the spring of 1960, seasonal employment in the Mississippi Delta totaled 30,510; in the spring of 1965, it was 32,328. Last year spring seasonal employment was cut almost in half, from 32,328 to 16,571. This spring it fell by over half again to 7,225. Seasonal employment in the fall exhibits a comparable trend. The decline in seasonal employment is superimposed upon a long term decline in the number of farm operators; last year, it was slightly moderated by an increase in nonseasonal employment; this year, even that component of employment has declined.¹ Incomes of Negroes in the

* The research upon which this paper is based was conducted during the summer of 1967 for the NAACP Legal Defense and Education Fund, Inc. I am indebted to Iris Brest, Paul Brest and Marian Wright for their advice and support during that summer. But the views and opinions expressed here are not necessarily shared by the Legal Defense Fund or its staff.

¹ Data on trends in agricultural employment supplied by the Farm Placement Department, Mississippi Employment Security Commission, Jackson, Mississippi.

Delta have always been among the lowest in the nation, but today, numbers of families have no income at all. What was once malnutrition and accumulated diseases has become virtual starvation. Even in the summer months, many families were begging from door to door.

Immediately responsible for the agricultural displacements is the shift from cotton to less labor intensive crops and, in cotton, to less labor intensive technologies of production. Cotton acreage has been cut back and converted to soybeans and, on some plantations, to cattle. In cotton itself, the spring labor once required to weed the crop has been replaced by chemicals sprayed from airplanes; harvest labor, by mechanical cotton pickers.

The causes of these changes are a matter of some dispute. Cut-backs in federal cotton acreage allotments are, in part, responsible for the crop diversification. Exogenous technological developments, spurred by federally subsidized research and high wages elsewhere in the country, may also be responsible. The introduction of the agriculture minimum wage last February which raised the wage for Negro workers from three dollars a day to one dollar an hour probably hastened the diffusion of the new technology.

But these are not the factors emphasized by Negro leaders in the Delta. They see the displacements as a white conspiracy to avoid, through forced outmigration, the threat of integration and Negro political power. The threat is real. The Civil Rights Act of 1965 created a potential Negro voting majority in most of the Delta counties. Federal pressure from without and the civil rights movement within are gradually curbing the physical and psychological repression which have kept the Negroes "in their place."

Circumstances within the state lend credence to the conspiracy theory. In private, the whites speak freely of outmigration as the only solution to the race problem. Individual planters are clearly hurt by and resentful of the response of the Negro community to the civil rights movement. They view that response as a lack of gratitude for previous paternalistic acts, and agricultural displacements have therefore been accompanied by the withdrawal of paternal protection. The practice of intervening with police officials in behalf of their own workers has sharply declined. This once moderated, albeit in an erratic and not always equitable manner, the harshness of Southern justice. The infinite series of small "loans"

that whites were once willing to grant favored Negroes has come to an end. Institutionalized aid appears to reflect the hardening of private attitudes. The surplus food program, for example, shifted this year from commodity distribution to a food stamp system requiring minimal cash payments that many Negro families could not afford.

In the desperate climate of Mississippi, the prevalence of a conspiracy theory is not altogether surprising. But the theory retains a certain plausibility even at a distance. The beginnings of the agricultural displacement follow upon the Civil Rights Summer of 1964 and coincide with the passage of the Voting Rights Act and the shift in the tactics of the white community from outright violence to reliance upon economic retaliation. The extension of minimum wage coverage required the acquiescence of the Mississippi congressional delegation, one of whose members chairs the House Agricultural Committee.

Since the agricultural displacements are now probably irreversible, the issue of their cause is largely academic. But the plausibility of the conspiracy theory is indicative of the social and political context in which the displacements have occurred. That context highly colors the character of the solutions which are being sought.

II

Current efforts to solve the economic problems of Negroes in the Delta are confined, almost exclusively, to training. Present programs in the Delta are geared to train 7550 people a year. A new proposal for a training program to be run at the Greenville Air Force Base would add at least 1000, and possibly as many as 6000, places to current training capacity. The racial composition of these programs is not clear, but the Negro share appears to run somewhere between 50 and 80 percent.²

The major problem with the training programs is that there are no jobs available for the graduates. Growth in Delta manufacturing employment in the May, 1960–May, 1967 period averaged about 10% a year.³ Were past trends to continue over the next

² In the STAR Adult Literacy Program about 80 percent of the trainees are black. Negroes constitute 50 percent of MDTA trainees for the state as a whole but this figure is undoubtedly greater in the Delta.

³ Trends in manufacturing employment estimated from data on manufacturing employees covered by unemployment insurance.

four years, annual growth would average under 3000 jobs, considerably less than half of existing training capacity.

These figures do not include employment in the nonmanufacturing sectors. But in Mississippi, jobs in those sectors are almost totally barred to Negroes. In the public sector, Negroes are confined to janitorial and maid work and to the colored school system. Construction, in contrast to the North, is relatively open: in several Delta countries, there are even Negro construction contractors. Negro contractors, however, are heavily dependent upon the construction of white housing, and since 1964, the white market has been closed to them in retaliation for civil rights activities.

Even the manufacturing figures may exaggerate the employment opportunities available to Negroes. The 1960 census shows Negroes in Mississippi holding only 53 percent of the manufacturing jobs to which their share of the employed labor force entitles them. Federal antidiscrimination regulations—Executive Orders 10925 and 11246 and Title VII of the 1964 Civil Rights Act—should have improved this showing, yet the regulations may have had an adverse impact. Many employers have moved to evade equal opportunity requirements by imposing tests for hiring and promotion, and the effect of these tests is to deny Negroes jobs previously open to them.

Moreover, it is not at all clear that past rates of manufacturing growth can be sustained in the future. Last year (May, 1966–May, 1967) Delta manufacturing employment declined by six percent.⁴ This decline no doubt reflects the slowdown in national economic activity. But the magnitude is surprising. Even in the 1960–61 recession, manufacturing employment in the Delta managed to grow by 1.5 percent.^{4a}

Given the lack of job opportunities, the training programs tend to degenerate into welfare programs, valued primarily for the stipend they provide to the trainee, and the trainee has no incentive to learn. The administrators have seen the symptom, but they have misunderstood the underlying problem. The new Concentrated Employment Program just getting underway, and the proposed training center at the Greenville Air Force base, are both open ended, permitting the trainee to remain until he reaches a given level of competence. In such programs, the trainee has an incentive *not* to learn.

⁴ See note 3.

^{4a} See note 3.

Moreover, because the programs are essentially welfare programs distributing income to a limited number of people in a context in which vastly larger numbers are living on the verge of starvation, the programs are open to all sorts of abuses. Places in the programs are distributed to reward and punish people for political activity. Neighborhood Youth Corps and work experience trainees are used for projects of exclusive benefit to the white community or, occasionally, to private individuals. Negro trainees are assigned to menial and humiliating jobs, and instructors are abusive and tyrannical.

III

For Negroes, a viable, long-run solution to the Delta problem requires their transfer to productive, nonagricultural employment. The critical question is whether it is possible to speed the processes of economic development and of transition from agricultural to industrial work that, in most nations and for foreign immigrants to the United States, took, at least, a generation. This question might have been answered by the Federal training programs in the Delta, but the corruption inherent in the programs and in the environment in which they have operated makes that experience suspect.

Other potentially relevant experience is that of manufacturing firms in the Delta who have attempted to absorb Negro workers. These experiences are discouraging. In the face of the tremendous agricultural displacements, there is widespread talk of a shortage of labor willing to accept industrial discipline and able to learn relatively unskilled jobs. One manufacturer characterized his attendance, discipline and turnover problems in the past year as the worst since World War II.

Trends in manufacturing employment, however, make these comments difficult to understand. Labor shortages would not have been surprising the year before last when manufacturing employment jumped 22 percent. But last year there was a 6 percent decline in employment. One would have expected an easing of shortages, particularly in comparison with earlier years. The most likely explanation of this paradox is the development of an interaction between the exclusively white first-line supervision and young Negro employees. Supervisory techniques in Delta industry remain primitive. The supervision shares the racial prejudices of the white community; they have little managerial training, and rely heavily

on abusive and dictatorial techniques to enforce the work pace. Negro youth are increasingly less willing to respond to such supervision. Those now reaching working age have grown up in the atmosphere created by the civil rights movement. They no longer accept the subservient role which the white community demands of them in personal relationships and are particularly resentful of abusive treatment from whites. If this explanation is indeed correct, it does not bode well for the autonomous development of solutions to Delta problems. But it does point to the importance of sympathetic supervision and instruction in any effort to speed the transition to industrial work.

Here the experience of the civil rights movement, whose efforts have been infused with a sympathy and understanding lacking in industry, is germane. When I first came to Mississippi as a civil rights worker in 1964, the Negro community was virtually devoid of organization and leadership. The thrust of the movement that summer was to organize. But although a great effort was made to generate indigenous leaders, local leadership was largely nominal; projects were originated and directed by outsiders. By the time I returned in 1967, most of the outside civil rights workers had left. The organizations were managed and controlled by local people and the nominal leaders of '64 had developed into sophisticated organizers and administrators. If such leadership can be developed in a period of three years, certainly a productive industrial labor force can be developed as well.

On the whole, moreover, the civil rights movement in Mississippi was built by the poorer and least qualified people in the Negro community. Access to the better educated and more resourceful individuals was barred by their dependence upon the white power structure. Negro teachers, who form the educated elite of the society, have scrupulously avoided civil rights activity for fear of jeopardizing their contracts with white school boards. Negro businessmen, fearing to jeopardize their credit, municipal permits, and lines of supply, have also shunned the movement. Most Negro businesses are trivial, but each of the larger counties has several families who have amassed substantial wealth. The variety of enterprises which such families manage simultaneously and their ability to prosper in a hostile environment imply a store of entrepreneurial talent as well as capital.

There is also a group of skilled blue collar workers attached more or less closely to the Delta which the movement has, to now, been unable to tap. The relationship between the Northern cities and the Delta communities is far closer than their geographic distance would suggest. Almost every Delta family has relatives in the North and there is a continual flow of traffic in both directions. Northern workers send their children South to live with their grandparents; some return home themselves for prolonged periods. In cities with a heavy population of in-migrants, there are clubs of workers from the larger Delta counties. The Delta is the permanent residence of a group of itinerant construction workers who live there between periods on the road. Many of these people claim to prefer life in the Delta to that elsewhere in the country and might be willing to return permanently were stable, high wage employment available.

Black Mississippians, no less than whites, recognized that the destruction of white supremacy would mean the destruction of the Delta economic structure as well. They had visions of building a new structure in its stead. And it was upon these resources that their visions were based. I do not believe that the visions were utopian. Despite relatively rapid growth in recent years, much of the Delta's industrial potential remains unexploited. There are opportunities for expansion in textiles, leather tanning and leather products, woodworking and paper. The Negro business community could mobilize a part of the capital and the managerial skill required for such ventures. Skilled blue collar workers in the North might be attracted to provide the supervision and training. Common humanity commands a vast extension of social welfare services in the Delta, and many of these services would also permit the expansion of Negro job opportunities. The food stamp program alone would provide the base for the expansion of Negro commercial enterprises were the community to believe that white administrators would certify Negro owned stores. A program of housing construction and municipal improvement would revive the Negro construction industry. The provision of adequate medical care could open jobs for an army of paramedical personnel.

This is not to argue that such developments can be easily accomplished. In many respects, however, the feasibility of economic development within the Negro community appears to be greater today than it was in the early stages of the civil rights movement.

The attitudes of the Negro middle class are changing. As the natural leaders of the Negro community, they have found themselves blamed by white society for civil rights activities irrespective of their actual role. They are beginning to accept the new climate as permanent, and to search for opportunities within it. In at least two counties, in fact, they have begun to plan cooperative industrial undertakings. The combined effect of civil rights progress in the South and racial violence in the ghettos may have reduced the relative attractiveness of Northern life and enhanced the ability of the Delta to recover its lost manpower. Title VI of the Civil Rights Act of 1964 promises that federal programs for business development, housing, farm improvement and the like, previously barred to Mississippi Negroes, will now be open. And press releases from Washington indicate new funds in all of these areas.

I think that the potential is present. But I have little hope that it will be realized. For despite the changing climate in the State and in the Nation, the only really tangible product of the past four years of intense civil rights activity is a dedicated and sophisticated leadership. The leadership has tried almost every form of constructive action: nonviolent demonstrations, intensive political organization and voter education, lobbying in Washington. Very little of that activity has paid off. The collapse of the Negro end of the Delta economy may be the final blow. In the climate of narrowing economic opportunity, the white community has become increasingly successful in deterring political support and dividing the leadership through the distribution of jobs and welfare. Most of the new federal programs in the state have been turned to this purpose. The funding of CDGM (a headstart program in a number of Delta counties) is the only Negro victory in the battle for programs free of white control, and these funds are now again in jeopardy. The November elections, the first major local elections since the Voting Rights Act, produced but a handful of victories, not enough to contribute to a solution of the economic problems.

The promises of Washington have proved empty. The Concentrated Employment Program, originally planned for a new agency with Negro participation and control, and the subject of intensive civil rights lobbying efforts, was finally funded through a consortium of the same state agencies that control other training in the Delta. The Clark committee hearings on starvation in Mississippi produced

the Stennis Bill promising new funds for food and medical aid, but that Bill has apparently died in the House. The Delta was originally announced as one of the five pilot areas in the White House Test Program of subsidies for industrial development in poverty areas; upon inquiries, the movement was informed that the announced areas were only five *examples* of the five which would ultimately be designated, and the Delta was not included on the final list. The model cities proposals for the Delta were rejected and with them much of the hope for a housing program.

Many of the roots of the radical black power movement can be traced to Mississippi. The bitterness of its leaders is, in a large part, the product of the beatings and jailings to which they were subject as civil rights workers in the state. But violent and anarchistic radicalism have never found a home in black Mississippi. The radicals which the state spawned have departed to preach in the North. The leadership which remains continues to hold the visions of the early civil rights movement. They are committed to constructive action. But constructive action has worn them out. They are tired and disappointed; each new effort seems to compound frustration. Their exhortations to the community ring increasingly less true; however unintentionally, they inevitably convey their own disappointments and frustrations to their constituency. To the white community, they are reduced to threatening riots. Riots are not a prospect which the black leaders of Mississippi welcome. But they are not an idle threat. As the current leadership continues to lose its own confidence and that of the community; as the number of people exposed to the civil rights movement when they were young enough to believe in its promise and partake of its freedom from psychological subservience grows, riots become more and more likely. In its own way, white Mississippi understands this. By that time, it hopes, the black people will have gone North.

THE ECONOMICS OF PRIVATELY NEGOTIATED TECHNOLOGICAL CHANGE PROVISIONS *

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This study attempts to place worker adjustment to technological change within an economic framework. Specifically, the paper attempts to assess the efficiency of different collective agreement provisions in their role of compensating displaced workers. How a provision's efficiency can be assessed depends on what is considered the proper rule for providing compensation to displaced workers. The following discussion provides such a rule, and the concept of efficiency which emerges is that used throughout the paper.

Unfortunately, technological change while increasing the income of some is likely to impose economic losses on others. Since technological change acts to redistribute income in this fashion, the fact that income per capita increases is not a guarantee that total economic welfare increases. This latter conclusion will only be true necessarily if all people in the population are net gainers from technological change. If unions or the public decide that increased productivity should not continue at the expense of welfare then to overcome the possibly undesirable redistribution of income resulting from change, and to judge whether economic welfare can unequivocally increase through a particular technological change, adoption of the Hicks-Kaldor compensation criterion is suggested. This criterion holds that if gainers can theoretically overcompensate losers for their income losses then welfare has increased; however, to assure a welfare increase in practice compensation must actually take place.¹ The shortcoming of the Hicks-Kaldor criterion for practical purposes

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¹On the question of welfare see: I.M.D. Little, *A Critique of Welfare Economics* (2nd edition; London: Oxford University Press, 1957).

is posed by the seemingly impossible task of identifying the gainers and losers.

The privately negotiated provision approach seemingly has an advantage over other compensatory approaches in identifying at least the primary gainers and losers from change because the process is decentralized and both representative parties are close to and actively involved in the technological change. It is suggested in this paper that union and management negotiated technological change provisions are consistent with this compensation role, and in being so it furnishes us with a familiar and handy conceptual framework for studying the relative economic efficiencies of compensatory provisions.

However, in order to judge the relative efficiencies of the various technological change provisions, it is necessary to ascertain both the effectiveness and the cost of them; efficiency here being defined conceptually as an index obtained by dividing the effectiveness of a provision by its cost.

Effectiveness is determined by looking at the beneficiaries of the various provisions. A completely effective provision is one that compensates all workers displaced or downgraded by technological change, in an amount equal to their economic losses. Different compensatory provisions can be equally effective, but vary in their costs, and these costs may differ not only in magnitude but in their incidence.

An outline for a modest and perhaps heuristic approach to the solution of formulating efficient compensatory provisions is the subject of the remainder of this paper. The approach has been to work out analytically the impact that specific technological change provisions have on a whole range of micro and macroeconomic variables, and translate this into estimates of the relative efficiencies of the provisions.

The results presented in this paper are the conclusions reached after examining in above fashion, the impacts of various provisions on the different economic variables. Lack of space does not allow for the complete derivation of conclusions, but a short section below outlines the economic framework used and the assumptions adopted.²

² The complete analytical framework and derivation of conclusions is contained in my doctoral dissertation submitted to Duke University.

Because empirical work has not generally been carried out for the purpose of estimating the quantitative impact of the various provisions, the conclusions regarding efficiency should not be regarded as definitive in any sense but rather as first approximations derived by weighing what appear to be the probable relative magnitudes of the most significant economic effects.

Compensation Provisions

The empirical data on technological change provisions was obtained through a survey involving 471 agreements, consisting of all recent agreements on file with the Canada Department of Labour covering firms with 500 or more employees.

The separate provisions found were grouped under four major headings. First, income maintenance, which includes full income security, severance pay, advance notice, and supplementary unemployment benefits. Second, employment sharing, which includes reduction of the work week, extended vacations, and early retirement. Third, employee adaptation, which includes retraining and relocation. Fourth, joint union-management committees and procedures. Joint committees, while not representing compensation provisions themselves are examined because they are an increasingly important complement to collective bargaining in the technological change area.

From this start, the next step was to determine analytically how each separate provision affected the following economic variables; employment, wages, profits, costs, prices, savings and consumption, government expenditure and revenue, exports and imports, level of national income, and rate of economic growth. Only in this manner can we determine the effectiveness and cost of a provision, and hence its efficiency.

The Economic Framework

The microeconomic analysis of the above provisions was initially carried out under the assumption of perfectly competitive product markets, with the further assumption that provisions were adopted on an industrywide basis without too much time lag. However, amendments were made to accommodate for a specific type of oligopolistic behaviour; that characterized by a few firms operating under marginal cost and profit maximizing conditions, where entry is blocked or very difficult, and collusion is absent.

Macroeconomic behaviour is examined only when changes in the microeconomic variables affect them in the short-run, and the short-run nexus between the microeconomic and private sector macroeconomic variables is generally provided by profits and prices. For example, investment and rate of growth vary proportionately with profits in our simplified framework, while exports vary inversely and imports proportionately with price changes. Furthermore, a provision that transfers profits to wage income is considered to lower the level of private savings because it redistributes income from high propensity to low propensity savers. Changes in government tax revenues are considered to be primarily dependent on the distribution of income between profits and wage income because a given volume of profit yields considerably more tax revenue than the same volume composed of average wage incomes.

The economic analysis led to the conclusion that in the assessment of efficiency, the effects on macroeconomic variables could all but be ignored for two reasons. First, the macroeconomic effects are believed small in the short-run and they are diffused over many people and groups. Second, it appears likely that the types of effects that provisions have on the macroeconomic variables are quite similar and in the same direction quantitatively; savings, investment, exports, government revenue and expenditures, national income, and rate of growth are likely to decrease, while only imports will increase. Therefore, efficient compensatory programs, regardless of the type, that reduce the cost of compensation at the firm level will commensurately reduce the quantitative macroeconomic effects without favouring or harming any one segment of the tertiary sector disproportionately. Therefore, it seems safe to approximate efficient compensatory programs from the knowledge we obtain from the behaviour of microeconomic variables.

The Efficiency of Compensation Provisions

Effectiveness—The *raison d'être* of change provisions is to compensate workers adversely affected by change. One purpose of this paper is to assess how well the various provisions accomplish this task; the single most important conclusion is that the effectiveness of provisions depends on the industry, the type of displacement manifested in the change, as well as other more specific conditions.

For example, a full income maintenance provision is designed to offer ultimate income security and protection to the worker, but the fact that firms are forced from the industry because of the peculiar nature of this provision requires some workers to become unemployed.³ However, even more important is the fact that if industry demand for the product is elastic, more workers will lose than will benefit from full income maintenance. This means that some workers benefit from full income maintenance, but at the expense of increased unemployment of their fellow workers.

Employment sharing also has the effect of increasing unemployment, and also leads to the consequence that more workers will lose than gain from this provision if the industry demand for labour is elastic. Furthermore, any moonlighting that may be created by the adoption of shorter hours depresses wages in other industries thereby shifting some of the cost of adjustment to other workers.

The effectiveness of an employer sponsored retraining provision for all displaced workers seems to be the least affected by variations in elasticities of demand among industries. However, even under this provision the degree of effective protection afforded by retraining may depend on the extent of the demand for labour complementary to the technological change within each firm. If there is no demand within the firm for the displaced workers then the firm may have little interest in the type and degree of training provided. In addition, the union may not have an interest either if the workers will be leaving its jurisdiction. The result is that retraining in cases where there is not an increased demand within the firm for labour complementary to the technological change becomes either impractical and will not be considered, or if undertaken at all the incentive exists to do it superficially.

Finally, all provisions suffer from the fact that they are unlikely to apply to entrant firms during any given change, and the cost advantage these entrants may gain can lead to the increased bankruptcy of marginal firms and the consequent voiding of collective

³ The peculiarity of full income maintenance is that the wages of workers covered by this provision become a fixed cost. Therefore, up to a certain level of output, the marginal cost schedule shifts down, and the average total cost schedule shifts up, with the result that each firm produces a greater output. However, since the market price must rise to meet the increased average cost, output demanded will fall and some firms will be forced from the industry. On this point see: Norman Simler, "The Economics of Featherbedding," *Industrial and Labour Relations Review*, Vol. 16 (October, 1962), pp. 111-21.

agreements. The voiding of the terms of an agreement leaves workers without any compensation. The problem of marginal firms exiting from the industry is not likely to be so great under oligopolistic product market conditions, however.

*Costs*⁴—The above discussion outlines the effectiveness of various provisions in providing compensation for displaced workers. Before proceeding to an assessment of the efficiency of the provisions, however, it is necessary to look at the extent and incidence of the costs imposed.

All compensatory provisions in perfectly competitive markets go beyond redistributing income from primary gainers—the innovating firms, to primary losers—the displaced workers. Most noticeable is the extent to which consumers in the associated product markets help pay the cost of compensation; but consumers are secondary gainers from technological change as a result of lower relative prices so this is consistent with the compensation principle.

A major difference introduced by an oligopolistic market structure is that the primary gainer, the firm, generally absorbs a greater proportion of the compensatory costs.⁵ The secondary gainer, the consumer, will generally remain unaffected by the costs of compensation, and should even gain via a price decrease in the case of full income maintenance.⁶ Because price will generally be less affected by compensatory provisions in oligopolistic industries, this nexus with macroeconomic variables does not play so large a role. However, the nexus between diminished profit and macroeconomic variables will be accentuated.

Efficiency—Following now, from the general conclusions concerning the effectiveness of provisions in protecting workers against change, and the resulting distribution of the costs, is an assessment of the compensatory efficiency of the various provisions. The general conclusion is that compensatory efficiency can most likely be maximized by formulating unique compensatory programs for each

⁴ Throughout the paper when it is stated that the value of some variable is higher or lower it should be interpreted as referring to the post-technological change value of the variable.

⁵ This results because most provisions affect average costs and not marginal costs, and under oligopolistic behaviour, marginal cost determines the price level; tangency of average cost and price is not a requirement of market equilibrium as it is in perfect competition. This same kind of reasoning is usually associated with discussions comparing the effect of lump sum and variable taxes.

⁶ *Supra*, esp. footnote number 3.

industry; efficiency, like cost and effectiveness is only defined for a given industry, and what may be the most efficient provision in one industry need not be so in another. The following discussion on efficiency is not meant to be definitive, its intent is to indicate the leading factors that must be considered when developing compensation provisions for an industry.

Of the most extensive provisions in each group; full income maintenance, reduced work week, and retraining all displaced workers, the latter is likely to be the most efficient compensatory provision. This conclusion is suggested on the basis that aside from providing income protection, there is a positive return to employee adaptation provisions in the form of increased productivity, and this increase can conceptually be applied against the cost of the provision.

The question is frequently raised whether employee adaptation provisions furnish returns above cost, but in the compensation context this is irrelevant because none of the provisions are undertaken as investment activities, *per se*, but as social responses.⁷ However, what is relevant is that employee adaptation is certain to yield a return in excess of any return from a full income maintenance, or reduced work-week provision.

While employee adaptation is likely to be the most efficient major compensatory provision, full income maintenance is likely to be the least efficient. The major shortcoming of full income maintenance is that it effectively prohibits workers, or a great number of them, from going into jobs or training for jobs where their output would be greater. The full income maintenance provision in the short-run interferes severely with the allocation of resources, espe-

⁷For example, see the following studies: Michael Borus, "Benefit-Cost Analysis of the Economic Effectiveness of Retraining the Unemployed," *Yale Economic Essays*, Vol. 4 (Fall, 1964), pp. 371-430; and Gerald Somers and Ernst Stromsdorfer, "A Benefit-Cost Analysis of Manpower Retraining," *I.R.R.A. Proceedings* (December 28-29, 1964), pp. 172-85. These types of studies generally show returns above cost for retraining. However, they summarize the results from training programs where trainees are selected according to an *a priori* belief that they will succeed. For present purposes, the results from retraining all willing workers affected by change are needed, including workers with low returns because they are physically or mentally incapable of acquiring technical skills, or advanced age imposes a short payoff period. The inappropriateness of the results of the cited works for estimating the returns from training programs in the "war against poverty" is similar in many respects to this situation, see: David O. Sewell, "A Critique of Cost-Benefit Analysis of Training," *Monthly Labour Review*, Vol. 90 (September, 1967), pp. 45-51.

cially labour, by freezing the distribution of labour in unprofitable uses. Other forms of income maintenance fortunately do not share this property.

Employment sharing also mis-allocates workers, but in the absence of an employment guarantee the firm is free to adjust the quantity of labour to the increased wage rate with the result that marginal workers never receive more than their value of marginal product. Because of this flexibility, employment sharing does not freeze the distribution of labour in its present unprofitable uses.

Moving to the less extensive provisions in each of the three groups, combinations of provisions should be emphasized. These provisions seem less extensive, and less costly to the firm but they should not necessarily be considered as inferior compensatory mechanisms. Under certain conditions such provisions as advance notice, severance pay, and voluntary early retirement can efficiently provide all the compensation that is required.

The most important factor to keep in mind when formulating a compensation program is that workers are not homogeneous with respect to employment alternatives, and therefore do not all need or require compensation in like amounts. Admittedly, it is impossible to assess precisely the losses accruing to each individual, and even following this it is difficult for reasons of equity to discriminate among workers and compensate them separately and individually. But even with the present structure of labour practices there is some latitude for developing more efficient compensatory programs.

For example, in industries where firms possess a hierarchy of general skills, there is a likelihood that older workers possess the best paid skills because of a combined longer period of on-the-job learning, and promotional advantages accorded older workers by seniority provisions. On the other hand, the younger members of these firms are those with little skill and little industrial experience of any type. Therefore, under these circumstances it is more efficient, given the necessary compensatory sum to be spent on severance pay, to establish a program that gives equal severance pay to all workers rather than scaling the severance payment positively with the years of service or the worker's age.

As revealed by the survey, both forms of distributing severance pay are acceptable, even though the latter is the overwhelming

favourite. Of course in the above circumstances it would be still more efficient to scale severance payments inversely with years of service or age, but this type of provision has not been found in practice and is probably anathema to the widespread seniority philosophy underlying most labour practices. However, the above example is not meant to deny that where employment opportunities are inversely correlated with age, for example, in industries where emphasis is on the physical rather than the cerebral, severance payments positively scaled to seniority and age will not be more efficient.

When workers are well educated and trained in general skills, and when employment opportunities are generally good, all that may be necessary to provide the required compensation is an advance notice provision, perhaps with paid time off for employment search. This type of provision will cost very little, which is as it should be if the workers suffer little from technological change.⁸

Blending of provisions presents the greatest scope for efficiently identifying and compensating the losers.⁹ Ample advance notice, perhaps with paid time off for employment search,¹⁰ allows workers with good alternatives to seek them out and leave the firm, perhaps after a period of self-sponsored retraining. When the good alternative workers have left and the date of the change arrives, severance pay can be granted to the dismissed workers according to the most efficient formula possible, and in the case of older workers early retirement benefits may also be granted. When the sequential application of provisions is utilized as in this example, the compensa-

⁸ The cost of advance notice to the firm derives from replacing lost productivity resulting from premature quits. Many factors will operate on the number of premature quits, but generally the fixed termination date of a designated obsolete job will act to discount the value of the job in the mind of the worker, and alternatives that were formerly inferior in value now become superior. Workers will move into these enhanced positions when the first opportunity presents itself so that length of advance notice and number of premature quits should be positively related.

⁹ The potential may not be being realized in practice. The survey revealed that in those agreements containing specific compensation provisions, excluding joint committees, the average number of provisions was 1.8. Fifty-seven per cent of the agreements contained only one provision.

¹⁰ Advance notice accompanied with paid search time differs from simple advance notice with respect to primary benefits. By being compensated for one of the large components of search cost, that of time, the probability increases that the worker by extending his search will secure a better paying employment alternative than he would in the absence of subsidized search. This conclusion leans heavily on the concepts and data presented by: George Stigler, "Information in the Labour Market," *Journal of Political Economy*. Vol. 70 (Supplement, October, 1962), pp. 213-25.

tion program automatically aids in the identification of the different degrees of losers.

When a sizeable proportion of the workers are relatively young and generally well educated, but their present specific skills have become obsolete, there is scope for combinations of retraining, and income maintenance provisions. Under these circumstances the combination of a cost-sharing retraining provision for younger workers, and severance pay and early retirement for older workers may be most efficient. The cost-sharing aspect of this program helps to identify and exclude those workers who would benefit little from retraining since either they are too old to realize an adequate return, or they are physically and mentally unable to succeed with the training. These workers will voluntarily opt out of a cost-sharing provision and can be compensated through severance pay or early retirement provisions.

The approach best suited to selecting the most efficient compensation program can be that represented by a joint union-management study committee. However, the joint committee approach will only be superior to traditional crisis collective bargaining if the proper attitude is attendant; this attitude being that summed up in the "compensation principle" philosophy. Given that workers should be compensated for income loss, the joint committee method is likely to develop a more efficient program than the traditional collective bargaining method because of several advantages. These advantages are: it is more timely, so that the relevant conditions surrounding the technological change are better known; it is able to concentrate its resources on a single problem, and the absence of this atmosphere of trading off issues may further lead to the co-sponsorship of more objective, impartial, outside research; and finally, in Canada, a joint committee can take advantage of the finances and counselling provided by the Federal Government's Manpower Consultative Service.

In conclusion, it should be observed that none of the provisions give effective protection or compensation to workers affected by displacement associated with permanent product demand shifts due to technological changes and unless there is a rule that requires bankrupt firms to observe agreement provisions there is unlikely to be compensation granted through privately negotiated provisions. Perhaps, in place of such a rule, public programs should be designed to protect these workers.

DISCUSSION

NOAH M. MELTZ
University of Toronto

I will discuss Dr. Leveson's paper in terms of three topics: (1) differences in labor market characteristics between self-employed and salaried managers in retail trade; (2) sources of difference between the earnings of the two groups; and (3) attempts to measure the supply of self-employed.

Before I deal with the first topic, let me comment on a small point that bothered me. The author continually refers to the large declines that have taken place in the proportion of non-farm employed persons in self-employment, yet he doesn't document the statement. This is important because in the post-war period, at least up to 1962, the relative decline in self-employment tapered off and in fact there was virtually no change in the over-all proportion between 1952 and 1962. Further, it should be noted that although the self-employed percentage of most occupation groups declined, there were increases within sales, craftsmen and operatives between the mid 1950's and 1961.¹

1. Differences in Labor Market Characteristics

The first finding on differences in labor characteristics is that the self-employed retail managers work longer hours both weekly and on an annual basis.

The second observation is that ". . . measured skill differences between self-employed and salaried retail managers are not great." In this connection Leveson notes that self-employed tend to be older and have fewer years of schooling completed. However, the conclusion as to lack of skill difference is based on ". . . little variation in 'expected' hourly earnings by city size and region for either class of worker."

There is no indication why a difference in 'expected' earnings is a good measure of skill. The concept of skill can be defined in several ways, hence the use of the term without any specification carries no meaning. Leveson should have said that standardizing

¹ See John E. Bregger "Self-Employment in the United States" *Monthly Labor Review* Vol. 86 (January, 1963).

for age and education almost eliminates the gap between the hourly earnings of self-employed and salaried.

2. Sources of Difference between the Earnings of the two groups.

The annual reported earnings of salaried managers in the sample of the 1960 census are 9 percent higher than the self-employed (\$7200. vs. \$6600.). On an hourly basis the gap widens to 20 percent (\$2.86 vs. \$2.41). Leveson says that the gap would be even greater if returns to capital and returns to unpaid labour were removed. He offers four possible explanations without attaching any weights. I would add two other possibilities: (1) reported earnings of the self-employed may not reflect real income because of the financial side-benefits which many self-employed receive. John Bregger gives as an example of this “. . . the proprietor of a grocery store, who, along with his family, consumes his own product throughout the year. Some of the self-employed live in the same building in which they conduct their business, and thus can charge part of the rent or mortgage payments as a business expense.”² As a result of tax provisions the real income of the self-employed may be much higher than reported earnings. (2) Bregger observes that older workers may move into self-employment because of the opportunity to maintain an income and to work at their own pace, even after compulsory retirement age.³ This would affect the relative supply of persons and presumably earnings.

3. Attempts to Measure the Supply of Self-Employed.

In this section the author correlates a number of variables with the percentage of self-employed managers in retail trade.

In point 4 of the summary Leveson observes: “Regression analysis across city size and region suggests that there is a significant and strong tendency for self-employed managers to change to salaried status within their occupation and industry when earning opportunities in salaried status are good.” This finding is confirmed on a historical basis by Bregger.

To a large extent, class-of-worker statistics are influenced by shifts between wage and salary jobs and self-employment. During periods of high economic activity, self-employment

² *ibid.* pp. 42-43.

³ *ibid.*

has tended to dip slightly or remain constant, while wage and salary employment rebounded substantially. Such self-employed workers (those operating marginal businesses) are probably induced to seek wage and salary positions which are more plentiful and more financially rewarding. Conversely, during downturns in the business cycle, as noted in the four postwar recessions, self-employment has either increased slightly or not changed significantly while wage and salary employment declined sharply.⁴

In point 5 Leveson says that self-employed retail managers seem to leave their occupation and/or industry much more readily than salaried managers when alternative opportunities are good. The evidence here is shaky—the statement is based on a correlation between percent self-employed and a measure of foregone earnings relative to the community—a correlation which the author himself says is not statistically significant. He says the sign of the correlation implies the move.

The conclusion is that “. . . it is quite possible that changes over time in the relative number of self-employed as large as observed (as noted earlier Leveson has never really shown how large these are) were in response to changes in opportunities rather than supply shifts.”

It is quite possible that changes in opportunities (i.e. shifts in demand) have been important, but it is also possible that there have been shifts in supply. I don't think the author has proven his case that the only change has been movement along a supply curve. I would have liked to have seen the cross-sectional comparison of the percent of self-employed managers in retail trade along with the relative earnings of self-employed and salaried managers. The problems of return to capital and unpaid family workers may in part, or wholly, be offset by the financial side-benefits to the self-employed through tax treatment.

I agree with Leveson's final comment that the analysis of changes in self-employment can be brought within the purview of the usual market processes.

I will discuss the two main sections of the paper of Berry and Murray, first measuring the effects of mass layoffs, second predicting their effects.

⁴ *ibid.* pp. 38–39.

1. *Measuring the Effects of Mass Layoffs.*

What, or how much is a "mass layoff"? Berry and Murray never explicitly define the term, though it seems to be at least $\frac{1}{2}$ of 1 percent of the total area employment.

The term layoff is not defined either. From the description of the data and the appendix a layoff seems to be synonymous with a reduction in employment in an industry or area. Again, an explicit statement would have been desirable.

Turning to the data, it is unfortunate that 36 cases of mass layoffs were eliminated because of high or low prior unemployment rates. It would have been useful to know for all cases of mass layoffs, whether there is any relationship between the prior unemployment rate, and the peak ratio of an area's unemployment rate to the national rate.

It would also have been useful to have a table showing when these layoffs occurred. All we are told is that 83 out of the 92 fell between 1958 and 1964. The question is whether these layoffs took place during periods of general recession, or were isolated cases. If the Public Works and Development Act is intended primarily as a selective economic tool then the period of occurrence is important.

One of Berry and Murray's conclusions in the first section is that mass layoffs involving at least $\frac{1}{2}$ of 1 percent of the total local employment, cause significant local economic hardship. The only basis for this statement is the observation that "on the average, layoffs cause areas with local unemployment rates only slightly above the national average (13%) to experience increases in their local rates to 46% above the national rate." Berry and Murray don't say why an increase from 13% to 46% above the national average constitutes a significant economic hardship. In addition, it should be noted that the median figure is lower—36% of the national average.

The second conclusion is that "the ratio criteria for Federal assistance is sometimes not appropriate for eliminating absolute economic hardship in a local area. It is possible for an area with a high local unemployment rate to fail in qualifying for Federal assistance because of a relatively high national unemployment rate." As indicated earlier, if the Act was set up primarily to apply selective measures to designated areas then it was not intended as an important tool in time of general or national recession.

2. *Predicting the Effects of Mass Layoffs.*

My major criticism of the first model is that the characteristics of the workers involved in the layoff are the averages for employed persons in the industry as shown in the 1960 census, not the characteristics of those who were actually laid off. The implicit assumption seems to be that the employed and those laid off have the same characteristics. The fact that the variables for workers characteristics had no impact on the correlations may result from the fact that they refer to the employed rather than those who were laid off.

What magnitude of layoff is implied in the final equation? If we let X_6 by 1.13 (the mean level Berry and Murray found prior to layoffs) the required layoff must be 6 percent of the local employment. If all those persons who were laid off become immediately unemployed then the initial ratio would exceed the predicted maximum unless the area and the nation were experiencing unemployment rates of close to 12 percent. It is possible, and in fact likely, that not all those laid off would be unemployed because some might leave the labour force or the area, and others would find alternative jobs. However, the onus is on the authors to explain the possibility that the initial ratio could exceed the predicted maximum. The diagram they have drawn of the consequences of a layoff shows a gradually increasing, then decreasing curve describing roughly a normal distribution, not a bimodal curve.

Another consideration relates to the use by Berry & Murray of a figure of $\frac{1}{2}$ of 1 percent of employment as a layoff causing significant local economic hardship. In terms of their model, a layoff of 6% would be required if the area's prior ratio were 1.13, and 9.5% if the prior ratio were 1.00. For a layoff of $\frac{1}{2}$ of 1 percent to raise the ratio to 1.50 the prior figures would have to be 1.33, that is the local area's unemployment rate would have to exceed that national rate by $\frac{1}{3}$ to begin with. This raises the question of whether the model's success in predicting the impact of layoffs resulted from a split of the areas into two groups, one with high prior ratios and the other with much lower prior ratios. Unfortunately this question can't be answered from the data presented in the paper.

All in all, I would like to see more information on previous patterns of layoffs and unemployment, especially where and when these occurred. This data should be shown for all cases of mass

layoffs, not just those where the prior unemployment rate was between 2.5 and 10.0 percent. The idea of attempting to predict the likely maximum ratio of an area's unemployment rate to the national rate is a good one, however, the equation actually developed raises some questions concerning the magnitude of the layoff necessary to raise the area's ratio to meet the required 150 percent.

DISCUSSION

ERNST W. STROMSDORFER

Pennsylvania State University

Mr. Ross' paper represents one of the more comprehensive treatments of the theoretical problems involved in compensating workers displaced by technological or other types of structural change in the economy and represents a very real and useful contribution. My comments are to be interpreted mainly as remarks to expand Mr. Ross' paper, since I am sure he is aware of many of the points I will make and only time limitations have kept him from making them himself.

My major disagreement with the approach taken is that the emphasis is strictly on the efficiency aspects of compensation. Even if the Hicks-Kaldor criterion is applied and even in compensation is not only hypothetically, but actually paid, problems of equity still exist with the resulting new income distribution. The losers from change may wish not only to be compensated for their direct monetary loss, but may demand over-compensation in monetary terms to compensate for loss of non-monetary economic welfare involved in any structural dislocation. This will be especially true if the gainers are highly visible and gain a great deal. Thus, simple compensation of direct monetary loss may be insufficient to gain the cooperation of the losers, and, clearly, because of this, equity considerations involved in the distribution of the total gains of the economic improvement cannot be avoided.

The second general problem deals with the fact that the discussion is generally conducted in terms which suggest that no uncertainty exists. But clearly, uncertainty does exist, especially in terms of estimating the expected present values of net benefit for the losers. Melvin Reder, among others, has pointed out in his *Studies in the Theory of Welfare Economics* that uncertainty must be taken into account and premiums must likely be paid to the losers to compensate them for this uncertainty.

One should also take issue with the assumption that macro-economic effects on tertiary participants can be all but ignored. This society has seen structural changes which have been massive in their effects on third parties. Examples can be shown in the shift

out of use of soft and hard coal into hydrocarbons as a source of heat and energy and in the geographic shifts of the textile and clothing industry out of New England, down to the southern Atlantic states and into the deep South.

Next, it is not always the case that firms will be forced from the industry when compensation takes the form of full income maintenance. In short run, the links among the wage-cost relationships may not be precise. Also, demand for the firm's product may be relatively inelastic over the relevant range in the short run. Finally, demand may increase over the long run. Clearly, the magnitude of the compensation paid becomes critical given the above considerations.

As Mr. Ross rightly points out, employment sharing either through shorter hours per day or a shorter work week comes off very badly as a compensation technique. In fact, if the major gainers from a structural change are the firm, industry and public, then the use of employment sharing enables these groups to avoid much of the costs of compensation and locates the major burden directly on the workers in the firm or industry itself. This effect is not what one generally has in mind when he speaks of compensating the losers from structural change.

Next, even if there is a demand for a given skill within a firm, the firm would have little incentive to voluntarily sponsor and pay for such training of its displaced workers if the skill need is general in nature rather than highly specific to the firm. If the skill is general in nature, this raises the productivity of the retrained worker as much in other firms where the skill is used as it does in the firm providing the training. The retrained worker has no incentive to stay employed with the firm and thus the probability that the firm will capture a stream of benefits to compensate it for the costs incurred in the retraining is low. A firm would have to be forced to incur the costs of provision of training in general skills by a union or some other exogenous force.

Mr. Ross also argues, and correctly, that retraining of displaced workers is likely to be more efficient, that is, results in a greater gross national product, than such provisions as full income maintenance. Society will desire retraining as a compensation form while the workers may desire full income maintenance. From the standpoint of the employee, he simply may not care that retraining

is more efficient. Because of this one is brought up against the equity issue again and a problem arises as to whose preferences, the worker's or society's, are to be served. Efficiency is not a sufficient condition for making this judgment.

Finally, Mr. Ross makes the suggestion that equal severance be paid to displaced workers regardless of age in those firms which possess a hierarchy of skills. As a practical matter, this prescription is difficult to justify. The older worker, once displaced, is most likely to lose the most in terms of the present value of his expected income. First, it may be that he has been paid more than his marginal revenue product due to seniority and similar provisions. Secondly, it generally takes an older worker a longer time to get rehired.

My comments on Professor Piore's paper will be brief. His is a very personal account of his experiences in the Mississippi Delta. It is a depressing paper for it suggests that there has been little qualitative change in the attitudes of people. The works of Cash and Myrdal are still strikingly relevant and require little updating even after almost three decades.

Even given that Professor Piore's view of the problem is a partial view, the account that he provides suggests that American society is in deeper trouble than I had thought it to be.

XI

ANNUAL REPORTS OF IRRA FOR 1967

MINUTES OF THE ANNUAL MEETINGS

EXECUTIVE BOARD SPRING MEETING

May 5, 1967 in Detroit

The Executive Board of the Industrial Relations Research Association met on Friday, May 5, 1967, at noon in the Park Shelton Hotel, Detroit. President Neil Chamberlain presided at the meeting attended by Secretary-Treasurer David B. Johnson; Editor Gerald Somers; Board Members Frances Bairstow, Douglass V. Brown, David G. Moore, Roy R. Reynolds, Jack Stieber; Jerome H. Brooks and David Tanzman of the Detroit Chapter.

Secretary-Treasurer Johnson reported that the income of the Association for the first four months of the fiscal year was up slightly compared with last year's, mostly from increases in publication sales and payments for institutional subscriptions to IRRA publications. Because of the increasing costs of publishing IRRA volumes, a membership dues increase was contemplated by the Board, but it was decided to wait until some future Board meeting to reconsider this question. Johnson indicated the cost of publishing the *Membership Directory* had in the past usually used some of the reserves accumulated by the Association in the intervening years between Directories.

A full slate of acceptances from nominees for Executive Board in the fall election was presented, and the Board particularly noted the high calibre of each. President Chamberlain listed the next year's nominating committee for the Board's approval. They would meet in December in Washington to select a slate of nominees for the 1968 fall election.

The Secretary-Treasurer then presented proposed amendments to the IRRA Bylaws which the Board had instructed him to draft

after the San Francisco Meeting. After some discussion, the Board approved them for printing in the *Autumn Newsletter*.

The request for affiliation by the Southern California Chapter in Los Angeles was approved by the Board after it was ascertained that their bylaws were consistent with the requirements of the Association's Bylaws, including the provision that local chapter officers be members of the National Association. In answer to a question on policy in this regard, it was stated that membership-promotion packets were customarily mailed to non-member chapter officers to follow-up on this requirement.

A resolution that the Association affiliate with the TIAA for coverage of IRRA staff members was approved, the details of the arrangement to be determined by the Secretary-Treasurer.

Editor Somers reported on the publication of the 1967 Detroit *Proceedings*, and the Board agreed that it be left to him to decide on the proper way to publish them after tapes of the sessions had been transcribed and edited. All of the sessions at the Spring Meeting were to be composed of informal presentations and discussion.

Editor Somers announced that Harper & Row would not print the 1968 research volume, and that the Association was free to choose another publisher. Other publishers had been contacted, three of whom would like to handle the IRRA series. Their estimated costs were about the same as for earlier volumes, and the time required for publication was much shorter. Editor Somers reported for Sar Levitan that the 1968 volume under the title, *Towards Freedom from Want*, was making good progress and that the manuscript was expected to be ready for the publisher by the end of the summer.

The Editorial Board for the 1969 research volume on private-public manpower policy was to be headed by Arnold Weber (chairman), Frank Cassell, and Woodrow Ginsburg. Weber had not yet presented an outline for the volume, and the Editorial Board requested ideas for chapters and authors from Executive Board Members.

Because there had been some expression of opinion that the special research volumes may be less influential in the profession than the IRRA *Proceedings*, the Board gave consideration to a reevaluation of the content and format of coming volumes. President Chamberlain urged Board Members to bring alternative ideas

in December. He urged that they feel free to reexamine the basic structure and format of the special volumes. Roy Reynolds suggested comments be sent to the Editor and the President in advance of the December Meeting for duplication and dispersal to the Board.

Progress on plans for the First World Congress of the International Industrial Relations Association in Geneva was noted. The program that the Board had thought too diffuse in December was now squeezed into four major categories. The Board approved nominees for President and Secretary of the IIRA and also noted the role of a good secretariat as one of utmost importance in the successful functioning of the new association. Wight Bakke, President of IRRA in 1958, was approved as one of IRRA's official delegates at the first Council Meeting in Geneva on September 4, and Editor Somers was reaffirmed as the other.

Sites for the 1968 Spring Meeting were discussed, and, after weighing the alternatives, the Board accepted the invitation of the Central Ohio Chapter to hold the meetings in Columbus.

President Chamberlain summarized plans for the December program in Washington, D.C., on the general theme, "The Use and Development of Manpower." Finally, he expressed the appreciation of the Board for the enormous help of the Detroit Chapter in arranging the meeting.

The meeting was adjourned at 1:45 p.m.

EXECUTIVE BOARD WINTER MEETING

December 27, 1967, in Washington, D.C.

The Executive Board of the Industrial Relations Research Association met at 7:00 p.m., Wednesday, December 27, 1967, in the Statler-Hilton Hotel. President Neil Chamberlain presided. Present were Incoming-President George Shultz; Secretary-Treasurer David B. Johnson; Editor Gerald Somers; Board Members (17) Aaron, Barbash, Brandwein, Brown, Cassell, Ginsburg, Hildebrandt, Irwin, Levitan, Mangum, Moore, Ross, Stieber, Teper, Ulman, Weber, and Wilensky; Sol Barkin, Editor of the 1967 volume; and Local Arrangements Chairman F. Robert Volger of Washington.

Secretary-Treasurer Johnson reported 340 new members for a net increase of 78 during the year, bringing total membership to 3033. About 11,000 new-membership promotions had been mailed out

in 1967: National Education Association (1000), Public Personnel Association (4000), Bowker's lists of selected libraries (3400), etc.

Dues collections increased by \$1,341.55; sales of volumes doubled to \$4,198.48 (1967 was the first year since reproduction of IRRA's formerly out-of-print volumes); royalty income increased notably, primarily because of the \$670 in royalties assigned to IRRA by William Haber, *et al.*, from sales of *Labor in a Changing America*.

Johnson reported that expenses in 1967 were generally down from the previous year when the 1966 *Directory* was printed, except for publication costs which had risen shockingly to \$20,422.88. Although this included payment of \$9,000 for printing the *Directory*, no billing had yet been received for *International Labor*, which had been mailed out by Harper & Row just prior to the Meetings. However, the retail price of this volume was \$6.95 (278 pages), about double the \$3.50 (208 pages) sales price of the last research volume, *Hours of Work*. In addition, the earlier publication date anticipated for the 1968 research volume, *Towards Freedom from Want*, would further the financial stringency early in 1968. These considerations led to discussion of a possible dues increase. Comparison was made with generally higher dues of other similar professional associations. Although there was some concurrence on the need for a dues increase, action was deferred until the May meeting when a more detailed projection of the rapidly rising publication costs would be available. It was also suggested that the possibility of underwriting some of the costs of publications be explored—utilizing the grantsmanship ability represented on the Board.

It was agreed that no further action was necessary on the proposed amendments to the Bylaws, since the Board had already approved them for vote at the General Membership Meeting on December 28, 1967.

Two applications for new local chapter charters were presented: the Greater Cincinnati Chapter and the New York Capital District Chapter at Albany. Affiliation was approved by the Board after it was ascertained that the constitutions and bylaws of both chapters conformed to requirements of the National IRRA Bylaws. Barkin announced that the Paris Chapter had disbanded. However, one of their purposes had been to encourage the French to

have their own association, and he was happy to report that this goal was about to be realized.

Editor Somers reported that the ultimate had probably been reached in reducing publication time of the 1968 research volume, *Towards Freedom from Want*, to ten weeks. The book was scheduled to be out in March and would be in paperback. It had been necessary for the Association to go into the publishing business itself for the 1968 volume, and the Colwell Printing Corporation, who also print the IRRA *Winter Proceedings*, had been selected. Somers anticipated that the new central publication organization proposed by Wayne Hodges would be helpful to the Association in promotion and sales of IRRA publications.

The Board then discussed the possibility of providing 100 free reprints to authors of chapters in *Towards Freedom from Want*. Decision on this matter was referred to the Editor. Consideration of a hard-cover edition of the volume for allocation to libraries and chapter authors was deferred.

Arnold Weber reported on the status of the volume dealing with Manpower Policy, to be published in 1969. His outline of topics and authors was approved with the addition of another possible author suggested by members of the Board.

The Executive Board approved a motion by Jack Barbash to the effect that the annual research volumes be continued and that President Shultz appoint a committee to recommend the content of future volumes.

Gerald Somers reported on the First World Congress of the International Industrial Relations Association, held in Geneva in September 1967. He was elected as the U.S. representative on the IIRA's Executive Committee. There were 204 participants from 39 countries at the Congress. A regional meeting of the international association was being arranged, probably to be held in Chicago in May.

Accepting the repeated invitation from the Iowa Chapter, the Board selected Des Moines as the site of the IRRA's Spring Meeting in 1969. President Shultz reported on his plans for the 1968 Spring Meeting in Columbus. Local arrangements were being effectively handled by Robert Miljus and Rankin Gibson, Central Ohio Chapter.

President Shultz provided an outline of topics which he planned

to include in the Annual Winter Meeting in Chicago, December 1968. The program would include papers and discussions on Collective Bargaining, New Directions in Labor Statistics, Manpower Issues, Labor Economics, Public Policy and Collective Bargaining, and Administration of Creative Organizations, as well as invited papers. He invited members of the Board to react to specific suggestions under these headings and to indicate possible participants. It was suggested that the procedures by which participants are included in the meetings be publicized in an early issue of the *Newsletter*.

Margaret Gordon, Chairman of the Nominations Committee, reported on the Committee's recommendations for nominees for IRRA offices in 1969. The Board approved the slate.

The meeting was adjourned at 10:30 p.m.

GENERAL MEMBERSHIP MEETING

Washington, D.C., December 28, 1967

President Neil Chamberlain welcomed members to the meeting at 5 p.m. on Thursday, December 28, and commented briefly on the status of the IRRA and its activities during the past year. He introduced President-Elect George Shultz and offered his best wishes for a successful tenure in the year to come.

Secretary-Treasurer David Johnson summarized the growth in IRRA membership and incomes in 1967, but spoke also of the somewhat precarious financial condition of the Association because of rapidly rising publication costs. However, the Executive Board had deferred decision on a proposed dues increase until the next spring meeting when more complete data would be available.

The Secretary-Treasurer noted with pleasure the affiliation of three new local chapters in 1967: Southern California at Los Angeles, Greater Cincinnati, and New York Capital District at Albany. He also reported that the Paris and Georgia Chapters had become inactive.

The membership voted its approval of the amendments to the IRRA Bylaws as proposed in the Autumn and Winter issues of the *Newsletter*. The Bylaws were amended as follows: (Brackets apply to wording which was removed. Portions in italics indicate new wording.)

1. In Article I, Paragraph 2, just after "Junior Members (grad-

uate and undergraduate students, limited to three consecutive years in each classification) paying annual dues of \$4.00"; insert: "*Foreign Members (from countries other than the United States and Canada) paying annual dues of \$4.00*"; also, changed the last sentence in paragraph 2 to read as follows: "Persons who [pay] *paid* dues for 1948 [shall be] *have been* designated as Charter Members of their respective classifications."

2. Article II, Paragraph 1, third sentence: "The terms of office of the members elected to the Executive Board shall be three years, rotated so that four terms expire one year, [four the next] *five the next*, [and six the third] *and five the third.*"

3. Article II, Paragraph 4, changed the last sentence to read: "The Editor shall, with the advice [and consent of the Executive Board] *of the President and the Executive Board appoint*, [for a *term of three years*] an Editorial Board [of at least five members to assist him] *for each research volume.*"

Editor Gerald Somers reported on the status of the various IRRA volumes in progress. He emphasized that at \$8 IRRA dues were still the best buy in professional circles; *International Labor* alone retailed for \$6.95. He anticipated *Towards Freedom from Want* would be the most definitive recent work on income maintenance. The Editor also reviewed for the membership the appointment of a committee by President Shultz to study the whole question of IRRA research volumes and requested members to give or send their reactions to President Shultz or to him.

President Shultz listed program sessions for the May Meetings in Columbus and the major topics he proposed for the December Meetings in Chicago. He indicated that both of these programs in 1968 would focus on diversified subjects rather than being keyed to a single central theme. He asked IRRA members to give or send to him their suggestions for both topics and speakers for the Chicago Meeting. Milton Derber approved of the "something for everyone" in the forthcoming programs, and he expressed concern over the lack of participation of psychologists, sociologists, political scientists and labor historians in IRRA programs. The involvement of these people had been the original premise of the Association. Other topic areas suggested by members for exploration included invasion of privacy, centralized computer systems, fringe

benefits as against wages, international comparisons with Europe, high-talent manpower and nonmonetary incentives.

President Chamberlain thanked the IRRA secretariat and all who had cooperated in the effective functioning of the Association throughout the year. The contribution of Dorothea deSchweinitz, Philomena Mullady, Alan Gibbs and F. Robert Volger, Chairman, in the local arrangements of the Washington meeting was noted.

The meeting was adjourned at 5:45 p.m.

AUDIT REPORT FOR FISCAL 1967

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION

Gentlemen:

We have audited the cash receipts and disbursements of the Industrial Relations Research Association for the fiscal year ended November 30, 1967. We submit herewith our report.

The available cash resources of the Industrial Relations Research Association on November 30, 1967, totaled \$14,903.55, and consisted of \$9,879.15 on deposit in the First National Bank checking account, \$5,000.00 invested in the Home Savings and Loan Association and \$24.40 on deposit at the First National Bank (savings account). The balances were confirmed directly to us by the bank and savings & loan association.

As set forth in Exhibit "A" and "B," the cash disbursements for the fiscal year totaling \$35,845.23 exceeded the cash receipts of \$32,340.58 by \$3,504.65. The cash receipts for the 1966-67 fiscal year were \$3,877.35 more than the cash receipts for the 1965-66 fiscal year. The cash disbursements for the 1966-67 fiscal year exceeded the cash disbursements for the 1965-66 fiscal year by \$7,490.69. This increase is principally due to the fiscal year 1965-66 expense of publishing the IRRR membership directory which was paid in the fiscal year 1966-67.

During the year, there was transferred out of the First National Bank savings account \$200.00 which was deposited in the First National Bank checking account. The Savings Bond of \$5,000.00 with accumulated interest of \$203.00 was also redeemed and deposited into the First National Bank checking account.

The cash receipts journal was footed by us for the entire year. All cancelled checks returned by the bank during the year were examined by us and traced to the disbursement journal. The cash disbursements journal was also footed for the year. The source information of dues income was tested for a portion of the year.

In our opinion, the accompanying statement of cash receipts and disbursements present fairly the cash transactions of the Industrial Relations Research Association for the fiscal year ended November 30, 1967, on a basis consistent with that of the preceding year.

HOUGHTON, TAPLICK & Co., Certified Public Accountants

December 18, 1967

COMPARATIVE STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS Fiscal Years Ended November 30, 1967, and November 30, 1966

	Year Ended November 30 1967	1966	Increase	Decrease
Cash Receipts:				
Membership Dues	\$20,172.80	\$19,227.00	\$ 945.80	
Subscriptions	2,367.75	1,972.00	395.75	
Sales	4,198.48	2,159.27	2,039.21	
Royalties	1,155.01	655.76	499.25	
Mailing List	879.25	605.76	273.49	
Travel, Conference and Meetings	3,118.57	3,352.45		\$ 233.88
Interest Income	434.25	414.79	19.46	
Miscellaneous	14.47	76.20		61.73
Totals	<u>\$32,340.58</u>	<u>\$28,463.23</u>	<u>\$ 3,877.35</u>	
Cash Disbursements:				
Salaries and Social Security	\$ 7,740.80	\$ 9,102.90	\$	\$1,362.10
Retirement Plan	61.80	—	61.80	
Printing	1,654.25	1,465.21	189.04	
Postage	1,598.00	2,416.85		818.85
Services and Supplies	1,832.77	1,977.62		144.85
Publications	20,422.88	11,653.72	8,769.16	
I.R.R.A. Conference and Meeting Expense	2,342.89	1,585.01	757.88	
Miscellaneous	117.54	153.23		35.69
Telephone and Telegraph	74.30	—	74.30	
Totals	<u>\$35,845.23</u>	<u>\$28,354.54</u>	<u>\$ 7,490.69</u>	
Excess of Receipts over Disbursements	\$(3,504.65)	\$ 108.69		\$3,613.34
Add: Beginning Bank Balances	8,183.80	13,295.11		5,111.31
	<u>\$ 4,679.15</u>	<u>\$13,403.80</u>		<u>\$8,724.65</u>
Add (Deduct): Net Transfer of Funds	5,200.00	(5,220.00)	\$10,420.00	
Bank Balance, End of Year	\$ 9,879.15	\$ 8,183.80	\$ 1,695.35	
Home Savings and Loan Certificate				
# 3384 Purchased in 1954	5,000.00	5,000.00		
First National Bank—Savings	24.40	220.00		195.60
First National Savings Bond Number G000617 (4-1/4%)	—	5,000.00		5,000.00
Available Cash Resources	<u>\$14,903.55</u>	<u>\$18,403.80</u>		<u>\$3,500.25</u>

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