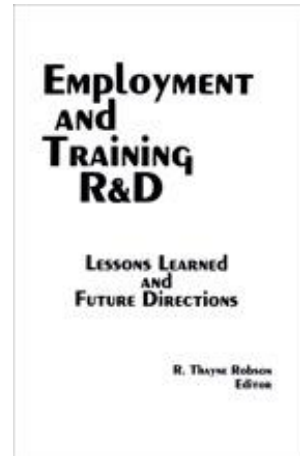




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Expanding the Knowledge
Base for Informed Public
Policy:
The U.S. Department of Labor's
Research Program 1963–1978

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Expanding the Knowledge Base for Informed Public Policy

**The U.S. Department of Labor's
Research Program 1963-1978***

Eli Ginzberg

1. Introduction

When asked to take on this assignment, I immediately responded in the affirmative since my colleagues and I at the Conservation of Human Resources (CHR), Columbia University, have been major beneficiaries of DOL funding throughout the two decades. Clearly our beneficiary status necessitates that this special relationship be acknowledged, but it did not justify my turning down the invitation. Except for the most recent generation of manpower researchers, all who have worked in the field of human resources and manpower had been beneficiaries of DOL, some more, some less.

*Anna Dutka, a long-time member of the Conservation staff who has assisted me on many earlier projects, was most helpful on the present assignment. She found many of the critical items that I have reviewed; she checked a great many details with informed persons inside and outside of the federal government; she made sure that text and footnotes were aligned; and she took over responsibility of turning my draft manuscript into final product. For all of this assistance, and more, I am deeply in her debt.

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My solution to this conflict of interest is relatively simple: I will not deal with the multiple research products that the Conservation of Human Resources produced beyond calling the reader's attention to the brief descriptive summary that can be found in *Research and Development: A 16-Year Compendium (1963-78)* (hereinafter cited as *Compendium*); *The Conservation of Human Resources Project: Fortieth Anniversary Report*, Columbia University, March 1979; and a listing and brief notation of the principal CHR research supported by DOL appended to this paper.

Let me further note that because of various governmental and nongovernmental positions, I had other interlocking relationships with the Department of Labor's Office of Research and Development (ORD), in particular, as Chairman, National Commission for Employment Policy and as Chairman of the Board, Manpower Demonstration and Research Corporation.

The above helps to make the record clear. But I should also add that I have had a long and close friendship with Howard Rosen, the long term director of ORD.

2. Orientation

The above potential sources of conflicts of interest having been specified, it is desirable, if not essential, that I touch at least briefly on a number of intellectual and emotional predispositions that have long helped to shape my thinking about research in human resources and manpower as well as in the broader arena of social investigations.

As a pupil of Wesley Clair Mitchell and John Maurice Clark, I come out of the "institutional school of economics" with deep skepticism about the applicability of mainline economics as an explanatory theory of the U.S. and world economies. My skepticism has been that much greater when

it comes to applying neoclassical economics to the analysis of human resources and the labor market.¹

Further, I am in fundamental disagreement with the positivistic tradition of the Chicago School, which believes that economics is a “value-free” discipline and that the results of the researcher are totally independent of his political orientation. Aristotle taught that man is a political animal. Hence he can engage in value-free social inquiries only if he were able to think and reflect outside of his own skin. But I cannot conceive of such a disembodied researcher.²

Let me call attention to a few more preconceptions and prejudices. While money, especially large amounts of money, can, over a period of years, alter a research environment by increasing the number of trained researchers, a significant transformation requires considerable time. Even when successful, as in the case of biomedical research which saw federal expenditures increase from about \$65 million in 1950 to about \$4 billion in 1984, the much enlarged research establishment may make very slow progress in solving complex problems such as understanding the causative factors in cancer.

Further, the institutional reinforcement that established doctrines and techniques receive from the academic leadership does not yield ground readily—not even in the presence of new, large, and sustained research and development expenditures. The reasons are not difficult to appreciate: most good researchers are interested in an academic career and have the best prospects of success if they conform at least to the extent where their seniors and peers publish their articles and vote to grant them tenure.

Reformulated, the foregoing implies that a federal research and development program is inevitably and to a large degree the captive of the academic establishment.

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Many will say this is as it should be; but moral imperatives aside, this is how it has been and will probably long continue to be.

Federal research funds are made available by Congress with the Administration playing a leading or, at a minimum, a supporting role. Hence there is no possible way for a federal research and development program to get under way and flourish unless those concerned with its growth and well-being keep, at all times, not one but two ears to the ground. Skillful research administrators must make a large number of compromises on both the administrative and the legislative fronts if a continuing dollar flow is to be secured. They are most successful if they know where they want to go and succeed in moving ahead with only an occasional detour.

Finally, one must recognize that the most important advances in the natural and the social sciences are the work of men of genius.³ By definition, not even the best planned, financed and executed research and development program has learned how to increase the number of geniuses. All that it can accomplish is to improve the methods, the data, the personnel and the environment which may sooner or later lead to a major breakthrough that will advance the discipline.

3. Criteria and Overview

The results of an assessment of a research and development program depend on the criteria employed. If the criterion is a major intellectual breakthrough, the odds are overwhelming, for the reasons just adumbrated, that the evaluation will be negative.

What other, more reasonable criteria, might be used to assess a research and development program? Three have already been alluded to in passing: the enlargement of the

research pool, the improvement in the data base, and the development of new, as well as the reinforcement of existing, methodologies. In the assessment that follows, we will start by making use of each of these three criteria.

One can begin this assessment by noting that ORD, through its dissertational grant program,⁴ enlarged the pool of young researchers by an order of magnitude. During the 16-year period under review, it added almost 500 new doctorates to the pool.

A second major accomplishment of ORD was its significant strengthening of the data base. Most of the 2000 or so grants and contracts which it funded yielded some new data about some facet or facets of the labor market. But ORD made its largest single commitment, beginning in 1965, to improve the data base by funding the National Longitudinal Surveys at Ohio State.

On the third front, the development of new methodology, ORD moved circumspectly. It was cognizant of a division of labor between itself and the National Science Foundation, whose charter gave the latter more scope to support research aimed at the development and refinement of theories and techniques. On the other hand, Congress encouraged ORD to undertake evaluative studies of manpower programs and in the process considerable advances in evaluation techniques were achieved. One must add, however, that many evaluations contributed little if anything to improved results, substantive or methodological.

The single most useful volume that deals with the ORD program is a collection of papers contributed by Ray Marshall, Denis Johnston, Michael Piore, Glen Cain, Peter Barth, Vernon Briggs and Herbert Parnes under the editorship of Gordon Swanson and Jon Michaelson.⁵ These papers were prepared for the Committee on Department of Labor Manpower Research and Development of the National

Academy of Science, chaired by Gordon Swanson, that had undertaken a review of the ORD program and published its report in the mid-1970s under the title *Knowledge and Policy in Manpower*.⁶

Peter Barth, in his contributed paper, calls attention to several ways in which a review of research can be approached: concentration on the subject areas that have received attention; assessment of the quality of the research; determination of the existence of patterns; evaluation of the timeliness of the research and its relevance to policy formulation; the cost/benefit ratio involved; and finally, the possibilities for improvement.⁷

There is surely nothing wrong with the above listing and Barth recognized that additional criteria could easily be added. From among this large number I will select only two to add to the three criteria noted earlier for the purposes of this assessment—the quality of the research and its contribution to program development and policy.

A first approximation suggests that many of the 2000 projects were of good quality—the subject was sensible, the data collection and the analyses were carried out in a workmanlike fashion, and the findings made some contribution to the program or policy. The best among them made multiple contributions.

With respect to the relation of ORD results to public policy, a presumptive conclusion is that Congress must have given the program at least a passing mark because of its willingness to keep funding it.

By way of recapitulation, the following five criteria have been identified as central to the assessment to which this paper is dedicated:

- The enlargement of the research pool.
- The improvement of the data base.

- The development of new methodology.
- The quality of the research projects.
- The contribution to public policy.

4. Labor Economics: A Longer View

By way of setting it is important, especially for the orientation of the younger members of the profession, to call attention to the state of “labor economics” (to use the most inclusive term that was earlier in vogue) that distinguished the American academic scene prior to the passage of the Manpower Development and Training Act in 1962.

What follows is based largely on memory and personal experience, sharpened by a rereading of the materials referred to in this assessment. It also clearly shows some of my prejudices and preferences.

The leaders of labor economics in the 1950s—John Dunlop, Charles Myers, Frederick Harbison, and Clark Kerr, the first three of whom were charter members of the National Council for Employment Policy and also served as chairmen of the Council in its formative years—were busy studying the impact of industrialization on labor, primarily in the developing nations. Without resorting to psychohistory, a reasonable presumption is that they found overseas a more exciting research arena than the United States during the Eisenhower era of goodwill during which management and unions were getting along and the problems of the poor, the blacks, and women had not yet risen to a high level of consciousness.

In the mid-1950s, when the National Manpower Council put the subject of “womanpower” on its agenda of possible areas for future investigation, the vote in favor of pursuing the inquiry passed by a single vote! When the final report *Womanpower*⁸ was presented to President Eisenhower he

remarked: “Oh yes, women were very important in the European Theater of Operations; they did very good work as telephone operators, chauffeurs, and nurses”!

At about the same time, one of the more literate members of the New York banking community was unable to comprehend what was meant by the term “human resources” until he was informed that it was a broader term for the arena usually subsumed under military and civilian manpower. In fact, when Frederick Harbison relocated from the University of Chicago to Princeton he made a detour via New York to learn about the range of subjects that the Conservation of Human Resources Project at Columbia was working on.

In late 1953, shortly after James P. Mitchell, one of my favorites among the sixteen Secretaries of Labor with whom I have consulted, as appointed, he designated an informal 5-man advisory committee to assist him in reorienting the Department of Labor. Douglas V. Brown of Princeton served as informal chairman and Kerr and I were members, together with Cy Ching and a Washington consultant. Our principal recommendation was that the Department of Labor should become the manpower agency of the federal government. Mitchell was comfortable with this recommendation but there was very little that he could do in the 1950s to implement it.

Two more observations. The majority of academicians interested in labor economics were based at, or closely aligned with, industrial relations institutions located at a few of the major private universities but primarily at the principal state universities of which Cornell, Michigan, Michigan State, Illinois, Minnesota, and California, both at Berkeley and at Los Angeles, were among the leaders.

An inspection of the contents of the *Industrial and Labor Relations Review* in the early 1960s discloses that most of the

issue was given over to a symposium on “Industrial Relations in Latin America.”⁹ The other three principal articles dealt with “Fringe Benefits and Overtime as Barriers to Expanding Employment,” “Labor Relations in the Postal Service” and “The Relation of the Labor Force to Employment.” None of the articles made use of a single regression; they relied on descriptive statistics—nothing more.

Much the same was true for the first issue of the *Journal of Human Resources* which appeared in the summer of 1966.¹⁰ Of the five principal articles on investing in human capital, the supply of and demand for college teachers, occupational data requirements for education planning, the effects of general education on manpower programs, and the economics of health, education and welfare, not one made use of econometrics or mathematical modeling.

So much for the status of labor economics in academe at the onset of ORD. How did the breakthrough in federal manpower policy, including research funding, occur? The successful political initiative owed much to the work and findings of two committees in the House and the Senate under Representative Elmer Holland and Senator Joseph Clark, both of Pennsylvania, during 1960 and 1961. The committee hearings called attention to the growing incidence and prevalence of unemployment. Curtis Aller and Garth Mangum did yeoman service as staff directors of the House and Senate committees, respectively. It is worth recalling that the Republicans played a major role in passing the MDTA legislation.

Further, Senator Paul Douglas of Illinois had worked long and hard to obtain federal assistance for depressed areas and the Area Redevelopment Act was finally passed and signed in 1961 by President Kennedy.

Senator Clark, shortly after the election of President Kennedy, asked me to assemble a group of academicians and

other experts for a meeting with him at the Harvard Club in New York City to explore a Congressional manpower initiative. Arthur Goldberg was one of the invitees, but had to cancel at the last moment because the President announced his appointment as Secretary of Labor. Among the major recommendations that the group made to Senator Clark was to include in any new legislation a requirement that the President submit an annual report on manpower to the Congress which would help to focus the attention of the nation on the subject. Further, the group recommended Congress provide funding for a research and development program.

One more piece of history. Seymour Wolfbein who had been assigned by Secretary Mitchell and reassigned by Secretary Goldberg a leading role in the Department of Labor's emerging manpower efforts, asked me to talk with the Secretary while the Manpower Development and Training bill was making its way through Congress about the need for a job creation program to accompany a job training program. The Secretary heard me out, indicated that he agreed, but added that the White House would go for a modest training bill and nothing more.

5. Assessment

The basis for the appraisals offered below requires clarification. I did not read, much less study with care, the 2000 or so completed research investigations. Some of the reports emerging from the more important research efforts were known to me since they first were made public and I have sought to refresh my memory about those that I considered relevant for the present exercise. Further, I turned the pages and read most of the text in the *Compendium* and reviewed with some care the two publications of the National Academy of Sciences. As noted earlier, I also did some sampling of the journals to refresh my memory of their

scope and coverage at the beginning and end of the period under consideration.

With this preamble, the assessment of ORD's program in terms of the five criteria that were earlier identified can proceed.

The Enlargement of the Research Pool

There is good reason to believe that in the absence of ORD's liberal funding for manpower studies, the principal centers of research in labor economics—the industrial relations centers identified above—would have continued surely for a long time in their accustomed ways, allocating most of their resources to problems of collective bargaining and closely related issues. In fact, even in the presence of multiple sources of funding, including not only ORD but also other federal agencies such as the National Science Foundation, National Institutes of Health, and the Departments of Commerce and HEW, to note only the more important, the industrial relations centers moved slowly and haltingly to shift the focus of their research interests towards human resources and manpower. A few moved energetically, but most took only small steps.

ORD, faced with this relatively inflexible research structure, moved to institution building, part of the aim of which was to strengthen the research pool by making a series of "institutional grants."¹¹ Most of the grants were funded for a period of between four and five years with a total of four rounds of awards between 1966 and 1978.¹² The funds provided for modest staff expansion, some scholarships, curriculum building, and some research support. The last two rounds shifted the program's focus from teaching and research to professional training for CETA staff in the several regions of the country.

A total of just under 50 institutional grants were made. An early and continuing target was to assist the curricula development of minority-based colleges and universities so that they could provide broadened opportunities for their students to qualify for careers in employment and training.¹³ An inspection of the list of grantee institutions suggests that, aside from the considerable number of minority-based institutions, about ten to a dozen represented universities that had demonstrated a sustained high level of research capability in labor economics and/or employment and training.

By far the most exciting undertaking in the arena of research resource development was the Doctoral Dissertation Grants program. Almost 500 of these, completed and in process, are listed in the *Compendium*.¹⁴ Three publications prepared by Lawrence Klein, formerly of the Department of Labor, who relocated to the University of Arizona, provide a window into those dissertations that were judged to have the most merit in terms of the quality of the research and the relevance of the findings.¹⁵

Among the unique characteristics of the dissertational support program was the fact that ORD encouraged students from all of the social sciences to apply, and that the selection committee of outside experts responded by allocating roughly one-half of the grants to economists and the balance to other social scientists from anthropology to demography.

The best way to indicate the quality of the grantees is to list those with whose work I am reasonably well acquainted who appear on the first 14 pages (10 percent) of the total listing: Lawrence S. Seidman, Gilbert Cardenas, Gregory DeFreitas, Lionel J. Hausman, Marjorie H. Honig, Michael Boskin, Robert D. Reischauer, Jonathan R. Kesselman, Robert J. Flanagan, Stephan T. Marston, Harvey S. Rosen. If the foregoing ratio were to hold throughout, it would mean that this one appraiser would have a more or less intimate acquaintance with the work of about one-fifth of the

entire group—no small visibility considering that a considerable number of researchers at the time that the *Compendium* was published had not yet completed their projects.

Faced with a gross shortage of manpower researchers, ORD responded quickly and with imagination to remedy this most serious of bottlenecks. By establishing the Doctoral Dissertational Grants program in 1965 and by opening it up to all social science students who had completed their work for a doctorate, other than writing their dissertation, ORD made a major contribution by both attracting high talent into the manpower arena and at the same time broadening the boundaries of the field by encouraging applicants from all of the social sciences.

The Institutional Grants program was more of a mixed bag, largely because of strong pressure from the policymakers to direct much or most of the money to objectives other than the advancement of manpower research. I don't want to convey the impression that the institutional grants made no contribution to the furtherance of research, only that their contribution was relatively minor. It should also be noted that ORD, had it been free to design the program according to its own preferences, would probably have spent a large proportion of the total funds at the nation's strongest academic centers with a demonstrated capability to undertake significant manpower research. But that option was not available.

Improving the Data Base

This is the second criterion that we earlier identified to guide us in this appraisal of ORD's program. As Clark Kerr recently remarked in "The Intellectual Role of the Neorealists in Labor Economics," one of the long-term contributions of those who focused their attention on the operations of labor and labor markets has been to improve and correct the faulty assumptions and conclusions of the

economic theorists about how labor markets operate.¹⁶ In fact Wassily Leontief, in his sharp and insightful presidential address to the American Economic Association, took note of the continuing misallocation of the resources between data gathering and model construction with the disproportionate emphasis on the latter.¹⁷

In the mid-1960s, when Daniel Patrick Moynihan was Assistant Secretary of Labor, he and the director of ORD took the initiative to devote a considerable proportion of the then quite modest research budget into a long term effort to improve the data base by funding the National Longitudinal Surveys of Labor Force Behavior (NLS) at The Ohio State University under the leadership of Professor Herbert S. Parnes in association with the Demographic Survey Division of the Bureau of the Census.

The NLS study has focused attention on four groups—older men, middle-aged women, and young people, both male and female. In 1979 it added a new and enlarged youth cohort. Its informational net has been cast wide to include a host of variables, including economic, sociological and psychological, in order to permit study of the interactions among the principal forces that determine outcomes of different groups in the labor market. The NLS deliberately oversampled for minorities. From the outset, a unique aspect of the surveys was the frequent reinterviewing of the same individuals.

The *Compendium* lists the large number of studies of labor force behavior that derive directly from the NLS.¹⁸ In her assessment of the NLS, June O'Neill of the Urban Institute singled out for special attention three research areas where the Surveys yielded much valuable new insight: Unemployment and Related Labor Market Issues; Women's Labor Force Participation and Male-Female Earnings Differentials; and Aging and the Retired.¹⁹

While Parnes and his many associates at Ohio State took the lead in analyzing the rich materials that the Sureys were yielding, ORD arranged along the line that the research community would have easy and low cost access to the tapes. Once again, I resorted to a sampling approach to call attention to some of the analysts who, under ORD grants, made use of the Survey data: D.H. Nafziger, J.L. Holland, Robert E. Hall, Jacob Mincer, Herman P. Miller, Robert J. Flanagan, Ernst Stromsdorfer.²⁰

Those wise in the ways of the Washington bureaucracy and the halls of Congress will appreciate that the launching of the NLS was not easy. There is always a strong resistance to spending governmental funds on data collection. But even more difficult is to keep a project such as the NLS going. Next year will mark its twentieth birthday, a remarkably long life for such an effort. As the editors of *Manpower Research and Labor Economics* remarked in their introductory note to Herbert Parnes' article: "The National Longitudinal Surveys (NLS) constitute a unique research effort in the manpower field; indeed this study is a landmark in the social sciences as a whole during the past decade."²¹ Parnes, with his customary modesty, concluded his interim assessment with the comment, "There is, of course, no way of determining whether the National Longitudinal Surveys have been worth the millions of dollars they have cost."²²

Under the single heading of "Labor Demand," the *Compendium* lists over 100 projects that ORD funded, many of which had as their primary or secondary aim the improvement of the data base.²³ While no one project, nor possibly the entire group, can approach the NLS, they underscore the sensitivity of ORD to improving the data sources available to researchers. In this connection, one must not overlook the useful appendices prepared by ORD that appear at the end of the annual *Manpower Report of the President*, later renamed the *Employment and Training Report of the President*. The tables therein reproduced and brought up to date

every year have undoubtedly saved researchers untold hours in gaining access to current data on which they depend so heavily.

The Development of New Methodology

As noted in section 3, when this subject was first addressed, ORD sought not to get too involved in funding projects the principal aim of which was to develop new methodology. Despite its self-imposed restraint, one can still identify a commendable contribution that ORD made to the improvement of methodology even though such gains were often closely related to data improvement, program design and policy clarification. In the Index of Research Subjects in the *Compendium* one finds about 50 titles under "Methodology" including the following important areas: accuracy in manpower projections; America's uncouneted people; cost-benefit analysis of manpower programs; income dynamics of the poor; internal labor markets; job vacancies in the firm and the labor market; methods of forecasting short-term unemployment change; occupations—meanings and measures; short-term manpower projection methods; and working life tables for the U.S.²⁴ This one listing under "Methodology" in no way provides an overview of the full scope of ORD's efforts in this area. About the same number of titles are found under "Assessment and Evaluation."

Once again, a useful approach to the quality of these investigations is suggested by noting the names of some of the researchers and the investigations that they pursued: Robert E. Hall explored the Keynesian dichotomy between frictional and involuntary unemployment in periods of full employment;²⁵ R.A. Gordon, Michael L. Wachter and Karl E. Taeuber prepared papers on demographic trends and full employment;²⁶ Michael J. Boskin explored a model of occupational choice based on the theory of human capital and estimated by conditional logit analysis;²⁷ Charles C. Holt and his associates at the Urban Institute carried on extensive

studies of job search and labor turnover dynamics in order to gain a better understanding of employment in an inflationary era;²⁸ Richard A. Easterlin studied long swings in labor force growth;²⁹ Stanley Lebergott sought to develop new methods of forecasting short term unemployment changes;³⁰ James G. Scoville addressed conceptual and measurement problems in occupational analyses;³¹ and Orley Ashenfelter investigated the use of various econometric models to assess the impacts of training.³²

Imbedded in sections 1 and 2 of the *Compendium* one finds methodological contributions from other leading economists and social scientists including: Finis Welch and Marvin Kosters; Laurits R. Christensen and Dale N. Jorgensen; Lawrence R. Klein; Phoebus Dhrymes; Lester C. Thurow; Edward D. Kalachek and many more with a national and international reputation.³³

By far the largest single financial commitment of ORD to the improvement of methodology was its liberal multiyear funding of the Manpower Research and Demonstration Corporation evaluation effort carried out under the title of "Supported Work," with Mathematica as the prime contractor and the Poverty Institute at the University of Wisconsin as the major subcontractor. The cost of the research, which was based on random assignment of clients with experimental and control groups and involved baseline interviews and multiyear follow-up interviews, approximated 11 million dollars.³⁴

ORD was distressed that with so many billions being invested in training programs, definitive answers as to whether or not they made a difference in terms of postemployment and earnings experience were hard to produce. Moreover, it was even more uncertain whether such programs could help the most disadvantaged groups in the population. Hence its willingness to spend a large sum on a well-designed research design that would be properly implemented and where the results could command respect.

The results turned out to be mixed: the AFDC mothers group definitely showed large benefits from work; the results for the ex-addicts were equivocal; and there were no gains for the ex-offenders and youth. I was restive from the outset about the high cost of this evaluation but my colleagues convinced me of the value of a scientific evaluation. I also recall Robert Lampman's warning that the null hypothesis would probably be sustained.

Before concluding this section on methodology, I would like to add a few observations. I believe that ORD was correct in not undertaking heavy financing of methodological inquiries. Had it done so, the odds are strong that it would have added substantially to its ongoing difficulties of sustaining support for its research program both within the Department of Labor and in the Congress. Further I suspect that many of the most important methodological advances in the manpower arena, as in other fields of inquiry, are often the by-products of investigations directed at substantive goals.

It made sense for both the Congress and the Administration to become interested in evaluating the results of various programmatic interventions to assist the unemployed and other disadvantaged groups. But this belated interest, which blossomed with the passage of CETA in 1973, led to the explosive growth of for-profit firms, many of which were located in the Washington area, which became highly adept at pressuring the various federal agencies, including the Department of Labor, for evaluation contracts. For the most part, the programs had not been designed and implemented in terms of participant selection, data collection, controls, output measures and follow-up to yield meaningful results when formal evaluation techniques were applied. As sections 4D and 4E in the *Compendium* make clear, ORD was successful through 1978 in not bending very far in the direction of this new enthusiasm.³⁵ When the new Administration

came into office in 1981, however, evaluations became a favorite of the policymakers in the Department of Labor.

One of the opportunities for learning more about the participants of various training programs that in my view was largely neglected was to tap into Social Security records for follow-up information. Admittedly, access to Social Security records is hard to come by, especially for research purposes; the matching process is difficult and the limited amount of follow-up information will constrain what can be learned. Still, it represents perhaps the least expensive way to get a fast reading on the effectiveness of large public investments in employment and training programs.

My direct experience with specially designed evaluation programs such as "Supported Work" has impressed me with their cost. On the other hand, attempts to economize, as in the case of the Youth Entitlement Program (Manpower Research and Development Corporation and Abt Associates), by reliance on a matching of so-called "comparable cities" such as Baltimore and Cleveland, can turn out to have many disadvantages.

The Quality of the Research Projects

If one were to single out just one, rather than five criteria with which to assess ORD's program, my preference would be to use "the quality of the research projects." As I have indicated earlier, good research in the social arena will, more often than not, have a policy orientation and in the process the researcher will often contribute to enlarging the data base and score an advance over existing methodology. Accordingly, many of the projects that are referred to below, as well as many previously discussed, could without distortion be placed in other categories since as with all systems of categorization, but particularly with the one that we are following, a large element of arbitrariness cannot be avoided.

About half of the pages of the *Compendium* are directed to listing and briefly discussing the research projects under two principal headings: 1. The Economics, Social and Policy Background; and 2. The Labor Market. Sections 3 and 4 deal more specifically with training and administration. In the pages that follow I will comment solely on research projects listed in sections 1 and 2.

There is no possible way for me, without excessive elaboration, to take note of all the research work that warrants attention because the investigator addressed an important subject; he or she dealt with it according to accepted research canons, and the results make a contribution both to the pool of knowledge and to public policy.

My selections aim rather to provide the reader an overview of the range of support that ORD provided and the important subjects that the research illuminated. In the very first year, 1963, Margaret S. Gordon studied the European experience with employment and training, thereby providing U.S. officials with a road map.³⁶ Benjamin Shimberg and his colleagues undertook pioneering work in the arena of occupational licensing.³⁷ David S. North and Marion F. Houston produced an important exploratory study of the characteristics and role of illegal aliens in the U.S. labor market.³⁸ Frank Levy and his colleagues Clair B. Vickery and Michael L. Wiseman contributed significant new knowledge and understanding to the income dynamics of the poor.³⁹

Lester C. Thurow's book on *Generating Inequality* was the outgrowth of a research project in which he explored the concept of job competition in contrast to the neoclassical wage competition model of the labor market.⁴⁰

The final stage of T. Aldrich Finegan's and William G. Bowen's classic study of labor force participation rates was supported by ORD.⁴¹

Richard B. Freeman's basic research on engineers and scientists in an industrial economy which led to his well-known work, *The Overeducated American*, grew out of ORD support.⁴²

John T. Dunlop and Daniel Quinn Mills had a series of grants which enabled them to assess in depth the changing capacity of the construction industry to adapt to changing labor requirements and to modify their training systems accordingly.⁴³

Louis E. Davis of the University of California, Los Angeles, the father of the Quality of Work Life in the United States, received early support from ORD which also provided considerable support for the Human Interaction Research Institute (Los Angeles) as well as for the work of Stanley Seashore and his colleagues at the Survey Research Center at the University of Michigan, all of which resulted in a considerable number of interesting publications.⁴⁴

Sheppard and Belitsky's study, *The Job Hunt*, published in the mid-1960s represented a departure. They explored more broadly than earlier researchers the motivational and attitudinal dimensions via a case approach of how unemployed workers look for jobs.⁴⁵ This effort reaffirmed the wisdom of ORD's broader approach to labor market processes than was characteristic of most economists.

A quite different approach, more ambitious and with more far-reaching results, was carried out over a five-year period (1968-73) by F. Ray Marshall of the University of Texas at Austin in his study *Negro Employment in the South*. Six southern cities were the focus of this inquiry: Atlanta, Birmingham, Houston, Louisville, Memphis and Miami. Important findings emerged from analysis of the factors that contributed to a lowering of the barriers against black workers. At the same time, the research pointed to ma-

job difficulties that continued to handicap blacks both at the point of being hired and also in advancing up the job ladder.⁴⁶

Cynthia Fuchs Epstein of Columbia University explored the factors that hinder or facilitate women's entrance into such prestigious professions as law, medicine, science, and academe. The author noted that the early socialization process of girls and young women as well as later institutionalized barriers acted to reduce the potential supply. Her analysis and findings led to a major book entitled *Women's Place: Options and Limits in Professional Careers*.⁴⁷

The foregoing selections are illustrative of the large number of important research projects supported by ORD which covered a wide range of critical policy areas and yielded important new knowledge about the operations of the labor market. The outstanding accomplishment of the research program, surely in terms of intellectual impact and long term influence, was the work of Peter B. Doeringer and Michael Piore, *Internal Labor Markets and Manpower Analysis*, which was started in 1966 and completed in 1970.⁴⁸

The data that the authors used to study the operations of manufacturing firms in adjusting to imbalances in labor supply and technological changes were derived from an earlier project that had also been funded by ORD. The authors stressed the dynamics of freedom that medium-sized and large employers have and exercise in making adjustments in their labor supply through hiring, screening, training, recruitment, and subcontracting, relying on these approaches much more than on wage adjustments to assure themselves of the range of workers and skills that they require.

The authors also concluded that disadvantaged members of the labor force, minorities and women, found it very difficult to break into the sector of stable, internal labor

markets and were therefore crowded into the “secondary” labor market characterized by short term, low-skill, low-paying jobs which in turn had a major impact on the ways in which such disadvantaged groups adjust to work and life. The authors concluded that these disadvantaged groups live on the periphery of the labor market and society and have little opportunity to join the mainstream. Hence the term, “the dual labor market.”

In the Brookings Papers, Michael L. Wachter undertook a 43-page critique of what he subtitled the “Dual Approach,” which was followed by comments and discussion including remarks by Piore.⁴⁹ In Wachter’s analysis, the dual labor market approach is predicted on the following: differences in firm behavior in the high and low wage sectors; a distinction between good and bad jobs, not between skilled and unskilled workers; and movement of workers in the secondary labor market among low wage jobs and between unemployment and labor force participation.

Wachter concluded that it is wrong to assume that the internal labor market in the primary sector does not follow the employer’s search for efficiency and that it is wrong to differentiate sharply between the primary and secondary markets since mobility exists between them. Further, pervasive underemployment need not be the key characteristic of the secondary labor market. But Wachter is not all negative: he believes that the dual labor market theorists have made significant contributions in focusing on wage-setting behavior in the secondary market; in introducing feedback effects into their model; and in deepening understanding of the unemployment mechanism. Each is important and the three together represent a major advance.

In a recent contribution to the *Discussion Paper Series* of the Harvard Institute of Economic Research, “Troubled Workers in the Labor Market,” Richard B. Freeman con-

cludes his review of the dual labor market hypothesis with the following comment: "In short, the dual market claim regarding wage determination processes appears to be valid, but its other assertions have yet to be shown to be empirically correct."⁵⁰ This is no small praise for a theory 14 years after it was first introduced and after it has been subjected to repeated and detailed critiques.

The ORD record of quality research projects would have to be assessed as respectable, if not outstanding, even without the Doeringer-Piore contribution. But its rating must be raised once one takes cognizance of the fact that it subsidized one of the few intellectual breakthroughs in the conceptualization of labor markets in the decades of the 1960s and 1970s.

Contributions to Public Policy

Although we have noted in passing that many of the projects previously identified have had a direct or indirect impact on manpower programs and policies, the investigations reviewed below have been selected specifically to emphasize this facet of ORD's total effort. The projects have been selected with an eye to illustrating the impact of ORD's projects on broad manpower policy as well as on specific programmatic improvements. Some fall in the zone between the two.

As far as broad policy considerations are concerned, one can identify projects that encouraged Congress to adopt new or more expansive stances with respect to public service employment, extended unemployment insurance, work-fare, improved articulation between remedial education and skill training, mobility allowances and upgrading efforts.

The research program also had significant beneficial effects on expanding apprenticeship opportunities for black men, on placing black women in the South in white-collar

and technical positions with career opportunities, in helping ex-offenders to gain a permanent attachment to the labor market, in helping persuade the courts to permit young people awaiting trial to participate in supervised work programs, in persuading the Department of Defense to modify its selection criteria so that a quarter of a million who, under previous standards, would have been rejected were accepted.

The following pages provide some elaboration of the foregoing. In the early 1970s, a series of University of California-based investigations focused on the Bay Area, including one by Robert A. Gordon and Lloyd Ulman, concluded that public service employment could be increased by 10 to 15 percent in low-skilled categories without severe disruption or costly new inputs.⁵¹ Later in the decade, the Urban Institute in Washington, under the direction of Lee Bawden, concluded that opportunities existed for 3 million public sector jobs in 21 program areas.⁵² In the late 1960s and early 1970s, two ORD contracts with the National Civil Service League led to an estimate, based on summary data, that more than 400,000 yearly vacancies were available in state and local governments for the employment of disadvantaged workers.⁵³

The foregoing, together with additional projects outlined in the *Compendium* under section 3G, "Providing Public Employment,"⁵⁴ surely contributed to the decision of President Carter to request, and Congress to agree to, a vast increase in PSE jobs in the latter years of the 1970s.

The carefully crafted and carried out study of unemployment insurance exhaustees by Mathematica in 1974-76⁵⁵ concluded, among other findings, that UI did not operate as a serious work disincentive and that even among many who withdrew from the labor force after their benefits were exhausted, a significant proportion wanted to return to employment. These findings, among others, surely reinforced

ed the subsequent actions of the Congress to extend the periods of coverage, even in the face of budgetary stringencies and the opposition of an Administration that sought to reduce income transfer payments.

The Minnesota Work Equity Program, which got under way in 1977, sought to test an alternative to income transfers for welfare clients by providing guaranteed work or training as alternatives. The principal components were an expansion of public service jobs at or near the minimum wage, expanded training opportunities on the job or in the classroom, and placement of 10 percent of the clients into unsubsidized jobs. The lessons learned from this undertaking, evaluated by Abt Associates, surely encouraged President Reagan and the Congress to modify existing welfare legislation to encourage the states to experiment with work-fare.⁵⁶ Even without the benefit of any specific research findings, the Department of Labor early recognized (1963) that MDTA had to be amended to enable many of the unemployed to undergo a remedial educational experience before entering upon occupational training. If my memory is correct, the Director of ORD was alerted to this need on the basis of his trips to the field during the early months of the training program. In any event, the Congress agreed with this assessment.

The most successful linkage between remedial education and skill training occurred at Job Corps Centers, but only a small number of disadvantaged youth profited from the experience. In 1977, Congress, in passing the Youth Employment and Training Program, specifically reserved some part of the total funds, 22 percent, for use by the educational authorities to encourage them to improve their efforts at remedial instruction, especially for out-of-school youth who were returning to school to take advantage of the program. ORD did not make more than an occasional grant for remedial education. Again, if my memory serves me correctly, this was viewed as the domain of HEW.

In the case of “Facilitating Geographic Mobility,” the Congress acted first (1965), directing the Department of Labor to mount efforts to assist unemployed and underemployed workers to relocate to areas where there are more and better jobs available.

Demonstration mobility projects were launched in 28 states and a total of 14,000 workers were relocated.⁵⁷ The Employment Service undertook a major 3-year effort, beginning in 1969, to assist farm migrants based in South Texas to settle out of the migrating stream. Abt Associates undertook the assessment and published a 4-volume report.⁵⁸

The relatively modest number of workers who were successfully relocated (many who made a successful move later returned home) and the formidable difficulties encountered in diverting settlement out of the migrating stream appeared to me at the time, and also now in retrospect, to explain why Congress never moved in a big way to subsidize worker mobility. Politics was an additional barrier. Congressmen from counties losing population do not readily vote funds to speed the outmigration of their constituents. The equivocal results from the demonstrations strengthened their opposition.

ORD, through contacts with Mobilization for Youth and Howard University in 1965 and 1966, focused on preparing disadvantaged youth for entrance into paraprofessional occupations with focus on jobs in health care. These early efforts provided a favorable backdrop to Congressional action in 1967 when it passed the New Careers amendment. Thereafter ORD expanded its upgrading demonstration efforts in all three sectors of the economy—private, nonprofit, government.⁵⁹ Among the most interesting and rewarding was its decade-long effort at the U.S. Atomic Energy Commission plants at Oak Ridge where it succeeded in moving a considerable number of poorly educated local persons into

skilled and technical jobs through carefully structured learning and on-the-job experiences.⁶⁰

The foregoing illustrations of the interface between ORD's projects and Congressional action do not "prove" that without the former, legislative action would not have occurred. All that this suggests is the probability of ORD's influence, both positive and occasionally negative (mobility), on Congressional action.

There is a presumption in the United States that the measure of influence on public policy is best revealed by Congressional action to pass new laws and make new appropriations since by such actions Congress can affect all or a large part of the entire population. But clearly, as noted below, ORD had considerable policy impact other than through persuading Congress to act. We will inspect five more striking success stories.

F. Ray Marshall and Vernon M. Briggs, Jr. undertook in 1966 and completed the following year a study of 10 major cities with large black populations aimed at assessing the barriers blocking the entrance of blacks into apprenticeship. The more important recommendations emerging from this study are set out in the *Compendium's* abstract.⁶¹ The critical point for this assessment is to be read in the striking gains in the numbers of minorities who succeeded in being accepted as trainees in subsequent years and the striking gains in the number of journeymen, at least in some, if not all, unions. Those who followed the lowering of the barriers have no question that the Marshall-Briggs study, *The Negro and Apprenticeships*,⁶² served as the wedge that the leadership in both the public and private sectors used to accomplish this striking advance.

The Minority Women Employment Program was another outstandingly successful effort of ORD. Based on an Atlanta pilot study of the early 1970s, the aim of the demonstration

was to determine whether a specially targeted outreach effort could place college-educated minority women in nontraditional managerial, professional and technical occupations, primarily in the private sector. In addition to Atlanta, the program became operational in Dallas, New Orleans, Tulsa, Cincinnati and Los Angeles. The major steps in the program were to identify desirable openings, to coach and support likely candidates to increase their prospects of being hired and then to help them to retain their jobs. By 1978, five years into the program, over 1300 women had been placed, with many of them representing the first minority women ever hired into these higher level positions.⁶³

Starting in the very first year of MDTA, ORD focused considerable effort and resources in assisting prisoners and ex-offenders through a series of imaginative and often difficult and risky demonstrations. These involved gaining approval of the prison authorities to provide training for inmates by taking advantage of the 1966 amendments to MDTA which no longer limited eligible trainees to persons in the labor force. In the late 1960s, ORD funding enabled the Vera Institute in New York City to undertake two pioneering projects using pretrial interventions to provide persons under arrest and awaiting trial with training and employment opportunities. If the trainee's performance warranted, the project staff recommended dismissal of the charges.⁶⁴

Still another, relatively late, effort was to provide transitional financial aid to newly released prisoners to assist them in making it back in civilian society and into the world of work. At the time when the *Compendium* was being published ORD had achieved some successes together, as one might have anticipated, with some failures. But it must not be overlooked that the resources available to ORD to help this large population were quite limited.

The last impact study goes back to the earliest days of ORD—to 1964—when it carried out a study for the President’s Task Force on Manpower Conservation focusing on youth disqualified for military service.⁶⁵ The Report recommended that approximately one-third of all the young men turning 18 would, if examined, fail to qualify for induction into the Armed Forces for reasons of inadequate health or education. Most of the latter had been reared in poverty. The results of the study were used by the President to persuade Secretary of Defense McNamara to accept a large group (about 250,000 eventually) of below-standard men in the hope and expectation that through remedial assistance in the military they could be turned into effective servicemen. While the Pentagon was equivocal about the results, I reached a positive conclusion.⁶⁶

6. A Personal Summing Up

Now that my formal assessment has been completed, the reader is free to make his own judgment about how well ORD scores on the five criteria that have been used to review its progress over the 16-year period, 1963-78. I will add my own judgment at the very end, but not before I comment briefly on some critical factors that have not been introduced up to this point but which I believe must be considered before a balanced judgment can be made. The hitherto excluded considerations deal respectively with certain developments in both the academic and political environments, each of which helps to define the parameters for any large-scale governmental research and development program in human resources and manpower.

To treat the academic issues first: most of the energy of academic economists since the university first captured the discipline has been directed to refining the intellectual corpus and perfecting successive techniques, the most recent being

the dominance of mathematical model-building and econometrics. Progress in a social discipline surely depends in part on improvements in theory and advances in technique but it also depends on problem identification, data improvement, and first approximations that yield new understanding and that can contribute to policy guidance. It is my judgment that because of the pedagogic imperatives of the university which involves training and testing of students, the former always predominates to the relative neglect of the latter.

To make matters worse, the more emphasis is placed on the demonstration of technical competence by students rather than on the reliance on their written work, the greater the gap between the discipline and the inchoate world of reality.

A few points of illumination. I recall Arthur F. Burns remarking to me in the early 1960s that in his opinion his colleagues in Fayerweather Hall (the then home of the Columbia Economics Department) were off the wall since the curves which they put on the blackboard were used interchangeably to describe wages, prices, international trade, money and still other key variables.

In 1970 or 1971 the National Institute of Education asked a few consultants to discuss youth unemployment and what the schools might do to mitigate the curse. A Chicago economist, who later won the Nobel Prize, said "You know, Eli, all one has to do is wait. They'll grow out of it." I suggested that some, perhaps many, might not since they would be the victims of homicide, become drug addicts, or spend years in prison.

In 1964 Gary Becker published *Human Capital* and within a relatively few years his approach had come to dominate the field of "labor economics" at most of the country's leading universities. All that one need do is to scan the journals from the late 1960s to the present. A never-ending stream of

econometric exercises has emerged in which novitiates seek to measure the influence of one or more factors on the employment and/or wages and/or career progression of individuals with differing endowments and achievements.

No one will question that Becker opened up a powerful line of analysis but the value of the inquiries informed by his approach depends in no small measure on the quality of the extant data and in most cases the data vary from poor to very poor. The combination of econometrics coming into its own and the availability of the human capital model proved a powerful combination that left its mark on ORD in the 1970s. In Glenn Cain's judgment it was all to the good,⁶⁷ but the editors of the *Industrial and Labor Relations Review* according to their recent note to prospective authors appear to have developed some second thoughts.⁶⁸

It is an old question in new form—how much does one need to know about the institutional framework to make significant advances in understanding the operations of labor markets and the behavior of workers? I believe the answer is—a great deal.

But the world of academe has compounded the situation in still another respect. The dominance until recently of the neo-Keynesians with their reliance on a relatively small number of basic relationships to explain the level of aggregate employment must be seen as another impediment to progress. And when the theory ran afoul of an accelerating inflation after 1965, the doctrines that sought to replace Keynes, a worsening Phillips' curve, the increase in the natural rate of unemployment, and the elaboration of rational expectations created an unseemly spectacle of an analytic engine out of control. And that is where the academy stands at the beginning of 1984.

As I look back to the early days of the New Deal I find four arenas of public policy issues in the manpower or-

bit—unemployment, income for those who have no work or can't work, discrimination, and equality of career opportunity. This is my assessment of how well, or how poorly, we have done to cope.

With respect to unemployment the American public, as is so frequently the case, has not taken its own laws seriously and full employment is not high on the nation's agenda. I have found it irresponsible and cynical for a nation to insist that everybody, other than the sick, the injured and the elderly, take care of himself and his dependents and yet makes no serious effort to provide jobs for those who can't find an opening because there is a shortage of jobs.

We have done well in providing income for most of the elderly. Few remain in poverty once one takes in-kind transfers into account. With respect to single parents and their children even in states with relatively liberal payments, we know that money alone does not suffice. What is required, and how to intervene remain elusive. Here we need more knowledge.

Again in the case of discrimination, the record is equivocal. If one measures the progress of blacks from 1940, the gains have been appreciable; if the starting date is 1619, then progress has been abysmally slow. Many are fortunately joining the middle class; many others are regrettably still in a marginal role. Laws can help but full employment and white leadership are even more important.

With respect to expanding career opportunities for those from low income homes we have made good progress since 1958 when the Congress passed the National Defense Education Act. But the broadest opportunities are those providing for young people who are qualified to enter college. There is a group who never get properly educated in the basics without which most of them are doomed to a blighted future. We must get our public educational system to work

better and it cannot do so all by itself. Improvements in the economy and in the country are also needed. Youngsters will make the effort to learn if they see some hope of benefiting. But such hope is absent for many who are brought up without a father, on welfare grants and are educated by teachers who fear or dislike them.

Some people believe that Congress has appropriated too much money in the past for these programs. My concern is different: our return per dollar expended has been relatively small and it is that issue which we must address.

Ours is a democracy and Congress' main task is to appropriate money to help achieve federal objectives, but it is forced to rely primarily on lower levels of government and the private sector to transform the dollars which it appropriates into useful goods and services. But the instrumentalities through which Congress is forced to work have their own objectives and priorities with the result that the efficiency and efficacy of federal dollar outlays are greatly reduced. To complicate matters further, the political arena contributes to an instability in administration, the dominance of an annual budgetary cycle, log-rolling in the halls of the Congress, and a calculus in which political gain is frequently at odds with program accomplishment.

We are now at the end. ORD in my view was on balance a highly successful effort. It must be adjudged that much more successful considering the sorry state of academe on which it was largely dependent for research proposals and for their implementation and on that unique American institution, the Congress, for financing, redesign and sustained support.

Appendix

From my perspective, Conservation of Human Resources (CHR), Columbia University, made significant contributions in opening up or addressing the following lines of analysis: the pluralistic economy, producer services, health manpower, comparative manpower studies (Europe and Japan), metropolitanism and suburbanization, the labor market as an information system, labor market segmentation, measuring public output, professional women, regional econometric models, and the theory of human resources.

I am listing below some of the more important research projects carried out by CHR that were supported in whole or in part by ORD during the period 1963-78.

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Eli Ginzberg, Dale L. Hiestand, and Beatrice G. Reubens. *The Pluralistic Economy* (New York: McGraw-Hill Book Company, 1965).

James W. Kuhn. *Scientific and Managerial Manpower in Nuclear Industry* (New York: Columbia University Press, 1966).

Harry I. Greenfield. *Manpower and the Growth of Producer Services* (New York: Columbia University Press, 1966).

Harry I. Greenfield with Carol Brown. *Allied Health Manpower: Trends and Prospects* (New York: Columbia University Press, 1969).

- Dean Morse. *The Peripheral Worker* (New York: Columbia University Press, 1969).
- Eli Ginzberg with Miram Ostow. *Men, Money, and Medicine* (New York: Columbia University Press, 1969).
- Beatrice G. Reubens. *The Hard-to-Employ: European Programs* (New York: Columbia University Press, 1970).
- Thomas M. Stanback, Jr. and Richard Knight. *The Metropolitan Economy: The Process of Employment Expansion* (New York: Columbia University Press, 1970).
- Ivar E. Berg. *Education and Jobs: The Great Training Robbery* (New York: Praeger Publishers, 1970).
- Dale L. Hiestand. *Changing Careers After 35* (New York: Columbia University Press, 1971).
- Charles Brecher. *Upgrading Blue Collar and Service Workers* (Baltimore: Johns Hopkins Press, 1972).
- Ivar E. Berg (ed.). *Human Resources and Economic Welfare: Essays in Honor of Eli Ginzberg* (New York: Columbia University Press, 1972).
- Stanley Friedlander with Robert Shick. *Unemployment in the Urban Core: An Analysis of 30 Cities with Policy Recommendations* (New York: Praeger Publishers, 1972).
- Boris Yavitz and Dean Morse. *The Labor Market: An Information System* (New York: Praeger Publishers, 1973).
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Eli Ginzberg. *The Human Economy* (New York: McGraw-Hill Book Company, 1976).

Robert Cohen. *The Corporation and the City* (NTIS PB284371/AS, 1978).

David Lewin, Raymond D. Horton, and James W. Kuhn. *Manpower Utilization and Collective Bargaining in Local Government* (Montclair: Allanheld, Osmun & Company, 1979).

Alfred S. Eichner and Charles Brecher. *Controlling Social Expenditures: The Search for Output Measures* (Montclair: Allanheld, Osmun & Company, 1979).

Alice M. Yohalem. *The Careers of Professional Women: Commitment and Conflict* (Montclair: Allanheld, Osmun & Company, 1979).

Beatrice G. Reubens. *The Youth Labor Supply: A Comparative Study* (Montclair: Allanheld, Osmun & Company, 1979).

Matthew Drennan. *Regional Econometric Models: New York and Baltimore* (forthcoming).

A brief discussion of each of the foregoing together with related research investigations supported by other funding sources are set out in *The Fortieth Anniversary Report, 1979* of the Conservation Project.

NOTES

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2. Eli Ginzberg. *The House of Adam Smith* (New York: Columbia University Press, 1934).
3. See Abraham Pais. *Subtle is the Lord: The Science and the Life of Albert Einstein* (New York: Oxford University Press, 1982).
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5. Gordon I. Swanson and Jon Michaelson, editors. *Manpower Research and Labor Economies* (Beverly Hills: Sage Publications, 1979).
6. National Academy of Sciences, Committee on Department of Labor Manpower Research and Development. *Knowledge and Policy in Manpower*, Washington, DC, 1975.
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8. National Manpower Council. *Womanpower* (New York: Columbia University Press, 1957).
9. See *Industrial and Labor Relations Review* 17, No. 3 (April 1964).
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13. *Ibid.*
14. *Ibid.*, pp. 388-514.

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23. *Compendium*, p. 569.

24. *Ibid.*, pp. 575-576.

25. *Ibid.*, p. 10.

26. *Ibid.*, p. 13.

27. *Ibid.*, p. 21.

28. *Ibid.*, pp. 66-68.

29. *Ibid.*, p. 68.

30. *Ibid.*, p. 69.

31. *Ibid.*, p. 69.

32. *Ibid.*, p. 72.

33. *Ibid.*, Sections 1 and 2.

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34. Board of Directors, Manpower Demonstration Research Corporation. *Summary and Findings of the National Supported Work Demonstration* (Cambridge: Ballinger Publishers, 1980).

35. *Compendium*, pp. 371-379.

36. *Ibid.*, p. 5.

37. *Ibid.*, pp. 9, 13.

38. *Ibid.*, p. 16.

39. *Ibid.*, p. 23.

40. *Ibid.*, p. 73.

41. *Ibid.*, p. 90.

42. *Ibid.*, p. 106.

43. *Ibid.*, pp. 78, 111.

44. *Ibid.*, pp. 118, 121.

45. *Ibid.*, p. 134.

46. *Ibid.*, pp. 150-151.

47. *Ibid.*, p. 171.

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52. *Ibid.*, p. 239.

53. *Ibid.*, pp. 232-233.

54. *Ibid.*, p. 232.

55. *Ibid.*, pp. 271-272.

56. *Ibid.*, p. 238.

57. *Ibid.*, p. 184.

58. Ibid., p. 218.
59. Ibid., pp. 311-326.
60. Ibid., pp. 313-314.
61. Ibid., pp. 194-201.
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