

**INDUSTRIAL RELATIONS  
RESEARCH ASSOCIATION SERIES**

**Proceedings of the Thirty-First  
Annual Meeting**

**AUGUST 29-31, 1978  
CHICAGO**

## OFFICERS OF IRRA FOR 1979

### PRESIDENT:

Jerome M. Rosow, Work in America Institute, Inc.

### PRESIDENT-ELECT:

Jack Barbasb, University of Wisconsin

### SECRETARY-TREASURER:

David R. Zimmerman, Mathematica Policy Research, Inc.

### EDITOR:

Barbara D. Dennis, University of Wisconsin

### EXECUTIVE BOARD MEMBERS:

Bernard E. Anderson, University of Pennsylvania  
Jean Boivin, Laval University  
Gladys Gershenfeld, Philadelphia College of Textiles and Science  
Marcia L. Groenbaum, Arbitrator  
Robert D. Chelsby, NYS Public Employment Relations Services  
James E. Jones, Jr., University of Wisconsin  
Charles C. Killingsworth, Michigan State University  
Raymond W. MacDonald, AIW, AFL-CIO  
Jerome A. Mark, USDL, BLS  
Bertram N. McNamara, United Steelworkers of America  
Lois A. Rappaport, University of Pennsylvania  
Markley Roberts, AFL-CIO  
Bernard L. Samoff, University of Pennsylvania  
Donald Vial, California Department of Industrial Relations  
Donald H. Wollett, University of the Pacific

## PAST PRESIDENTS OF IRRA

1948 Edwin E. Witte	1963 William F. Whyte
1949 Sumner H. Slichter	1964 Solomon Barkin
1950 George W. Taylor	1965 Edwin Young
1951 William M. Leiserson	1966 Arthur Ross
1952 J. Douglas Brown	1967 Neil W. Chamberlain
1953 Ewan Clague	1968 George P. Shultz
1954 Clark Kerr	1969 Frederick H. Harbison
1955 Lloyd Reynolds	1970 Douglass V. Brown
1956 Richard A. Lester	1971 George H. Hildebrand
1957 Dale Yoder	1972 Benjamin Aaron
1958 E. Wight Bakke	1973 Douglas H. Soutar
1959 William Haber	1974 Nat Goldfinger
1960 John T. Dunlop	1975 Gerald G. Somers
1961 Philip Taft	1976 Irving Bernstein
1962 Charles A. Myers	1977 Ray Marshall
1978 Charles C. Killingsworth	

**INDUSTRIAL RELATIONS  
RESEARCH ASSOCIATION SERIES**

**Proceedings of the Thirty-First  
Annual Meeting**

**AUGUST 29-31, 1978  
CHICAGO**

**Edited by Barbara D. Dennis**

PROCEEDINGS OF THE THIRTY-FIRST ANNUAL MEETING. Copyright © 1979 by INDUSTRIAL RELATIONS RESEARCH ASSOCIATION. Printed in the United States of America. All rights reserved. No part of this book may be used or reproduced in any manner whatsoever without written permission of the authors, except in the case of brief quotations embodied in critical articles or reviews.

First Edition

Library of Congress Catalog Card Number: 50-13564

PRICE \$10.00

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION SERIES

PROCEEDINGS OF THE ANNUAL MEETING (Spring publication)

PROCEEDINGS OF THE SPRING MEETING (Fall publication)

Annual Research Volume (Fall publication)

MEMBERSHIP DIRECTORY HANDBOOK (every sixth year)

IRRA NEWSLETTER (published quarterly)

Inquiries and other communications regarding membership, meetings, publications, and general affairs of the Association, as well as orders for publications, copyright requests on publications prior to 1978, and notice of address change should be addressed to the IRRA publication office: Barbara D. Dennis, Editor; David R. Zimmerman, Secretary-Treasurer; Elizabeth S. Gulesserian, Executive Assistant.

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION  
7226 Social Science Building, University of Wisconsin  
Madison, WI 53706 U.S.A. Telephone 608/262-2762

## PREFACE

The heat of Chicago, the host city, in August and competition from the Pompeii Exhibit at the Art Institute did not detract from attendance at the 1978 IRRA Annual Meeting—a tribute to those who planned and had a part in implementing the program.

One of many highlights was the first “Distinguished Speaker Address,” the suggestion for adding this to the annual program having come from the Comprehensive Review Committee. In this address, R. W. Fleming, president of the University of Michigan and long-time IRRA member and former officer, discussed the problems in current public-employee bargaining and challenged the membership to find a “better solution” than binding arbitration for resolving interest disputes in the public sector.

In his Presidential Address, Charles Killingsworth examined another difficult problem about which there has been a “clash of ideas”—the causes of fluctuations in the unemployment rate and how to remedy the weaknesses and imperfections of the labor market.

Topics for other sessions were union organizing, employment policy, the consumer price index and escalator clauses, unemployment compensation, theoretical labor economics, and the welfare system. Contributed papers sessions were on labor-management relations, labor markets, and equal employment opportunity. Four young scholars presented summaries of their research at the Dissertation Round Table.

The Association is grateful to Professor Killingsworth for arranging the program, to William R. Fischer and other members of his committee who handled local arrangements, and to Elizabeth Gulesserian, Marjorie Lamb, and Dorothy Rymer, who not only performed the office chores so necessary for a successful meeting, but also were present in Chicago to assist in resolving last-minute details.

BARBARA D. DENNIS  
*Editor*

You are invited to be a member of

**THE INDUSTRIAL RELATIONS RESEARCH ASSOCIATION**

The Industrial Relations Research Association was founded in 1947 by a group who felt that the growing field of industrial relations required an association in which professionally minded people from different organizations could meet. It was intended to enable all who were professionally interested in industrial relations to become better acquainted and to keep up to date with the practices and ideas at work in the field. To our knowledge there is no other organization which affords the multi-party exchange of ideas we have experienced over the years—a unique and invaluable forum. The word “Research” in the name reflects the conviction of the founders that the encouragement, reporting and critical discussion of research is essential if our professional field is to advance.

In our membership of 4,500 you will find representatives of management, unions, government; practitioners in consulting, arbitration and law; and scholars and teachers representing many disciplines in colleges and universities in the United States and Canada, as well as abroad. Among the disciplines represented in this Association are administrative sciences, anthropology, economics, history, law, political science, psychology and sociology as well as industrial relations. Membership is open to all who are professionally interested and active in the broad field of industrial relations. Libraries and institutions who are interested in the publications of the Association are also invited to become members, and therefore subscribers to the publications.

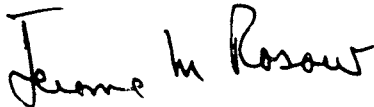
Membership dues cover publications for the calendar year, January 1 through December 31, and entitle members to the *Proceedings of the Annual Meeting*, *Proceedings of the Spring Meeting*, a special research volume (*Membership Directory Handbook* every six years), and quarterly issues of the *Newsletter*. Dues for membership on standing order are:

Regular Membership .....	\$24.00
Family Membership (At same address, no additional publications) .	2.00
Contributing Membership .....	65.00
Citizens of Countries Other than U.S. & Canada Living Abroad.....	7.50
Retired Membership (If a member for at least 10 years and not now gainfully employed).....	7.50
Student Membership (Full-time) .....	7.50
Institutional or Library Subscription.....	24.00

Inquiries and other communications regarding membership, meetings, publications and the general affairs of the Association, as well as orders for publications, copyright requests, and notice of address changes, should be addressed to the IRRA Office.

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION (608/262-2762)  
7226 Social Science Building, University of Wisconsin, Madison, WI 53706

Sincerely yours,



IRRA President 1979

# CONTENTS

	PAGE
Officers of IRRA	Inside Front Cover
Preface	iii
IRRA Membership Information	iv

## I

### PRESIDENTIAL ADDRESS

Jerome M. Rosow, Chairperson

The Fall and Rise of the Idea of Structural Unemployment	CHARLES C. KILLINGSWORTH	1
---	--------------------------	---

## II

### DISTINGUISHED SPEAKER ADDRESS

Edwin Young, Chairperson

Public-Employee Bargaining: Problems and Prospects	R. W. FLEMING	14
---	---------------	----

## III

### REEXAMINING THE OBJECTIVES OF UNEMPLOYMENT COMPENSATION

Wilbur H. Cohen, Chairperson

Unemployment Insurance: New Goals for the 1980s <sup>2</sup>	WAYNE VROMAN	24
Impact on Unemployment Compensation of the Increased Labor Force Participation of Women	PHYLLIS H. FINESHRIBER	35
Benefit Adequacy Relative to Preunemployment Expenditure Levels	PAUL L. BURGESS AND JERRY L. KINGSTON	39

#### IV

##### THE WELFARE SYSTEM AND LABOR MARKETS

Bruno Stein, Chairperson

The Use of Income Maintenance Experiment Findings in Public Policy 1977-78	HENRY AARON AND JOHN TODD	46
Welfare Reform and Labor Markets: What We Have Learned from the Experiments	ROBINSON G. HOLLISTER	57
Is Compulsory Work for Welfare Recipients Manageable?	BARRY L. FRIEDMAN AND LEONARD J. HAUSMAN	71
Discussion	DANIEL H. SAKS MARKLEY ROBERTS	79 83

#### V

##### CONTRIBUTED PAPERS: LABOR-MANAGEMENT RELATIONS

Gladys W. Gruenberg, Chairperson

Final-Offer Arbitration and Intertemporal Compromise, or It's My Turn to Win	PETER FEUILLE AND JAMES B. DWORIN	87
Attitudes and Public-Sector Labor Relations	JAMES E. MARTIN, LIZABETH A. BARCLAY, AND LAWRENCE L. BIASATTI	96
Labor-Management Relations in Canada's Construction Industry	JOSEPH B. ROSE	103
Final-Offer Arbitration in Wisconsin After Five Years	CRAIG A. OLSON	111
Discussion	ANTHONY P. ALFINO	120

#### VI

##### CONTRIBUTED PAPERS: LABOR MARKETS

Richard U. Miller, Chairperson

The Long-Run Effects of Teenage Unemployment: Some Preliminary Results	BRIAN E. BECKER AND STEPHEN M. HILLS	125
Youth Labor Markets, Enrollments, and Minimum Wages	J. PETER MATTILA	134



Age and Reactions to Unemployment: An Empirical Examination of Job Search Methods and Postunemployment Earnings	DONALD E. PURSELL AND WILLIAM D. TORRENCE	141
Rural Female Labor Force Participation	CRIS HEATON AND PHILIP MARTIN	149
Discussion	CARL J. SCHRAMM	158

## VII

### DISSERTATION ROUND TABLE

Richard N. Block and Myron Roomkin, Chairpersons

The Impact of Collective Bargaining Laws Covering Police and Firefighters on Municipal Expenditures and Fiscal Strain	JEAN BADERSCHNEIDER	162
Estimates of Occupational Injury Risk and Compensating Wage Differentials	ALAN E. DILLINGHAM	165
Employee Grievances: Incidence and Patterns of Resolution	JEFFREY GANDZ	167
Labor Market Segmentation in New England: Empirical and Case Studies	ROBERT NEIL HORN	170
Discussion	DAVID LEWIN HERBERT S. PARNES	172 176

## VIII

### EMERGING ISSUES IN EMPLOYMENT POLICY

Marcia Freedman, Chairperson

How Much Fiscal Substitution Is There in PSE?	MICHAEL E. BORUS AND DANIEL S. HAMERMESH	180
Labor Force Projections to 1990: Three Possible Paths	PAUL O. FLAIM AND HOWARD N. FULLERTON, JR.	188
The New Youth Strategies: A Shift in Employment and Training Policy?	GREGORY K. WURZBURG	201
Discussion	ROBERT F. COOK	208

## IX

### STRATEGIES AND PROBLEMS IN UNION ORGANIZING

Arnold R. Weber, Chairperson

Unions in the Traditional Sectors: The Mid-Life Passage of the Labor Movement	MYRON ROOMKIN AND HERVEY A. JURIS	212
Management Comes Out Swinging	A. H. RASKIN	223
Learning to Live Without the Union	PETER J. PESTILLO	233
The Longest Season: Union Organizing in the Last Decade, a/k/a How Come One Team Has to Play with Its Shoelaces Tied Together?	RICHARD PROSTEN	240

## X

### WAGE ADJUSTMENT AND THE CONSUMER PRICE INDEX

Henry Lowenstern, Chairperson

An Examination of the Revised and Unrevised Consumer Price Indexes After Six Months	W. JOHN LAYNG	250
Collective Bargaining and the CPI: Escalation vs. Catch-Up	VICTOR J. SHEIFER	257
Escalators, Inflation, and Macroeconomic Policy	DANIEL J. B. MITCHELL	264
Discussion	SIDNEY W. SALSBURG MARVIN FRIEDMAN	271 276

## XI

### CONTRIBUTED PAPERS: CIVIL RIGHTS AND EQUAL EMPLOYMENT OPPORTUNITY

James E. Jones, Jr., Chairperson

Union Security Provisions and Discrimination	JACK HOOVER AND WILLIAM LEAHY	280
The Use of Arbitration and Litigation in Employment Discrimination Disputes: An Empirical Comparison	MARGARET OPPENHEIMER AND HELEN LAVAN	291
The Role of Special Grievance Systems in Furthering Equal Employment Opportunities	PAUL F. SALIPANTE, JR., AND JOHN D. ARAM	299

Mandate: Minority Business Utilization	PAULA SINGER-SANDLER	308
Discussion	STEPHEN RUBENFELD	314
	ANDREA H. BELLER	317

## XII

### NEW DEVELOPMENTS IN THEORETICAL LABOR ECONOMICS AND IMPLICATIONS FOR POLICY ANALYSIS

Melvin Reder, Chairperson

Labor Supply Estimates for Public Policy Evaluation	GEORGE J. BORJAS AND JAMES J. HECKMAN	320
Discussion	V. JOSEPH HOTZ	332

## XIII

### IRRA ANNUAL REPORTS FOR 1978

Minutes of Annual Meetings in 1978		
Executive Board Spring Meeting in Los Angeles		336
Executive Board Meeting in Chicago		339
General Membership Meeting in Chicago		347
Audit Report for Fiscal 1978		350
Alphabetic List of Authors in 1978 Proceedings	Inside Back Cover	

# WORKSHOP SESSIONS

August 30–31, 1978

## Impact of Imports on Jobs

Lawrence Nagatomo, Chicago Mayor's Office of Manpower, Convenor

William Caples, Chicago Economic Development Commissioner,  
Chairperson

Panel: James C. Collins, American Iron and Steel Institute  
Elizabeth Jager, AFL-CIO  
Richard F. Kosobud, University of Illinois, Chicago Circle

## Dispute Settlement in the Health Care Industry

Panel: Helen LaVan, DePaul University  
Cameron Carley, DePaul University  
Gail Bentivegna, American Hospital Association  
Robert Barkin, Rush-Presbyterian St. Luke's Hospital  
George Larney, FMCS, Chicago

# I. PRESIDENTIAL ADDRESS

---

## The Fall and Rise of the Idea of Structural Unemployment

CHARLES C. KILLINGSWORTH  
*Michigan State University*

In October 1963, the Chairman of the Council of Economic Advisers (CEA) told a Senate Committee that a huge tax cut by itself would achieve the “interim full employment target” of 4 percent unemployment, and that so-called structural problems would be no obstacle at all. Therefore, the Chairman said, the big tax cut was properly the “centerpiece” of the Administration’s economic policy.<sup>1</sup>

In July 1978, the present Chairman of the Council of Economic Advisers told a White House press conference that more and more the data show that unemployment must be attacked by aiming policies at specific structural problems that are endemic in the economy and society.<sup>2</sup>

When the CEA Chairman spoke in 1963, the latest reported unemployment rate was 5.6 percent of the labor force. When the present Chairman spoke in 1978, the latest reported rate was 5.7 percent of the labor force. I think it is fair to say that the present Chairman was facing in almost exactly the opposite direction from his predecessor of 15 years before. And his 1978 statement was no surprise.

There was a time when reputable economists would not write the word “structural” without putting it in sanitizing quotation marks, and they would not speak the word without a snicker and a wink. Times have changed. In 1978, “structural problems” has become almost a vogue

---

Author’s address: School of Labor and Industrial Relations, Michigan State University, East Lansing, Mich. 48823.

<sup>1</sup> The CEA presentation is published in *Nation’s Manpower Revolution*, Hearings before the Subcommittee on Employment and Manpower of the Committee on Labor and Public Welfare, U.S. Senate, 88th Cong., 1st Sess., Part 5, pp. 1769-96. A somewhat revised version of the same presentation appears in *Economic Report for 1963* (published January 1964), as Appendix A, pp. 166-90.

<sup>2</sup> *New York Times*, July 8, 1978, p. 1.

phrase in Washington. Congressional committees now write long reports about structural unemployment without a quotation mark in sight. Administration spokesmen regularly present testimony and speeches about structural unemployment without a sign of a snicker. Even some academic economists write articles explaining in detail how tough the problem of structural unemployment has become.

Has the world of reality changed so much over the past 15 years, or is it only our perceptions of reality that have changed? Undoubtedly, “some of both” is the safest answer. But I believe that perceptions have changed much more than reality has. Many of the assertions, analyses, and predictions that were relied upon in the early 1960s to discredit the idea of structural unemployment as a serious obstacle to full employment have themselves been discredited. John Kenneth Galbraith remarked some years ago that “The enemy of the conventional wisdom is not ideas but the march of events.”<sup>3</sup>

The task that I have set for myself is to review and evaluate, in the light of experience, the clash of ideas about structural unemployment in the 1960s and early 1970s; then to indicate very briefly some of the main events that have led to the recent turn-around of views; and finally to draw some conclusions. I believe that the natural history of the idea of structural unemployment during the past two decades can teach us something worthwhile about the nature of modern economic analysis and some of its leading practitioners. In short, this is a cautionary tale.

### The Issue

When John Kennedy became President in 1961, the national unemployment rate was 6.6 percent. In those innocent days, that figure was almost universally considered to be alarming and even intolerable. What was becoming equally alarming was a kind of stair-step progression of unemployment rates during successive prosperity periods. We had less than 3 percent unemployment during the early 1950s; 4 percent in the mid-1950s; 5 percent in the late 1950s; and in 1963, after two full years of Kennedy and recovery, unemployment was still 5½ to 6 percent.

During the 1950s, there had been increasing discussion of rising structural unemployment as a cause for this upward creep of prosperity unemployment rates. Structural unemployment, to put the matter as briefly as possible, is joblessness—usually long-term—which results from basic changes in the economic structure: new technology, the decline of some industries and the growth of new ones, geographic relocation

---

<sup>3</sup> John Kenneth Galbraith, *The Affluent Society* (Boston: Houghton Mifflin, 1958), p. 13.

of industries, permanent changes in consumer tastes, changes in labor force characteristics, and so on. There was abundant evidence of such structural changes in the United States since World War II, and unemployment rates did vary greatly as between various labor force groups and various localities.

In its first public utterances, the new Kennedy Council of Economic Advisers had rejected the idea that structural changes were responsible for the upward creep of prosperity unemployment rates. The Council elaborated this view in later statements, with its fullest statement in Senate hearings in the fall of 1963.<sup>4</sup> The essence of the Council's view can be stated as follows: Structural change does create unemployment and other human problems, but there is no evidence that structural unemployment has increased at all since the end of World War II; it is certainly not the cause of higher and higher levels of prosperity unemployment. The real cause is the growth of "fiscal drag," which is the tendency of the progressive tax system to increase revenues more rapidly than government spending increases during a recovery period. This fiscal drag, the Council argued, had repeatedly choked off recovery before full employment was reached. The remedy, the Council argued, was a large tax cut for individuals and businesses. (The amount was originally set at \$10 billion, but the ultimate value was about \$13 billion.) The tax cut would stimulate aggregate demand sufficiently to reduce unemployment to 4 percent, and everybody would benefit. But, the Council said again and again, the benefits would not be equal—the greatest benefits would go to the labor force groups and geographic areas where unemployment was the highest. The unemployed worker would not get a tax cut, but he would get a job that would be worth a lot more than any conceivable tax refund.<sup>5</sup>

The Council did not oppose the so-called "structural programs"—manpower training, worker mobility assistance, area redevelopment, and the like—but they warned that these programs could not have any significant effect on the unemployment problem as long as there was an inadequacy of aggregate demand. Only after the tax cut reduced the unemployment rate to the 4 percent level would the structural programs have any chance of success. When the Council was advocating a \$13 billion tax cut, the appropriation for activities under the Manpower Development and Training Act was about \$130 million.<sup>6</sup> This was a

<sup>4</sup> See fn. 1 above.

<sup>5</sup> This point was made most specifically in response to questioning at the Senate hearing, p. 1794.

<sup>6</sup> The MDTA appropriation figure is from Garth L. Mangum, *MDTA: Foundation of Federal Manpower Policy* (Baltimore: Johns Hopkins Press, 1968), pp. 32–33.

ratio of about 100 to 1. The Council expressed no dissatisfaction with that ratio.

The Council's insistence that structural problems had not contributed to recent increases in prosperity unemployment rates rested squarely on the view of the labor market which was most frequently stated in economic theory textbooks. Thus, in its 1963 Senate Committee presentation, the Council said the following:<sup>7</sup>

[The structural analysis fails] to make any allowance for the proven capacity of a free labor market . . . to reconcile discrepancies between particular labor supplies and particular labor demands. If relative shortages of particular skills develop, the price system and the market will moderate them, as they have always done in the past. Employers will be prompted to step up their in-service training programs, as more jobs become available, poorly skilled and poorly educated workers will be more strongly motivated to avail themselves of training, retraining, and adult education opportunities.

Many similar statements were made by the Council and others as the discussion of this issue developed. One more example will suggest the general flavor. The *Report* of the Automation Commission included the following statements:<sup>8</sup>

It is the proper function of a market to allocate resources, and in this respect the labor market does not function differently from any others. If the available resources are of high quality, the market will adjust to the use of high quality resources; if the quality is low, methods will be developed to use such resources. . . . The total number of employed and unemployed depends primarily on the general state of economic activity. The employed tend to be those near the beginning and the unemployed those near the end of the [hiring] line. Only as demand rises will employers reach further down the line in their search for employees.

In earlier days, it was conventional for economic theorists to assume that labor is homogeneous. The economists of the early 1960s modified that assumption. They argued, in effect, that although labor was not really homogeneous, the labor market acted as a powerful automatic homogenizer. When demand rose, employers redesigned jobs in order

---

<sup>7</sup> *Economic Report* for 1963, p. 181.

<sup>8</sup> National Commission on Technology, Automation and Economic Progress, *Technology and the American Economy* (Washington: U.S. Government Printing Office, 1966), p. 23.



to make use of less-skilled workers, and they increased their on-the-job training; the workers themselves sought out ways to improve their skills, and they migrated to where the jobs were. These economists conceded that there might be some time lags in this process. But they insisted that the automatic homogenizing function of the labor market had held the structural component of unemployment to a low, constant level throughout the years since World War II.

Those who came to be called “structuralists” offered an abundance of statistics to support their view that the Council of Economic Advisers and others of like mind had misdiagnosed the unemployment problem. This audience will be relieved to learn that it will not hear today a rehashing of all of the statistics that were flung back and forth in those days. Neither will you hear a restatement of all of the structuralist arguments. You will hear simply the bare bones of the particular line of argument with which I happen to be most familiar—my own.<sup>9</sup>

There was general agreement, as I have hinted, that there had been a substantial amount of structural change in the economy since World War II. My basic contention was that technology and other kinds of economic change had developed some new characteristics in the post-war world. Such developments as the dramatic decline of agricultural employment and the equally dramatic rise of employment in such fields as education, health care, and research and development had combined to “twist” the demand for labor—pushing down the demand for low-skilled, poorly-educated workers, and pushing up the demand for highly-skilled, well-educated workers. The labor force had partially adapted to this great shift. The numbers of workers at the lower end of the scale had decreased and the numbers at the upper end had increased. And the labor market had guided most of those displaced in declining industries (like agriculture) to new jobs. But there had been a growing lag in adaptation. The growth of the lag was shown, in my opinion, by rising unemployment rates among less-educated workers at the same time that unemployment rates for better-educated workers were falling. I granted that there was some validity to the fiscal drag argument. But it seemed quite unlikely that a sharp rise in aggregate demand would create many more jobs for less-skilled workers than for high-skilled workers. It seemed much more likely that excessive reliance on stimulation of aggregate demand would create inflationary bottle-

---

<sup>9</sup> My first major presentation on this matter was made to the U.S. Senate Hearings in 1963 (see fn. 1 above; my presentation appears on pp. 1461–1511). For a fuller statement, see “Structural Unemployment in the United States,” in *Employment Problems of Automation and Advanced Technology*, ed. J. Stieber (New York: St. Martin’s Press, 1966), pp. 123–56.

necks in labor supply before an unemployment rate as low as 4 percent was achieved. On a more general level, I argued that the Council's depiction of the labor market as a powerful and efficient homogenizer of labor was contradicted by the conclusions of a number of empirical investigators of labor markets. One of them had summed up the consensus of the empirical investigators in these words: "Labor markets are less adequate than any other type of factor or product market in the economy."<sup>10</sup>

### The Great Hoax

The most ambitious effort to refute the structural thesis with numbers originated in a 1961 staff study for the Joint Committee for which Edward Kalachek was principally responsible.<sup>11</sup> Kalachek soon joined the staff of the Council of Economic Advisers. His study was adapted and updated, and it soon became one of the mainstays of the Council's case against the structuralists. The study undertakes to test two main propositions, which were stated in the JEC paper as follows:<sup>12</sup>

The structural transformation hypothesis maintains that unemployment has remained at relatively high levels in the period since mid-1957 in the face of adequate overall demand forces and despite the availability of a sufficient number of job opportunities.

If structural transformations have led to higher unemployment, then . . . it will be heavily concentrated . . . among workers attached to blue-collar occupations and goods-producing industries. The rate of unemployment among these workers will be higher relative to the overall unemployment rate than it was earlier.

The author then calculated an "expected" unemployment rate for particular occupations and industries—originally, for 1960, and in a later version of the study, for 1962. The principal finding was that, for a majority of what were designated as the "technologically vulnerable groups," actual unemployment rates were *lower* than the "expected rates"; and for all blue-collar occupations together and all goods-

<sup>10</sup> Lloyd G. Reynolds, *Labor Economics and Labor Relations*, 4th ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), p. 375.

<sup>11</sup> *Higher Unemployment Rates, 1957-60: Structural Transformation or Inadequate Demand*, Subcommittee on Economic Statistics, Joint Economic Committee, U.S. Congress, 97th Cong., 1st Sess. (Washington: U.S. Government Printing Office, 1961).

<sup>12</sup> *Ibid.*, p. 12.

producing industries together, the rise in unemployment rates was *less* than regression analysis of the 1948–57 experience would have suggested.

This study, both in its JEC version and in its updated CEA version, had a great impact on the discussion of the structural unemployment issue. The findings were cited again and again by the Council of Economic Advisers in speeches, in congressional testimony, and in the CEA Annual Report. Other economists cited it frequently in speeches and articles. And soon some economists devised new ways of testing the “structural hypothesis” as stated by Kalachek and the CEA. In 1964 and 1965, articles began to appear in such journals as the *American Economic Review* and *Industrial Relations* (among others) which presented new “tests” of the CEA formulation, and soon books or chapters in books worked over the same material. The verdict was virtually unanimous: no matter how you manipulated the data, there was little or no statistical evidence to support the structural hypothesis. Rarely has an economic proposition been so thoroughly tested and so completely demolished. The “structuralists” were, quite literally, derided from public platforms and in popular publications as well as in the professional journals.

The trouble with all of this was that the CEA-Kalachek “structural transformation hypothesis” was pure hoax. It was not based on anything ever written or spoken by anyone identified with the structuralist view. Nobody had claimed that there was a sudden upsurge of structural change or of structural unemployment starting in mid-1957. Nobody had claimed that “overall demand forces” were adequate during the 1957–60 period, and nobody had claimed that “a sufficient number of job opportunities” was available throughout this period. Nobody had ever defined structural unemployment in such a way that it neatly coincided with the occupational and industrial categories used in labor force statistics. I repeatedly challenged the CEA formulation of the structural hypothesis, and so did several others.<sup>13</sup> Nevertheless, even in the 1970s, books and articles were still appearing which treated this hoax as the authoritative statement of the structuralist position.

---

<sup>13</sup> For my comments, see “Structural Unemployment in the United States,” pp. 148–51 (although this essay was published in 1966, it was written and informally distributed rather widely in 1964). See also, as examples, Eleanor G. Gilpatrick, *Structural Unemployment and Aggregate Demand* (Baltimore: Johns Hopkins Press, 1966), pp. 10–14; and R. G. Lipsey, “Structural and Deficiency-Demand Unemployment Reconsidered,” in *Employment Policy and the World Market*, ed. A. M. Ross (Berkeley: University of California Press, 1965), pp. 219–36.

## The Grand Fallacy

The JEC-CEA study was especially persuasive for professional economists because it made extensive use of mathematical analysis and the “scientific” jargon of the profession. It was somewhat difficult to explain to laymen, however. Soon the “march of events” provided another line of argument that was highly appealing in its simplicity and apparent conclusiveness. When the great tax cut was passed early in 1964, the reported unemployment rate was 5.4 percent. By the end of 1964, the rate was still at about 5 percent. Then in 1965 the rate began to fall more rapidly—in fact, faster than the CEA had predicted. At the end of 1965, the rate was 4.1 percent. Thereafter, the decline was slower, but a low point of 3.3 percent was finally reached early in 1969.

As early as 1966, some of the participants in the debate of a few years before were pointing to the reduction in the unemployment rate as the final and unanswerable proof that the structuralist position had been completely mistaken. As the rate continued downward, other voices joined the chorus, and the theme was heard well into the 1970s. On other occasions I have presented a lengthy collection of quotations from eminent economists proclaiming the doctrine that the dramatic decline in the unemployment rate (and the rise in employment) in the late 1960s refuted once and for all the arguments of the structuralists. There is inadequate time today to read the entire collection of quotations. I will read only one, which is typical of many: “The history of the 1960s demonstrated that the American economy can reach unemployment rates of close to 3 percent through the use of simple fiscal and monetary policy.”<sup>14</sup> It should be noted that among the authors who expounded this view were four recent presidents of the American Economic Association and—no doubt—some future presidents of that organization. Economists are noted for their disagreements; but here, at least, was a verity about which there could be no rational disagreement. The official figures were there for everybody to see, and the reasoning was simple and easy to understand.

The trouble was that this generally accepted proposition rested on a grand fallacy. The implicit assumption is that nothing but the tax cut had a substantial effect on the employment rate between 1964 and 1969. This is a classic example of the *post hoc ergo propter hoc* fallacy. It is not hard to demonstrate that in fact there were other factors which, in combination, had a much greater effect on the unemployment rate than the tax cut did. These other factors included the Vietnam War,

---

<sup>14</sup> Lester C. Thurow, “Redistribution Aspects of Manpower Training Programs,” in *Manpower Programs in the Policy Mix*, ed. Lloyd Ulman (Baltimore: Johns Hopkins Press, 1973), p. 84.

two changes in the definitions of employment and unemployment, and large increases in manpower and poverty programs.

By 1969, the Vietnam War had removed a large number of young men from the civilian labor force and had induced a substantial number of others to enroll as full-time students in colleges. By conservative estimating methods, it can be shown that these effects had reduced the reported unemployment rate by 0.9 percent by 1969.<sup>15</sup> The two sets of changes in the definitions of unemployment took place in 1965 and in 1967. The 1965 change was to count as "employed" the enrollees in certain manpower and government-subsidized employment programs (such as College Work-Study and Neighborhood Youth Corps), although historically the enrollees in comparable programs (such as WPA in the 1930s) had been counted as "unemployed." This change, plus the expansion of the relevant programs, contributed 0.5 percent to the lowering of the unemployment rate by 1969.<sup>16</sup> The 1967 definition changes were estimated by the Bureau of Labor Statistics to reduce the reported unemployment rate by 0.2 percent by 1969.<sup>17</sup> There is no "double counting" involved in these estimates. The combined effect is 1.6 percentage points.

There were other significant effects not yet discussed. I will simply note two of them without elaboration. First, between 1965 and 1968, approximately 50 percent of the *new* blue-collar jobs that were created in the U.S. economy were in defense industries. Second, the employment of less-educated men *declined* despite the war boom from 1965 to 1969.<sup>18</sup> The labor market twist operated almost as strongly in the period of rapid expansion as it had during the period of stagnation.<sup>19</sup>

The reduction in the unemployment rate from 5.4 percent in early 1964 to the lowest monthly rate reported for 1969 (3.3 percent) is 2.1 percent. Factors *other* than pure and simple fiscal policy, or tax cuts, accounted for about three-fourths of that decrease. Thus, one may reasonably conclude that, in the absence of these other factors, the un-

---

<sup>15</sup> Charles C. Killingsworth and Christopher T. King, "Tax Cuts and Employment Policy," in *Job Creation: What Works?*, ed. Robert Taggart (Salt Lake City: Olympus Publishing Co., 1977), pp. 14-17.

<sup>16</sup> Charles C. Killingsworth and Mark R. Killingsworth, "The Effects of Unemployment and Training Programs on Employment and Unemployment Statistics," a paper for a conference co-sponsored by University of California, Los Angeles, and U.S. Department of Labor, forthcoming.

<sup>17</sup> Robert L. Stein, "New Definitions for Employment and Unemployment," *Employment and Earnings and Monthly Report on the Labor Force* (February 1967), pp. 3-27.

<sup>18</sup> Killingsworth and King, pp. 8-14, 16-17.

<sup>19</sup> *Ibid.*, pp. 8-14; for an earlier analysis, see Charles C. Killingsworth, "The Continuing Labor Market Twist," *Monthly Labor Review* (September 1968), pp. 12-17.

employment rate would not have fallen below about 4.9 percent. The actual decline below that level was caused by factors that are anti-thetical to the idea of a free labor market: a military draft and governmental programs of direct job creation. There is particular irony in the fact that many of our leading economists interpreted the effects of the draft and government job creation as proof of the power and efficiency of the free labor market.

### **The About-Face**

Through the late 1960s and into the 1970s, there were a few of us who continued to argue that the Vietnam War and the changes in the definitions of unemployment had only temporarily masked the problems of structural unemployment, and that these problems would reappear. But I strongly doubt that this continuing insistence on our part was a factor of any real significance in the about-face that has now taken place in Washington and in the hinterland. Galbraith was right. It was the march of events, not ideas, that overthrew the conventional wisdom about the basic causes of excessive unemployment in the United States.

When the Vietnam War began to taper off, unemployment started to rise. The then Chairman of the Council of Economic Advisers advised the nation that this rise—to about 4 percent—was purely a “transitional” problem.<sup>20</sup> But the rise continued. In 1969, the average number of persons unemployed was 2.8 million. The average number unemployed in the 1970s thus far has been 5.7 million, or more than double the 1969 average. In the past three years, the average has been more than 7 million unemployed. If we applied the pre-1965 definitions of unemployment, the three-year average would exceed 8 million.

Now I am not suggesting that these totals by themselves prove the validity of the structural viewpoint. What they do prove is that we have a severe problem of chronic and excessive unemployment. And the patterns which are indicative of structural problems have reappeared, some even more clearly than in the early 1960s. So the official diagnosis has changed. I began with a quotation from the present Chairman of the CEA. Let me give you a more detailed statement of the present Administration viewpoint, from testimony presented to the Joint Economic Committee a couple of months ago:<sup>21</sup>

---

<sup>20</sup> Statement by Herbert Stein, reported in *New York Times*, March 13, 1970.

<sup>21</sup> Statement by Arnold Packer, Assistant Secretary of Labor, before the Special Subcommittee on Economic Change, Joint Economic Committee, June 6, 1978 (processed), pp. 2–3.

While our overall performance record has been remarkable, there are segments of our society who have not shared equally in this recovery and who have historically suffered disproportionately during the cyclical swings. During the past year, the unemployment rate for nonwhites has remained about the same at 12.3%, while the rate for whites dropped from 6.7% to 5.2%. Teenagers of all races are experiencing unemployment rates of 16.5%, with the nonwhite teenage rate at a totally unacceptable level of 38.4%. Unemployment is particularly high in central cities and remote rural communities. For these localities, lack of adequate job opportunities has a permanent, structural character which persists in both good times and bad. \* \* \* It is clear . . . that macroeconomic policies, by themselves, are not sufficiently precise to solve specific structural labor market problems without causing unacceptable side effects. Selective labor market policies, on the other hand, are more flexible . . . [and] more cost effective than macroeconomic policies in solving structural problems. . . .

If it occurs to you that talk is cheap, consider one more fact: In 1978, while Congress debates a possible tax cut of the magnitude of \$15–20 billion, the expenditures on manpower programs are running at an annual rate of about \$12 billion.

The recent discussion of structural unemployment emphasizes some kinds of changes, such as more teenagers and women in the labor force, that were not present 15 years ago. I think that some of the recent converts to the structural viewpoint may have reached the right conclusions for the wrong reasons. There have been important offsetting changes in labor force composition and there have also been further changes in demand for labor that have been neglected. But these are subjects for another paper.

### Lessons

It is hardly noteworthy any longer when the march of events proves that the majority of professional economists have been wrong. But, unless we are ready to give up completely on economics and economists, we should continue to try to figure out (if we can) what went wrong in particular cases. I have some observations along those lines which grow out of my involvement in the aggregate demand–structural controversy. I do not intend to generalize beyond my data base. Not all economists were involved in that controversy, and my observations are certainly not intended to apply to all economists generally, nor to all who emphasize mathematical analysis or economic problems.

What led the aggregate demand school astray?

Probably the most important factor was one which the CEA, early in the day, called "the nub of the issue."<sup>22</sup> The aggregate demand group, as *general* economists, had a quasi-religious faith in "the market" as an extremely powerful, highly efficient regulator of the economy, and a corollary belief that labor markets were like all others. That faith affected their perceptions. They quickly and uncritically embraced "evidence" which seemed to support their preconceptions, as the Kalachek hoax did; and they almost automatically rejected as "implausible" and "insufficient" any evidence which was inconsistent with these preconceptions, such as my statistical demonstrations of the labor market twist.

Second, some of them misunderstood the data on which they relied. This country generates an enormous volume of numbers relating to employment, unemployment, and the labor market. There is no substitute for a painstaking and often tedious investigation of the characteristics and meanings of the numbers that you want to use. To cite one example, the occupational classification system—especially the highly aggregated version used in monthly labor force data—is of questionable utility for any purpose, and unemployment rates by occupation are probably the most questionable of all. Again, changes in the national average unemployment rate are produced by a multitude of factors, including such artifacts as definition changes. It should be obvious that a single factor, such as a tax cut, is not likely to be an adequate or accurate explanation for a large change in reported unemployment over several years. But what one aggregate demand supporter once wryly referred to as "the enthusiasm of advocacy" can dull the caution with which sweeping generalizations might otherwise be approached. One lesson which should be emphasized is that reliance on inappropriate statistics can be as misleading as reliance on unrealistic assumptions.

In a broad sense, the aggregate demand—structural controversy carried into the public arena a conflict among economists that previously had been confined mainly to the groves of academe. Some economists preferred to draw conclusions about the economy and economic policy from the assumptions of perfect competition (and all that this implies); other economists preferred to draw conclusions from direct observation of economic behavior in the real world. Most of the aggregate demand supporters came from the former group, and most of the structuralists came from the latter group. The aggregate demand school relied primarily on the theoretical model of the labor market, which makes little

---

<sup>22</sup> *Economic Report* for 1963, p. 181.



or no distinction between labor markets and other types of markets. The structuralists relied primarily on the large number of empirical studies of labor markets that were available in the early 1960s.

The common theme of the empirical studies is that the gritty reality of labor markets departs widely from the simplistic assumptions of economic theory. Knowledge is imperfect, mobility is limited, wage competition among employers is unusual, workers often behave differently from the theoretical "economic man," jobs are almost never redesigned (in peacetime) to adapt them to changes in the quality of labor available, and so on. The point is certainly not that labor markets are completely ineffective, or that the forces of competition and self-interest are nonexistent. Rather, the point is that labor markets and the forces that operate within them are often inadequate to overcome the imbalances that grow out of structural changes in the economy.

Since the structuralist view of labor markets now seems to have achieved rather general acceptance, some of you may ask, why rake over the dead coals of an old controversy? My answer is in two parts. First, the misdiagnosis of the causes of unemployment in the 1960s probably retarded the development of adequate employment policies for about ten years. During that time, some aspects of the unemployment problem became even more intractable. And we still do not know nearly as much as we should about how to remedy the weaknesses and imperfections of the labor market. After we are sure what works best, we will still have the task of building institutions to apply the remedies. We tried the easy, palatable answer, and it was inadequate. Now we must work on a slow, laborious answer.

Second, the past errors of analysis have not been generally recognized and corrected. Some of the current forecasting models still incorporate the simplistic view that the decline in unemployment in the late 1960s was due entirely to fiscal and monetary policy, and this misreading of the past undoubtedly contributes to the impressive record of error in efforts to predict the future. The great overstatement of the effects of the tax cut of 1964 has recently led to proposals from the radical right to cut taxes by roughly \$120 billion over the next three years. One somewhat unexpected result of this proposal is that some of the tax cut enthusiasts of the 1960s are becoming the nay-sayers of the 1970s. The 1964 tax cut was not really as effective as today's tax cutters claim, some old tax cutters are now saying—and besides, they suggest, there were other things happening that contributed to economic expansion in the 1960s. I conclude with the observation that it is better to discover the truth late than never to discover it at all.

## II. DISTINGUISHED SPEAKER ADDRESS

(Memorial Session in Honor of Gerald G. Somers)

---

### Public-Employee Bargaining: Problems and Prospects

R. W. FLEMING

*The University of Michigan*

I am honored to be asked to speak here tonight—first and foremost, of course, because this session is a memorial for Gerald Somers who was for me, as for so many of you, a good friend and a much-respected colleague; second, because in the late forties and early fifties, I was active in the IRRA and was its secretary for a number of years; finally, because it is an occasion to be with old friends and to talk about a subject which I once thought I knew something about.

While public-employee bargaining is now well established, it has obviously fallen upon hard times, at least with respect to economics. Jarvis-type amendments are springing up all over the country, there is genuine taxpayer resistance, and administrators of public agencies often find themselves without the resources to meet even entirely legitimate demands of employees. This can lead to a crisis in government because strikes, both legal and illegal, will occur while the electorate, particularly in this period of hostility toward what is perceived as “over-government,” will refuse to pay more taxes. Union leaders, understanding both the public employer’s dilemma and the public’s very marginal tolerance for public-employee strikes, will seek to guide their members toward “constructive” solutions like binding arbitration. Public employers will, on the other hand, resist such a solution both for traditional reasons and because they understand that even an “equitable” decision may be beyond their financial capacity and unwise in terms of their larger mission. Moreover, one is likely to hear expressed by other employees, both or-

---

Author’s address: University of Michigan, Ann Arbor, Mich. 48104.

ganized and unorganized, what might be labeled “due process” complaints about such an arbitration. That is, an arbitration between a public employer and a single union may require reductions in force beyond the bargaining unit even though employees in that segment of the operation had no chance to participate in the proceeding or to make their views known before the arbitrator. Thus, it is timely to review the public-employee bargaining scene.

Those of us whose memories go back at least as far as the fifties remember vividly the days when there was very little genuine collective bargaining in public employment. Three questions, some of which continue to this day, stand out in my mind as prominent in any discussions of public-employee bargaining during that period. One dealt with whether, either as a matter of policy or of law, it was wise to countenance public-employee bargaining. A second was whether, if there were to be bargaining, there should be restrictions on the subject matter of the bargaining. And the third was whether, if bargaining were permitted and an impasse reached, the strike could be tolerated.

What I have to say tonight starts off from that base and revolves around the following four points:

1. Regardless of the merits of the arguments over the three questions just mentioned, we are now beyond them in the sense that we do have widespread bargaining, we have tended to model it after the private sector in applying it to “wages, hours, and working conditions,” and we do have strikes.

2. It is apparent that collective bargaining in both the private and public sectors has changed a great deal since we first adopted it as a theory of industrial jurisprudence.

3. Binding arbitration of public-employee disputes is not, as is so often claimed, unsatisfactory because it puts the power of decision in a third party, but because the bipartite arbitration model which has worked so well in the private sector, at least as to grievances, is not well adapted to the public sector.

4. Since public-employee bargaining is here to stay, some method of impasse resolution must be devised which is tripartite, rather than bipartite, in nature so that the approval of the funding authority and other affected parties are tied into the process.

Let me now proceed to develop these four points.

### **The Traditional Arguments over Bargaining in Public Employment**

Following the passage of the Wagner Act in the early 1930s, and approval of its constitutionality by the Supreme Court a few years later,

collective bargaining in the private sector became an established way of life. It was, however, many years before attention was focused on the public sector. When, in the years following World War II, it became evident that the great growth in employment in the United States was taking place in the public sector, it was inevitable that the Labor Movement would have to turn its attention to public employees or risk its status and influence in the American society. Moreover, in undertaking the task of organizing public employees, labor had before it the model of Western European countries where such unions had long existed. Given the ethnic derivation of so many of our people, a European model always lends some comfort and acceptability.

It was doubtless also of some significance that as government agencies proliferated, some of the same kinds of grievances which arise in any human organization, and which too often go unattended, would give an incentive to employees to organize.

In any event, policy arguments against organization of public employees became increasingly untenable once one recognized that a free American Labor Movement could hardly be expected to ignore an increasingly important segment of the total labor force. Since the strike question did not play an important role in early organizational efforts—indeed, prominent public-employee organizations had a constitutional ban against it—the legal question of a strike against the sovereign was contained at the theoretical level.

The right to organize and to bargain did not, and does not, carry with it the automatic right to discuss any and all subjects. We are all familiar with the “wages, hours, and working conditions” concept of the National Labor Relations Act, and with the fact that there are mandatory subjects of bargaining, excluded subjects, and permissive subjects. Under state legislation, which controls much of the bargaining at state and local levels, there may be further restrictions. There may also be, as in the case of New York’s famed Taylor Law, penalties for illegal strikers, or simply an abolition of the right to strike.

For all practical purposes, then, the original debate over whether public employees should be permitted to organize and bargain is over. Remnants of it persist, and there are jurisdictions where there is no such right, but in the overall the battle is now on a different front.

### **The Collective Bargaining Milieu Has Changed**

Both the practice of collective bargaining and the milieu within which it exists have changed greatly since the Wagner Act became law. This is not surprising since everything else has also changed. But it does

mean that if collective bargaining is to remain viable, it must adapt to new circumstances. The national prominence of labor disputes in railroads, mining, steel, and autos is far less dominant than it was in the 1950s. Both industry and labor have maneuvered to obtain the passage of legislation that would either strengthen their positions vis-à-vis the other, or preempt a certain area of the relationship by covering it with legislation rather than leaving it to bargaining. In 1934 the debates over the Wagner Act spoke in terms of "equalizing" the bargaining power of the adversaries by giving employees the right to organize and thereby pit their strength against an already organized employer. But labor unions, just like companies that seek protection of their products against market competition, likewise seek support of their "staying power" in the event of a strike. Thus, unemployment compensation laws sometimes permit payments after a strike has been under way for a certain period, and food stamps for strike-bound families are added to the arsenal. Business, on the other hand, seeks tax writeoffs, incentives for certain kinds of performance, and subsidies to protect it. For our present purposes, the point is not whether these measures are right or wrong, but only that they change the context of bargaining.

In more recent years, both labor and management are seeing an increased number of examples of the hard fact that what the government giveth in collective bargaining, the government may also taketh away. Minimum wages, employment tests, hiring practices, working hours, safety requirements and practices, apprenticeship rules, retirement age, seniority practices, and a host of other items are now controlled by law. Thus, the parties may bargain, but they may not alter the requirements of the law in these areas. In a real sense, the government has defined many of the conditions which collective bargaining, as originally envisaged, was expected to consider.

In public employment, there is another significant difference that was not really explored in the original collective bargaining legislation. "Management" in the public sector is normally either appointed or elected. In either case, political pressure can be brought on either the appointing authority or through the polls to name administrators who will be favorable to one side or the other. This is quite unlike the situation in the private sector where labor can do little to participate in the selection of management.

In summary, bargaining today is a quite different institution than it was at its inception. This is true in the private sector, but the differences are even more marked in the public sector. Aside from the fact that labor participates in the selection of management in the public sector,

so-called "management" in most cases has neither ultimate control of its own budget nor any "price" mechanism which it can adjust to take care of added costs.

For all of these reasons, plus the difficulties of impasse resolution, which remain to be discussed, it is not unlikely that public-employee bargaining will be subject to close scrutiny in the years immediately ahead.

### **Binding Arbitration as a Method of Impasse Resolution**

From the very outset of union organization of public employees, there has been uneasiness about the strike and/or its alternative. Some of this concern was allayed in the early years by the fact that some of the most prominent public-employee unions voluntarily foreswore the strike and most jurisdictions made it illegal. It was probably inevitable that unions could not maintain this position over a period of time, both because their memberships became an increasingly important segment of the labor force and because the line between what could properly be labeled a "private" enterprise, in which the strike was permissible, and a "public" enterprise, in which it was not, grew increasingly hazy. One city might, for instance, be served by privately owned utilities, while another in the immediate area was served by a "public" utility. The service was the same, the job classifications were the same, and if uninterrupted production was essential in one, it was equally essential in the other.

The fact that a strike on the part of public employees was "illegal" also proved to be somewhat illusory. To be effective, our laws must be accepted and obeyed voluntarily, or at least be accompanied by an effective enforcement mechanism. It is probably fair to say that in our society as a whole there is today considerably less disposition to accept and obey any law simply because it is on the books, but there are peculiarly difficult problems in identifying effective enforcement mechanisms against illegal strikes. This has proven to be true not just in the United States, but all over the world.

Because the strike is, to say the least, an unsatisfactory solution to an impasse in public-employee bargaining, increased attention has been given in recent years to binding arbitration.

"Rights" arbitration, as distinguished from "interest" arbitration (involving the terms of a new contract) has been an enormous success in the private sector. But even in that arena, both labor and management have shown extreme reluctance to use arbitration as a means of resolving disputes over the terms of new contracts. Public employers and unions tended for some time to reflect this view, perhaps because pat-

terns and habits of collective bargaining in the private sector were so slavishly imported into the public sector. More recently public-employee unions, in the face of economic adversity, taxpayer resistance, and public hostility to the strike, have taken a different view. Public employers, on the other hand, continue to take a dim view of binding arbitration as a solution to the bargaining impasse. Two major reasons are usually given for this hostility: (1) that third-party arbitrators have no fiscal responsibility for the affairs of the agency and may, therefore, make an award that is beyond the means of the agency; and (2) that piecemeal arbitrations with one segment of the political unit's employees, as against other employees not then bargaining, or unorganized employees, is unfair to the latter because it impacts upon them even though they are not represented, and is, in addition, bad public policy because it does not take into consideration the relative importance of the various groups of employees to the overall mission of the employer.

Though the frustration of a public-agency head who must cope with a binding arbitration award that distorts or exceeds the unit's financial capability is understandable, it is not, in my view, as difficult a problem as the second criticism, and I should like to take a minute to explain why.

There are ways in which one can guard against irresponsible awards from the fiscal point of view. Wisconsin requires for state employees that any bargain be approved by a joint legislative committee which, if it approves the bargain, then introduces legislation to implement the agreement. New York City, in the midst of its recent economic crises, has taken similar steps. The chairman of the city's Board of Collective Bargaining reports as follows:

The New York City Collective Bargaining Law provides an appellate procedure from the findings of the impasse panel . . . to the tripartite Board of Collective Bargaining whose decisions are final and binding. As an additional safeguard in New York City, the statute specifically provides that any determination of an impasse panel or decision of the Board of Collective Bargaining which requires the enactment of a law cannot go into effect until such law is enacted. This proviso . . . recognizes that arbitration awards, just like collective bargaining agreements in the public sector, are not self-implementing decisions. Therefore, where necessary, unless the ultimate legislation or fiscal authority is provided to finance or implement an award, it cannot go into effect.

These kinds of statutory safeguards against an award that is beyond the capability of the employing unit are helpful from the employer's

standpoint, though probably not very popular from the union point of view, but they are not absolute. The New York State law, which provides for binding arbitration in certain kinds of public disputes outside the City of New York, lists criteria for the consideration of the arbitration panel which must be taken into consideration in making the award. One of these has to do with ability to pay. In a case involving the City of Buffalo, an award was made which the city contended it could not pay in view of the dire economic straits in which the city found itself. The award was therefore appealed to the appellate division which reversed the arbitration panel, saying “. . . there was no rational basis in the record before the arbitration panel for concluding that the City has the ability to fund a three million dollar wage increase . . . and any finding to the contrary must be based on pure conjecture and speculation and without regard for the demonstrated facts of the catastrophic fiscal crisis confronting the City of Buffalo.”

Lest this sound too reassuring to public employers, however, the case was then appealed to the New York Court of Appeals. It reversed the appellate division and reinstated the arbitration award, saying that “ability to pay was only one of the considerations to be weighed by the panel,” and that “the Appellate Division should not have drawn its own conclusions from the weight of the evidence or substituted its judgment for that of the arbitrators.”

Except in those cases where the funding authority must review the proposed agreement before it can become effective, there is no assurance that the additional resources will be available with which to finance a new contract. Even in those cases, every administrator who has ever presided over a public agency knows from experience that the funding authority frequently announces that it has funded a project when in fact it has financed only part of it and told the agency to reduce its operations by enough to provide the balance.

Even so, it is difficult, in times like the present, to ask public employees to accept less than the rise in the cost of living. Suppose, for instance, that at this moment in time a public employer finds itself financially unable to grant more than a 3 percent increase for fiscal 1978-79. Further suppose that the law provides for binding arbitration and the panel awards a 7 percent increase. Is this irresponsible behavior on the part of the panel? From the purely fiscal standpoint, I would argue that it is not. The decision may cause real hardship for the unit, it may have to lay off employees to fund the increase, it may increase workloads, or it may terminate certain functions, but there are ways of meeting its funding responsibilities. To proceed in this manner may, in the



view of the public employer, represent a bad choice of alternatives or an unwise decision, but it is not fiscally irresponsible. Therefore, I would argue that binding arbitration of a public-employment impasse is a viable alternative if one is primarily concerned with the fiscal aspects of it.

The larger problem, and one which it seems to me we have not grappled with at all successfully, is how to put the arbitration of one dispute, confined to a single segment of the enterprise, into perspective in terms of its impact on both the overall mission of the enterprise and the interests of other employees. Suppose there is a strike of police which goes to arbitration under the terms of a statutory provision. Let us assume that the union can make out a legitimate case for a more fulsome economic package than the police department, backed by the city, is willing to offer. Let us further assume that the city is acting responsibly within the limits of its resources. The arbitration panel, finding merit in the union's case, makes an award beyond the city's offer and beyond an amount which the city administrators feel they can justifiably allocate to the police when the latter are viewed in the entire spectrum of the city's operation. In the usual case, the city administrators must then make some judgments. Given the essentiality of the police, particularly in these times, it may be assumed to be doubtful that the award can be funded by simply reducing the police force. Alternatively, the city can cut other services not involved in the arbitration, or eliminate entire operations. The services that are eliminated may very well be those which have the least organized clientele, yet they may be giving desperately needed help to a segment of the society which is easily neglected. Is that either fair or wise? I think it is not. It may in fact be argued that unless and until such services are supplemented rather than reduced, continued emphasis upon the police force is self-defeating.

To cite another example, take the public institution which so many of us in this Association know best—the university. The employees most likely to be organized are the service people who staff the hospitals, the dormitories, the dining halls, and the student unions. Since the main mission of the university is educational, service employees, though essential to the continued operation of the enterprise, cannot make the difference between a high-quality and a mediocre institution. In the course of collective bargaining, they will nevertheless expect their union to fulfill their expectation of increased benefits and wages. If the bargaining does not satisfy them, they will then consider a strike or, in the alternative, binding arbitration. If a strike is the chosen alternative, the university may decide to weather it in preference to an agreement which it

perceives to be inappropriate in the light of other demands upon its resources. If the dispute goes to arbitration, the panel might, in making comparisons with the wages and salaries of others similarly employed, decide that more was warranted than the university was prepared to give. This would not necessarily be irresponsible; it might be equitable. The end-result may nevertheless be that the university administration will have to divert money from other parts of the university in order to finance a segment of the university which is, in its judgment, less important to its overall mission than certain other segments. Is that wise? And under those circumstances, what incentive is there to the university administration to arbitrate?

How does one solve such a problem? One can put the problem in a different perspective by asking the question in a somewhat different way. Suppose in either the city-police case or the university case, the question before the arbitration panel was not, "What is the proper rate of pay for police in 1978-79 in view of the rise in the cost of living and similar rates paid elsewhere?" but "Within its available resources, and in the light of other demands upon its budget, did the city offer the police a fair wage for 1978-79?" The questions are quite different and might well evoke different answers. The union would clearly prefer the first question and probably reject the second. Management might reject both, but if it had to choose between them would almost certainly take the second.

The important thing about the two questions is not their respective merits, but the fact that they expose the heart of the problem. A public administrator relies primarily on tax revenues levied and appropriated by the chosen representatives of the people. It is the duty of the administrator to administer the funds as efficiently, fairly, and productively as possible. Since there is no absolute assurance that the administrator will perform in this manner, the employees may well have decided that they needed a union to protect their interests. The members then expect the union leaders to maximize the benefits that flow to them, but since the union is likely to represent only one segment of the total workforce, all of whom must be paid from available resources, a favorable result for one group may be possible only at the expense of another group. In such a situation, it is understandable that the public employer resists binding arbitration. It is not only the budget, but the mission of the agency which is at stake. And it is why the traditional bipartite arbitration is not very satisfactory in a great many public-employment situations.

## Conclusion

In my introductory remarks, I said that I thought we were now beyond the traditional questions with respect to public-employee bargaining. That is, more and more jurisdictions now authorize bargaining; there may be some restrictions on the subject matter of bargaining, but the most common definition is still “wages, hours, and working conditions”; and we have grown used to strikes in the public service even though the tactic is unpopular.

What is different about collective bargaining, whether private or public, is that the legal and economic milieu has changed. Beyond that, in our rush to adopt collective bargaining among public employees, we accepted the private framework much too readily without recognizing and making allowance for the great differences that exist in the public sector.

Binding arbitration finds increased acceptance on the part of employee unions, perhaps because the climate in which they must bargain is presently unfavorable. Public employers burst forth with emotional blasts at arbitration panels, but the evidence seems to be that such panels are handing down equitable awards. Thus, the thrust of my argument tonight is that binding arbitration of public disputes is neither good nor bad; it is simply structurally deficient. It is deficient because it is bipartite when in fact the situation demands at least tripartitism. Few public administrators have any control over levying taxes for their agencies or appropriating money for their needs. This is done by another entity, responsive to the people. On the other hand, the public administrator does have a responsibility to the other constituencies whom he must attempt to satisfy within the limits of his budget. Those other entities are not present in the arbitration, yet they may bear part or all of the brunt of it.

I conclude that we have not yet been wise enough to devise a fair system for adjudicating the rights of public employees in their contractual disputes with public employers. Involved are questions of the science of government, the economics and politics of union-management relations, public finance, and the sociology and psychology of human behavior. Given the fact that this Association came into being to bring together the various disciplines that bear upon the industrial relations field, this seems to me to be the appropriate forum in which to pose the question of how to find a better solution than we now have.

In that quest, I wish you great good luck!

### III. REEXAMINING THE OBJECTIVES OF UNEMPLOYMENT COMPENSATION

---

## Unemployment Insurance: New Goals for the 1980s?\*

WAYNE VROMAN  
*The Urban Institute*

Unemployment insurance has existed as a joint federal-state program for more than 40 years. Founded during the great depression to provide a measure of income security to involuntarily unemployed workers, the program has been subjected to renewed attention and critical concern in recent years. This short paper will discuss the objectives of unemployment insurance and means for achieving those objectives. A more comprehensive analysis of program objectives will be contained in an Urban Institute working paper to be completed in the fall of 1978.

Since the audience includes members of the National Commission on Unemployment Compensation, I want to indicate now that the paper will argue for changes in the structure of unemployment insurance. Three changes are suggested as ways to help the program to better achieve important objectives. These changes are: (1) to increase eligibility among the unemployed who leave their job for good personal reasons; (2) to remove the weekly maximums on benefit payments; and (3) to make benefits taxable under federal and state personal income taxes. Each of the three suggestions is to some degree controversial. The paper presents arguments why these changes are desirable. It will not attempt to present fully all counter arguments. As such, it would be

---

\* Support for this research was provided by The Urban Institute. Opinions expressed are those of the author and do not necessarily represent the views of The Urban Institute or its sponsors. Helpful comments were received from Ralph Smith and Susan Vroman. Any remaining errors are solely my responsibility.

Author's address: The Urban Institute, 2100 M Street, N.W., Washington, D.C. 20037.

accurate to describe the paper as a work of advocacy, and not one of scholarly balance and evenhandedness.

### **Unemployment Insurance: The Traditional Objectives**

Two prominent reference volumes dealing with unemployment insurance agree that the program has three main objectives. To quote, these objectives are:

(1) to provide a measure of economic security for wage earners and their families through adequate partial compensation of wage loss from involuntary unemployment; (2) to cushion economic slumps and prevent spiralling unemployment by helping to maintain workers' purchasing power; and (3) to stimulate regularity of employment on the part of individual firms by means of incentive tax provisions.<sup>1</sup>

Observe that objectives (1) and (2) refer to program benefits while (3) is related to program financing and experience rating of covered employers. In the remainder of this paper attention will be focused on program benefits.

Unemployment insurance was developed in a particular historical context. Locally administered relief and charities were found to be sorely inadequate to the needs of the unemployed in the early 1930s. The means tests of these earlier programs were demeaning to the individual applicant and administratively cumbersome. Therefore, unemployment insurance was structured to pay benefits promptly to eligible individuals as a matter of right and free from means tests.

To meet these objectives, the state programs which were created subsequent to the Social Security Act of 1935 had a number of common features. States mandated coverage, base-period earnings requirements, nominal replacement rates, weekly benefit minima and maxima, waiting periods, maximum benefit durations, benefit disqualifications, and employer tax rates. Benefits were paid mainly to workers laid off by their employers, although some who left employment for "good cause" were also eligible to collect benefits. Weekly benefits were determined by the worker's base-period average weekly wage, the nominal replacement rate (often 50 percent of the average weekly wage), and the weekly benefit minimum and maximum. The specifics of these program features

---

<sup>1</sup> This quotation is from Richard Lester, *The Economics of Unemployment Compensation* (Princeton, N.J.: Industrial Relations Section, Princeton University, 1962), p. 4. The second statement of objectives is found in William Haber and Merrill Murray, *Unemployment Insurance in the American Economy* (Homewood, Ill.: Irwin, 1966), p. 26. Haber and Murray further add that the first of the three objectives is paramount in the program.

have always varied from state to state, but the overall program outlines are similar.

### **Changes In Economic Structure: The 1930s and the 1970s**

More than four decades have now elapsed since the creation of unemployment insurance. The basic structure of the program has not changed markedly: benefits are paid to eligible persons as a matter of right, and most recipients are unemployed as a consequence of employer initiated actions, i.e., layoffs. Over this time period, however, the structure of our economic institutions has changed markedly. Two of these changes will be emphasized here: (1) changes in the composition of family income, and (2) changes in the composition of the flows into unemployment.

Family income is the sum of three components: labor compensation (earnings plus fringe benefits), income from capital (rents, dividends, and interest), and transfer payments. Earnings and income from capital are subject to income taxes while transfer payments are not taxed. Compared to the 1930s, family income differs in the 1970s in the following respects: (i) families with two working adults are now much more prevalent; (ii) the importance of fringe benefits (such as health and retirement benefits) in total labor compensation is now much higher; (iii) access to transfer programs (both social insurance and means-tested programs) is much more widespread; and (iv) many more families are now subject to federal and state income taxes and to employee payroll taxes.

In short, family income now has more sources than 40 years ago. The earnings of the family head is now only one (although still usually the largest) of many potential income sources. A spell of unemployment for a previously employed family member may not cause severe economic hardship. Its impact on family income and well-being will depend on the level of the worker's earnings, the family's marginal income tax rate, and access to other transfer programs in addition to unemployment insurance. None of these considerations was important in the 1930s. An occurrence of unemployment would typically have signalled the onset of poverty status for a family during the great depression.

The composition of aggregate unemployment is much different now compared to the 1930s. Adult women and younger workers aged 16 to 24 have become a larger share of the total labor force, and the increases have been especially rapid since the mid-1960s. Compared to men 25

and older, the other labor force groups can be characterized as more mobile. They move into and out of the labor force more often, and the younger workers also make voluntary job changes more often. Associated with both types of mobility are risks of unemployment. Unemployed workers who are entering or reentering the labor force are not compensable under unemployment insurance, while unemployed job-leavers are usually disqualified from receiving benefits. Thus, compared to the 1930s, unemployment insurance now potentially compensates a smaller fraction of aggregate unemployment.

### **Who Should Receive Unemployment Insurance Benefits?**

Since 1967 the Bureau of Labor Statistics has published data on unemployment by reason. Some unemployed workers have previously been employed (job-losers and job-leavers) while the rest have come from outside of the labor force (reentrants and new entrants). This four-way breakdown of unemployment by reason is a convenient starting point for a discussion of who should receive unemployment insurance benefits. Table 1 shows selected data on unemployment by reason for the years 1973 and 1975. These two years are the extremes of U.S. labor market conditions in the 1970s; 1973 was a year of near full employment while 1975 was the trough of the 1974–76 economic slump. The table also shows unemployment for two major demographic groups, men 25 and older and all others in the labor force. The top half of Table 1 displays counts of unemployed workers, while the bottom half displays the proportions in each column.

It is clear in Table 1 that unemployment by reason varies markedly among demographic groups. In 1973 about two-thirds of the unemployed adult men were job-losers, whereas only three-tenths of the "All Other" group fell into this category. These data also illustrate how the composition of unemployment changes over the business cycle. The 1.67 million 1973 job-losers represented only .387 of aggregate unemployment, whereas in 1975 the 4.34 million were .554 of that year's total. All categories of unemployment increased between 1973 and 1975, but job-losers accounted for about three-fourths of the increase (2.67 million out of 3.53 million). The increases are due to the combined effects of more layoffs and longer durations among the unemployed.

Two other features of Table 1 warrant comments. The number of unemployed who are labor force reentrants and new entrants is substantial. Combined, they represent .456 of the total in 1973 and even in the deep recession of 1975 they account for fully a third of aggregate

TABLE 1  
Unemployment by Reason: 1973 and 1975<sup>a</sup>

Unemployment Category	1973			1975		
	All Persons 16 and Older (1)	Men 25 and Older (2)	All Others (1) - (2) = (3)	All Persons 16 and Older (4)	Men 25 and Older (5)	All Others (4) - (5) = (6)
<i>Worker Counts (in millions)</i>						
Job-losers	1.67	.71	.95	4.34	1.88	2.46
Job-leavers	.67	.14	.53	.81	.19	.62
Reentrants	1.32	.20	1.12	1.86	.28	1.58
New entrants	.64	.02	.62	.81	.02	.79
Total	4.30	1.08	3.23	7.83	2.37	5.46
<i>Proportions of the Total</i>						
Job-losers	.387	.663	.295	.554	.792	.451
Job-leavers	.157	.132	.165	.104	.080	.114
Reentrants	.307	.189	.347	.238	.119	.290
New entrants	.149	.016	.193	.104	.009	.145
Total	1.000	1.000	1.000	1.000	1.000	1.000

<sup>a</sup> Based on annual averages of interview data from monthly labor force survey—Bureau of Labor Statistics (BLS). Columns (1) and (4) display regularly published data, while columns (2), (3), (5), and (6) are taken from unpublished BLS tabulations.



unemployment. Finally, observe that job-leavers are not that large a proportion of the total, .157 of 1973 unemployment and .104 of 1975 unemployment.

Who should receive program benefits? Currently, most job-losers become beneficiaries. Exceptions are provided by those who are fired or discharged for misconduct. Average durations of unemployment increase markedly in recessions, however, and many job-losers exhaust benefits. In the last four recessions (1958, 1960–61, 1970–71, 1974–76) some type of emergency federal legislation has been enacted to increase the maximum duration of benefits. Because the recent recession was so severe, the maximum duration for many workers was 65 weeks during 1975 and 1976.<sup>2</sup>

Labor force reentrants and new entrants have never been compensated under unemployment insurance, and I think this policy should continue. Two administrative considerations would be very important to any proposal to compensate these categories of unemployed workers: how to determine degree of labor force attachment, and how to determine the appropriate level of benefits. Given their large numbers, it would be costly to compensate these workers, and the prospect of benefit payments might prompt many to claim benefits who were not serious job-seekers. Some of the unemployed labor force reentrants and new entrants are from low-income and poverty families, but the bulk are not. The problem of deciding which of these persons should receive needs-based transfers should not be the responsibility of unemployment insurance.

Unemployment insurance currently compensates only a minority of the unemployed who are job-leavers. In a mobile society where two-earner families are increasingly prevalent, the question of what constitutes good cause and good personal cause for leaving a job is admittedly complex.<sup>3</sup> States follow a variety of practices in compensating this type of unemployment. I think that persons who leave jobs because their

---

<sup>2</sup> Since 1971 there has been a federal-state extended benefit program to automatically extend benefit duration by half (from 26 to 39 weeks for many workers) when designated threshold or "trigger" unemployment rates (insured unemployment as a percent of covered employment) are exceeded. This has the advantage of automatically extending benefits in recessions when unemployment duration lengthens. Unfortunately, many workers exhausted their extended benefit eligibility in the severe 1974–76 slump, necessitating further extensions of benefit eligibility through emergency federal legislation.

<sup>3</sup> Chapter 15 in the volume by Haber and Murray, pp. 292–93, is one source which discusses the distinctions between good personal cause and good cause attributable to the employer. Many states will compensate a job-leaver if the reason is good cause attributable to the employer, but will not pay benefits if leaving is due to some other personal reason.

spouse is transferred should be compensable under unemployment insurance. The increase in the number of beneficiaries that would result from compensating more job-leavers is a matter of some uncertainty. It would depend on the degree of liberalization in eligibility (particularly in what constitutes good personal cause for leaving a job) and the length of the waiting period to be applied to job-leavers. The administrative problems of determining weekly benefit levels from base-period earnings for such workers would be no different than what now applies to job-losers. If liberalization of eligibility among job-leavers added 100,000 to 200,000 workers to weekly beneficiary levels, this would represent only a 4 to 8 percent increase over the number of regular program beneficiaries as of 1977.<sup>4</sup> Accurate actuarial estimates of the potential number of these beneficiaries would be a great help to informed policy discussions in this area.

### **What Is the Appropriate Level of Benefits?**

When asked what degree of partial compensation should be provided, many persons familiar with unemployment insurance would respond that 50 percent of wage loss replacement is appropriate and the intent of the program as originally conceived. The program pays benefits to eligible individuals who are usually family members. It would seem that measuring benefits against the loss of family spendable income caused by unemployment is the relevant way to judge benefit adequacy. As noted above, family income usually has more sources now than in the 1930s, particularly as there are many more two-earner families, and most families now pay income taxes. Both considerations are relevant to an assessment of replacement rates, i.e., the size of benefits relative to the income loss caused by unemployment.

There is considerable disagreement about replacement rates under unemployment insurance. Feldstein has suggested replacement rates are typically high (in the .70 to .85 range), while publications at the Labor Department's UI Service show replacement rates of from .30 to .40 in recent years.<sup>5</sup> Since benefits are not taxable while wages are taxed, replacement measurements are very sensitive to the treatment of taxes.

---

<sup>4</sup> There were 2,473,000 regular state UI program beneficiaries in 1977. See Table B33, p. 295, in U.S. Executive Office of the President, *The Economic Report of the President* (Washington: U.S. Government Printing Office, 1978).

<sup>5</sup> See Martin Feldstein, "Unemployment Compensation: Adverse Incentives and Distributional Anomalies," *National Tax Journal* 27 (June 1974), p. 236, and U.S. Department of Labor, Unemployment Insurance Service, *Handbook of Insurance Financial Data, 1938-1970* (Washington: U.S. Government Printing Office, 1971), p. 139.

Also, because many families have two working members, it is possible to have an unemployed low-wage worker who is from a high-income household.

A full treatment of the topic of replacement rates is not possible in this paper. Replacement rates can be measured in a number of ways. One important aspect of this topic is to assess fully how unemployment affects net family income. This encompasses such items as taxes, work expenses, and fringe benefits which all will change when a person leaves employment. There is also the issue of for what proportion of the total unemployment spell does the worker actually collect benefits. This involves such considerations as waiting periods, payment lags, and benefit exhaustions. Finally, one must know what other transfer payments might be received by the unemployed worker. All of these are relevant to a complete assessment of the income-loss replacement experienced by unemployed workers.<sup>6</sup>

The examination of replacement rates to be undertaken here centers around three illustrative unemployed workers' family-income situations which are summarized in Table 2. The numbers in the table are artifacts, but they help illustrate some important points about income-loss replacement under the program as currently structured. Lines 1-4 show the impact of unemployment on three family types: Case 1, a low-wage worker from a low-income family; Case 2, a low-wage worker from a high-income family; and Case 3, a high-wage worker from a high-income family. Cases 1 and 2 are alike in that the worker's weekly wage is \$100. Cases 2 and 3 are alike in that the marginal tax rate on family income is .40. Case 2 is of particular interest because it represents a family situation which is now much more common than in the 1930s. When unemployment occurs, the reductions in spendable income are \$100, \$60, and \$240 for Cases 1, 2 and 3, respectively.

Lines 5-7 simulate the payment of unemployment compensation under a program like those now in effect in the various states. Weekly benefits are 50 percent of average weekly wages, but subject to a weekly maximum of \$100.<sup>7</sup> Since benefits are not taxable the gross benefits paid by the program are the same as the net benefits received by the worker (lines 5 and 6 respectively). The replacement rates in line 7 vary con-

---

<sup>6</sup> All of these topics are discussed in an Urban Institute working paper, "Unemployment Insurance, Income Replacement and Automatic Stability," to be completed in the fall of 1978.

<sup>7</sup> There are no dependents' benefits in this example. Students of unemployment insurance institutional details will immediately recognize that these workers must not be from Massachusetts.

TABLE 2  
 Illustrative Cases of Income Losses  
 and Unemployment Insurance Benefits<sup>a</sup>

	Case 1 Low Wage Worker, Low Income Family	Case 2 Low Wage Worker, High Income Family	Case 3 High Wage Worker, High Income Family
A. Income loss due to unemployment			
1. Weekly family income before unemployment	100	500	500
2. Marginal income tax bracket	.00	.40	.40
3. Weekly wage of unemployed worker	100	100	400
4. Loss of weekly income due to unemployment	100	60	240
B. Unemployment insurance benefits <sup>b</sup>			
5. Weekly gross benefits	50	50	100
6. Weekly net benefits	50	50	100
7. Income-loss replacement rate (6 ÷ 4)	.50	.83	.42
C. Hypothetical unemployment insurance benefits <sup>c</sup>			
8. Weekly gross benefits	50	50	200
9. Weekly net benefits	50	30	120
10. Income-loss replacement rate (9 ÷ 4)	.50	.50	.50

<sup>a</sup> These are illustrative cases developed by the author. All income and benefit amounts are measured as dollars per week.

<sup>b</sup> These benefits are based on an unemployment insurance program that pays half of a worker's average weekly wage (line 3) up to a maximum of \$100. Benefits are not taxable.

<sup>c</sup> These benefits are based on a hypothetical unemployment insurance program that pays half of a worker's average weekly wage (line 3), but subjects the benefits to income taxation.

siderably. In Case 1 the program actually replaces half of the weekly income loss.<sup>8</sup> Much higher replacement is experienced in Case 2 because wages are taxable but benefits are tax free. Income replacement in Case 3 is .42, a result of two opposed tendencies. The weekly benefit maximum lowers the replacement rate while the nontaxability of benefits raises it. In this case the impact of the weekly maximum predominates, and the replacement rate is less than .50.

Lines 8-10 simulate benefit payments under a much different unemployment insurance program. This one taxes benefits but has no upper limit on the weekly payment. Gross benefit outlays are now higher be-

<sup>8</sup> Since a poverty income level worker in the real world would still be subject to the employee part of OASDHI taxes, the actual replacement rate would be closer to .55.

cause of increased payments to high-wage workers. Net benefits in line 9, however, total the same as earlier (line 6) because of tax payments in Cases 2 and 3. Note that aggregate net benefits received by high-income workers are the same as before (\$150), but the distribution between Cases 2 and 3 now correctly mirrors the losses in weekly income caused by unemployment. In all three cases this program replaces 50 percent of the family's income loss.

In many ways this hypothetical unemployment insurance program retains important features of the present programs. Base-period wages determine the gross benefit amount through the same kind of computational formula. Benefits are received as a matter of right, regardless of the worker's income. What has changed is that the net weekly benefit now depends on both the worker's average weekly wage and the family's income tax bracket.

What are the advantages of this hypothetical system over the current program? First, it seems to me there is clearly a more equitable distribution of net benefits. For all three cases benefits are exactly half of the loss in net weekly income.<sup>9</sup> The program is acting as an income loss insurance for workers who become unemployed. The payout rate is the same for all workers, 50 percent. Second, by reducing replacement-rate variations, this system probably leads to fewer labor market distortions than are caused by the current program. The Case 2 worker typifies a situation where the current program may induce a spell of unemployment. In weeks which are compensated, program benefits represent 83 percent of net take-home wages. Under the hypothetical program, however, this replacement rate is reduced to 50 percent, the same as for other beneficiaries.

The implementation of this hypothetical unemployment insurance program would involve some difficult administrative questions. Would the taxation of benefits be administered on a withholding basis by State Employment Security agencies? Would it be feasible and legal for such agencies to obtain the tax withholding rates from the workers' previous employers? Should the taxes on benefits be sent to the U.S. Treasury like other income taxes? Should increases in gross benefit outlays be charged to covered employers through higher payroll tax rates and/or higher annual taxable maxima, or should they be financed by a federal general revenue contribution? These are some of the questions that

---

<sup>9</sup> This usage of the term equity is the same as what Myers has termed individual equity. It also might be termed strict insurance or proportional net income loss insurance. Benefits are the same proportion of net income losses for all recipients. See Robert Myers, *Social Insurance and Allied Government Programs* (Homewood, Ill.: Irwin, 1965), p. 6.

would have to be faced if such a program were to be proposed or implemented. The gains in interpersonal equity and reductions in labor market distortions under this hypothetical program would seem to make it worthy of serious consideration.

### **Conclusions**

The three main program objectives noted above will undoubtedly remain important objectives of unemployment insurance in the 1980s. In light of evolutionary changes in the composition of family income and in the makeup of overall unemployment which have occurred during the past 40 years, this paper has suggested three changes in the structure of unemployment insurance. The suggested changes (to increase eligibility among job-leavers, to tax benefits, and to remove weekly benefit maximums) would affect the means for achieving the first of the program's main objectives: the provision of partial compensation to those who are involuntarily unemployed. If they are implemented, the provision of wage-loss benefits would become somewhat more adequate (because the number of recipients would be increased) and much more equitable (because the variation in individual replacement rates would be reduced). Reducing replacement-rate variation would seem to be important in its own right and helpful for reducing labor market distortions. The suggested changes would not measurably affect how unemployment insurance functions as an automatic stabilizer of the macro economy, the second main program objective. Their impact, if any, on regularity of employment with individual firms, the third main objective, would depend on implementation details that have not been explored here.

# Impact on Unemployment Compensation of the Increased Labor Force Participation of Women

PHYLLIS H. FINESHRIBER

*Consultant, U.S. Department of Labor*

Establishment of the National Commission on Unemployment Compensation under the October 1976 congressional mandate has focused attention on the basic concepts of unemployment compensation in the United States. Throughout much of the 40-year history of the federal-state unemployment insurance system, some confusion has existed between the concept of unemployment compensation as a transitional, temporary insurance program in which involuntarily unemployed workers receive benefits as an earned right and the concept of public assistance as a needs-tested program of benefits for individuals not able to work. The confusion is by no means confined to the lay public. We hope and expect that the Commission will be able to dispel the confusion and clarify the objectives of unemployment compensation in the latter half of the twentieth century.

The Commission has been at work only a few months, but those have been busy months. Our panel chairperson, who also chairs the Commission, has seen to that. Those of us who have been heavily involved in the federal-state unemployment insurance program (UI) welcome the comprehensiveness of the Commission's interest and the depth of its investigations.

One area of Commission interest is women and families. Women have not always shared equally in the protection guaranteed to all workers who are involuntarily unemployed and who meet tests of eligibility and of being able to work and available for suitable work.

Originally, there were no special restrictions on payment of UI benefits to women in either federal or state laws, nor are there such restrictions in federal law today. In all states, an unemployed worker may receive UI benefits only if he or she is able to work and available for work at a suitable job. Furthermore, the worker must be free of such

---

Author's address: 7214 Rollingwood Drive, Chevy Chase, Md. 20015.

disqualifying acts as having left the job voluntarily without good cause, having been discharged for misconduct connected with the work, or refusing an offer of suitable work.

As the number and proportion of women in the labor force began to increase at an accelerating rate, however, particularly the number of working wives, states began to enact restrictive provisions and enforce restrictive procedures in three areas which limited the protection accorded women workers. The categories in which sex discrimination occurred were: (1) specific disqualifications for pregnant or postpregnant claimants; (2) special disqualifications, mainly affecting women, for leaving employment because of marital or domestic obligations; and (3) payment of allowances for dependents on a more restrictive basis to women than to men claimants. Also, lack of UI coverage of employment in certain occupations, particularly those in private households, affected women adversely.

Two presidentially-appointed commissions in the 1960s—the President's Commission on the Status of Women, and its successor, the permanent Citizens' Advisory Council on the Status of Women—included unemployment insurance in their investigations. The commissions and their special committees on social insurance and taxation recommended that each of these areas of discrimination be eliminated from state laws and procedures. They also branded as unfair and inaccurate the attitude that "most women are secondary workers and do not need benefits when unemployed." The fact that wives customarily earned less than their husbands did not mean that their earnings did not contribute significantly to family income. Need, too, is irrelevant to the basic UI concept of earned right. The solution lies in adopting more realistic measures of labor force attachment of both men and women before benefits are paid.

The pregnancy issue was resolved by congressional enactment of a federal pregnancy standard in October 1976. Under a provision of Public Law 94-566, effective January 1, 1978, states must not deny unemployment compensation solely on the basis of pregnancy or termination of pregnancy. All states have conformed their laws to this federal requirement. This means that, on a case-by-case basis, pregnant claimants will be paid or denied benefit not on the basis of their pregnancy, but on whether they meet the state conditions for receipt of benefits, including ability to work and availability for suitable work.

Twelve states continue to deny benefits in cases where a claimant voluntarily left work to marry, to move with spouse, or to take care of marital, domestic, or filial obligations. Again, this means different treat-



ment of women. Most claimants denied benefits are women, although no state law now uses only feminine pronouns in its marital obligations provisions, as some formerly did. The original state UI laws recognized that a worker might, under certain circumstances, have to leave a job and that even voluntary leaving could be for good cause, which might include personal circumstances. Regardless of whether or not the separation was disqualifying, eligibility for benefits after any disqualification period depends on week-by-week determinations of availability. But the disqualifications for marital and domestic obligations last until the claimant has returned to work and, in 10 states, has specified earnings. This is generally a more severe disqualification than under the normal voluntary quit provision. In the absence of the special disqualification, job-leavings for family reasons would be judged on their merits. Some would be deemed voluntary quits without good cause, while others would be considered as having good cause but holding the individual unavailable for work until the situation changed.

Eleven states and the District of Columbia modify the wage-related character of benefits by increasing the weekly benefit of workers with dependents. The allowance and the definition of dependent vary from state to state. Four states compute the allowance as an integral part of the benefit formula; the rest pay a flat amount per dependent up to a specified limit. While some states formerly required only women claimants to furnish proof of dependency, the 12 jurisdictions now apply the same criteria to men and women, according to Department of Labor sources. Allowances are payable to the individual who provided more than half support for dependents, however, a test relatively few married women can meet. Also, state agencies customarily include child-support orders and social security payments in determining whether a mother has provided more than half support for a child. Thus, in 1975 dependents allowances were paid to 49.8 percent of men, but only to 11.8 percent of women claimants. Yet the median contribution of working wives in 1974 exceeded 25 percent of total family income and nearly 40 percent for wives who worked year-round full time. About 2.5 million wives (12 percent of all working wives) contributed half or more of total family income. In addition, 3.9 million female heads of families were in the labor force in March 1975.

The problems of lack of UI protection because of limited coverage have been largely resolved by congressional action in 1970 and 1976. Now about 80 million jobs are covered of an estimated 100 million jobs in the labor force in 1978. This figure includes some 130,000 household workers, a breakthrough even though the statutory limitation—house-

holds with a \$1,000 quarterly payroll—severely restricts coverage to some 11 percent of domestic workers.

Women in the labor force and their problems have been extensively analyzed elsewhere. I shall mention only a few facts. In 1977, 40 million women, or 48 percent of all women age 16 and above, were in the labor force, compared with only 5 million women (20 percent) in 1900 and 13 million (29 percent) in 1940. In 1977, women were 41 percent of all workers, compared with 18 percent in 1900 and 25 percent in 1940. This increase is expected to continue. Only the rate of increase is being debated. How will such growth and the high proportion of women in the labor force affect unemployment compensation?

Women work for the reason that men work: to earn money. Women are heads of families. Women are wives contributing significantly to family income. Women are self-supporting individuals.

Some women seek part-time work. Fewer men do so. For these people, there may be a move to redefine "suitable work" for UI purposes to include part-time work where individuals have a history of such employment. After all, employers pay unemployment taxes on wages of part-time workers.

Proposals have been made to include displaced homemakers as beneficiaries in the UI system. It is not clear how this would work, but in the past training allowances, trade-adjustment assistance, and other benefits besides unemployment compensation have been paid through the federal-state system.

A provision of the tax bill recently passed by the House of Representatives subjects unemployment benefits to income taxation. This would in effect apply a needs test for unemployment compensation. The rationale appears to be that, while UI originally was for a single-earner family with dependents, the present multi-earner family norm reduces hardship when one earner becomes unemployed. Since the second earner usually is the working wife, the question arises whether—finally—sex discriminatory UI legislation may be enacted at the federal level.

Women have as great a stake as men in the right to compensation for wages lost during unemployment. Soon it will be difficult to find women who have not been at one time or another in their lives members of the paid labor force. Women, therefore, in the future will be more aware than ever before of their benefit rights. They can be expected to insist on full equality in the unemployment compensation program.

# Benefit Adequacy Relative to Preunemployment Expenditure Levels

PAUL L. BURGESS  
JERRY L. KINGSTON  
*Arizona State University*

This paper is based on a portion of the three-and-one-half year study of benefit adequacy conducted by the Arizona Department of Economic Security and the authors for the U.S. Department of Labor (USDOL).<sup>1</sup> A randomly drawn sample was interviewed after five, 13, and 25 weeks of unemployment to obtain data on claimant and household income and expenses for a "typical" month of employment prior to unemployment, and to gather information on income and expenses and on the household adjustments made following unemployment. Also, exhaustees were interviewed after they had drawn all the benefits to which they were entitled. Although such a study cannot be summarized adequately here, some main goals were to: (1) develop a household definition suitable for UI research purposes; (2) develop and utilize a measure of benefit adequacy based on household living standards; (3) analyze income/expenditure changes and various adjustments to unemployment for those unemployed 13 and 25 consecutive weeks; (4) analyze the job search conducted by beneficiaries following their unemployment and the new jobs found by "successful" searchers; (5) estimate the effects on benefit adequacy of implementing certain hypothetical benefit formula changes; and (6) analyze the impact on the affected households of benefit exhaustion.<sup>2</sup>

---

<sup>1</sup> The authors' opinions may not reflect those of the Arizona Department of Economic Security or the U.S. Department of Labor. Authors' address: Department of Economics, Arizona State University, Tempe, Ariz. 85281.

<sup>2</sup> For a more complete analysis of these issues see the following reports by Paul L. Burgess, Jerry L. Kingston, and Chris Walters, *The Adequacy of Unemployment Insurance Benefits: An Analysis of Weekly Benefits Relative to Preunemployment Expenditure Levels* (1978), 181 pp.; *The Adequacy of Unemployment Insurance Benefits: An Analysis of Adjustments Undertaken Through Thirteen and Twenty-Five Weeks of Unemployment* (forthcoming), 186 pp.; and the analysis presently underway of the postexhaustion experiences of these claimants. Each report has been or will be published by the U.S. Government Printing Office for the U.S. Department of Labor, Employment and Training Administration, UI Service.

The goals of the present paper are to discuss the measure of benefit adequacy and the household definition utilized prior to presenting a few major patterns of benefit adequacy. Next, some main adjustments made by the group in response to 25 consecutive weeks of unemployment are noted. Finally, the results of simulating two changes in the existing benefit structure are presented.

### The Concept of Benefit Adequacy

The pathbreaking study in benefit-adequacy research was Father Joseph Becker's in the early 1960s.<sup>3</sup> Another important contribution was the work undertaken by Saul Blaustein and Paul Mackin in the mid-1970s.<sup>4</sup> The approach taken in the present study builds on these earlier studies. The basic rationale of the study was that the "average" needs of unemployed workers should be used in establishing benefit formulas because unemployment insurance is a social insurance program. Analysis of the extent to which weekly benefits meet the *group needs* of the unemployed provides a basis for determining what proportion of lost wages "should" be replaced by UI benefits, even though an individual's entitlement typically does not depend on individually demonstrated needs.

The measure of benefit adequacy utilized is defined as:

$$BENAD = \frac{WBA}{EXP \times (WG/INCOME)}$$

where *BENAD* is the adequacy measure for an *individual* beneficiary; *WBA* is the UI weekly benefit for the *individual*; *EXP* is the weekly total of necessary and obligated expenses of the beneficiary *household* during the preunemployment month; *WG* is the *individual's* gross wage during the preunemployment month; and *INCOME* is the gross recurring *household* income during the preunemployment month. The basic issues confronted in developing and utilizing this concept of benefit adequacy are outlined briefly below.

The definition of the household unit was a central issue because the beneficiary's *WBA* was to be compared in some way with "household"

<sup>3</sup> Joseph Becker, *The Adequacy of the Weekly Benefit Amount in Unemployment Insurance* (Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, 1961).

<sup>4</sup> Saul Blaustein and Paul Mackin, *Development of Techniques for Evaluation of the Weekly Benefit Amount in Unemployment Insurance*; and *Job Loss, Family Living Standards and the Adequacy of Weekly Unemployment Benefits* (Washington: U.S. Government Printing Office, U.S. Department of Labor, Employment, and Training Administration, UI Service, 1978). These reports are based on a study undertaken in 1975.

expenses. One clear implication of this study was that conventional household definitions, which focus on the “head” of household, are inappropriate for benefit-adequacy research. Because the beneficiary (who often is not the household “head”) was the person of primary concern, the definition utilized was developed around the beneficiary, in order to obtain more accurate income and expense data. Specifically, the beneficiary household was defined as the beneficiary and, if present, the spouse plus all persons who reside with the beneficiary and receive half or more of their monthly support from the beneficiary/spouse; the rule for including household members other than spouses obviously was arbitrary. Based on this definition, seven household types were developed for analysis (see below).

Expenses *paid* during a “typical” month of employment prior to unemployment were selected as the proxy measure of household living standards. Only paid expenses were included because no reasonable way of imputing the value of services from consumer durables or of allocating the appropriate portion of due-but-not-paid expenses to the current month could be developed for the study. The “typical” month was chosen by the beneficiary as that one of the last two calendar months prior to unemployment that was more typical of his/her usual employment.

Only “necessary/obligated” expenses were included for comparison with the WBA on the subjective basis that other expenses need not be maintained by UI benefits. These expenses were defined as the “necessary” expenditures for goods/services acquired and consumed on a regular basis and those expenses that are expected to be met on a regular basis because of established commitments, legal or otherwise. The ten expense categories included were: housing, food purchased in grocery stores, medical care, credit/loan payments, clothing, transportation, insurance, services/other regular payments, continuing/regular support of persons outside the household, and lump-sum payments for property/income taxes. Among the ten expense items included, housing was the largest category for the sample, followed by food and credit/loan payments. Examples of items *excluded* from necessary/obligated expenses are gifts, any meals/snacks eaten away from home, and entertainment expenses. Following Becker,<sup>5</sup> the beneficiary’s proportionate “share” of household expenses (relevant for comparison with his/her WBA) was given by the ratio of the beneficiary’s gross earnings in the preunemployment month to recurring household income during the same month.

---

<sup>5</sup> Becker, p. 45.

### Benefit Adequacy: Empirical Results

The study group (3,196 claimants) filed for benefits in Arizona and was drawn randomly throughout the 12-month period beginning in mid-September 1975. Just over half of the sample qualified for Arizona's maximum weekly payment of \$85, which is based on a formula that provides a weekly benefit of 1/25 of high-quarter earnings, up to the maximum payment. For purposes of comparison with other studies that have focused on wage replacement, it may be noted that the average benefit-wage ratio for the sample was 44 percent (56%) for gross (net) wages. For the total sample, the mean value for the benefit-adequacy measure of 63 percent conceals considerable disparity among beneficiaries as shown below:

Benefit Adequacy Category	Percent of Sample
35% or less	10.8
36%-50%	21.0
51%-65%	23.2
66%-85%	21.7
86%-99%	9.2
100% or more	14.1
<b>TOTAL</b>	<b>100.0%</b>

The extremes were that 11 percent of the group could meet 35 percent or less of their expense shares during the preunemployment month, whereas 14 percent had benefits sufficient to cover at least 100 percent of these expenses.

The degree of benefit adequacy differed markedly among the seven household types, as shown in Table 1. Benefits were less adequate for

TABLE 1  
Percentages of Each Household Type in Selected Adequacy Categories

Household Type	Benefit Adequacy Category	
	35% or less	100% or more
One-person households:		
Beneficiary lives alone or with nonrelated person	6.0%	15.8%
Beneficiary lives with relatives	4.4%	41.1%
Two-person households:		
Beneficiary lives with spouse who does not work	12.4%	9.6%
Beneficiary lives with spouse who works	2.0%	23.4%
Three-or-more person households:		
Beneficiary sole earner, spouse present	22.2%	2.3%
At least 1 other member works, spouse present	6.9%	14.8%
Other		
Two-or-more persons, possibly earners other than beneficiary, spouse absent	12.2%	7.6%

sole earners with relatively large households than for beneficiaries in any other household type—over one-fifth of this group fell in the bottom adequacy category and only 2 percent were in the top adequacy category. In sharp contrast, benefits were more adequate for beneficiaries who lived with relatives and had no other household members than for any other household type—only 4 percent of these persons fell in the bottom adequacy category, and over two-fifths actually had 100 percent or more of their necessary/obligated expenses covered by their WBAs.

As would be expected, the limit on the WBA of \$85 results in a strong and inverse relationship between prior earnings and the degree of benefit adequacy. The following percentages of the claimants in each wage category that fell in the *top two* benefit-adequacy categories (86% or more) clearly show this pattern:

Preunemployment Gross Weekly Wages

Less than \$75	\$75-124	\$125-174	\$175-224	\$225-299	\$300 or more	Total
50.3%	34.9%	32.3%	16.9%	6.0%	3.7%	23.3%

Just over half of those in the lowest wage class fell in these top adequacy categories, compared with only 4 percent of those in the highest wage class. Also as expected, a fairly strong relationship was found between the measure of benefit adequacy and benefit-wage ratios; generally, low (high) values of the benefit-adequacy measure corresponded to low (high) benefit-wage ratios.

### Adjustments to Unemployment

The changes in labor force status/activity of nonbeneficiary household members and changes in paid necessary/obligated expenses made by the 599 households in which beneficiaries were unemployed for at least 25 weeks are examined in this section. A basic hypothesis is that the frequency and magnitudes of the adjustments made would be inversely related to the degree of benefit adequacy recorded for the household unit. The actual adjustments selected by the household unit, of course, depended not only on the relative financial pressures experienced but also on the “ability” of household units to undertake them.

Almost one-fourth (23.3%) of the total sample had at least one nonbeneficiary household member who, because of the beneficiary’s unemployment, had worked more hours by the 25th week interview. Also in response to the beneficiary’s unemployment, over one-fourth (27.5%) of the units had at least one nonbeneficiary member who had begun to look for work over this interval and 14.4 percent reported that one or more nonbeneficiary household members had begun to work. Each of these

labor market adjustments was made by a larger percentage of the households for which benefits were less vs. more adequate. Interestingly, analysis revealed that most of the households that had made these adjustments by the 25th week of the beneficiary's unemployment already had done so by the 13th week of unemployment.

The financial pressures of the beneficiary's unemployment would be expected to induce some decreases in the amount of paid necessary/obligated expenses, and almost two-thirds of the sample reported some expense cuts from the preunemployment month to the month prior to the 25th week interview. For nearly one-third of the sample, expenses were cut by at least 30 percent. Moreover, most of the reductions in expenditures reported at the 25th week already had been implemented by the 13th week of unemployment. As expected, the percentage declines in these expenses were much more pronounced among the households for which benefits were less vs. more adequate. For example, over one-half of the households in the lowest two adequacy categories (*BENAD* = 50% or less), compared with only 7 percent of those in the highest two adequacy categories (*BENAD* = 86% or more), cut paid necessary/obligated expenses by 30 percent or more from the employed month to the month prior to the 25th week interview.

### Simulated Benefit Formula Changes

Given the background provided above, this final section focuses on the effects of two hypothetical changes in Arizona's benefit formula—an increase in the maximum benefit to \$105 and a dependents allowance (see Table 2). Neither of these formula changes would change drastically the distribution of claimants by benefit-adequacy category. Nonetheless, the percentage of claimants in the bottom two adequacy cate-

TABLE 2  
Effects on Benefit Adequacy of Selected Formula Changes

Benefit-Adequacy Category	Existing Formula (\$85 Maximum)	\$105 Maximum (55% Average Weekly Wage)	Dependents Allowance <sup>a</sup>
35% or less	10.8%	6.7%	6.9%
36%-50%	21.0	16.3	18.3
51%-65%	23.2	22.8	22.2
66%-85%	21.7	25.9	24.3
86%-99%	9.2	10.8	11.2
100% or more	14.1	17.4	17.1
TOTAL	100.0%	100.0%	100.0%

<sup>a</sup> Dependents allowance would provide \$5 for any nonearning spouse and for each child under 18 years who depends on the beneficiary/spouse for half or more of his/her support, not to exceed *WBA*/2 or \$15.



gories would be reduced from the 32 percent presently there to 23 percent for the \$105 maximum or to 25 percent for the dependents allowance; the percentage in the top two adequacy categories would increase from the existing 23 percent to 28 percent for either change.

As emphasized previously, benefit adequacy varied markedly among beneficiaries in different types of households. The effects on benefit adequacy of the above formula changes for the two household types presently at the top and bottom of the adequacy scale are shown in Table 3. Presently 52 percent of the single persons who lived with rela-

TABLE 3  
Percentage of Households in Given Adequacy Categories

Household Type	<i>BENAD</i> = 50% or less			<i>BENAD</i> = 86% or more		
	Present Formula	\$105 Maximum	Dependents Allowance	Present Formula	\$105 Maximum	Dependents Allowance
One-person HH, beneficiary lives with relatives	13%	12%	13%	52%	55%	52%
Three-person HH, beneficiary sole earner, spouse present	56%	38%	41%	5%	9%	13%

tives and had no other household members were in the 86 percent or more adequacy category, and this percentage would increase only to 55 percent for the \$105 maximum (and not change for the dependents allowance). In contrast, only 5 percent of the sole earners with at least three-member households were in the 86 percent or more adequacy category, but this percentage would increase to 9 percent for the \$105 maximum and to 13 percent for the dependents allowance. Even more striking would be the effect at the bottom end of the adequacy scale. Either formula change would have virtually no effect on the percentage of these single-person households at the bottom of the adequacy scale, but the percentage of the three-or-more person households that would remain at the bottom of the adequacy scale would fall sharply from 56 percent to 38 percent (\$105 maximum) or 41 percent (dependents allowance). Thus, either formula change would reduce considerably the present disparity in benefit adequacy among the seven household types. This would be the case even though the impact on adequacy for the sample as a whole would be much less striking than the impact on those households for which benefits presently are least adequate.

## IV. THE WELFARE SYSTEM AND LABOR MARKETS

---

### The Use of Income Maintenance Experiment Findings in Public Policy 1977-78\*

HENRY AARON

JOHN TODD

*U.S. Department of Health, Education, and Welfare*

On August 6, 1977, President Carter announced a welfare reform proposal whose design and specifications were shaped in part by the findings of four sets of income maintenance experiments begun a decade ago by the Office of Economic Opportunity (OEO). This paper describes in some detail how the findings of the last of those experiments, now nearing completion in Seattle and Denver, were used in developing President Carter's Program for Better Jobs and Income (PBJI). The first two sections outline the experimental findings about labor supply and the simulation model which incorporated those results. The third section describes the three major provisions of the proposal affecting assistance for families with children. The fourth section describes how analysis helped shape the central characteristics of the proposal—the combination of cash assistance and direct job creation. The fifth section indicates how specific labor supply simulations were used in other decisions and debates. The final section offers some generalizations based on this experience.

#### **I. The Work Effort Findings**

The Seattle-Denver Income Maintenance Experiment (SIME-DIME) is the largest and last of four income maintenance experiments begun

---

\* This paper does not necessarily reflect the views of the Department of Health, Education, and Welfare. We are grateful to Michael Barth, David Betson, Gary Burtless, Richard Kasten, David Lindeman, Larry Orr, and Jerry Strauss for their helpful comments and suggestions. Authors' address: U.S. Department of Health, Education, and Welfare, 200 Independence Avenue, S.W., Room 415F, Washington, D.C. 20201.

by the Office of Economic Opportunity (OEO) and the Department of Health, Education, and Welfare (HEW) in 1967-70 and currently managed by HEW.<sup>1</sup> The main objective of the experiments has been to measure the effect of cash assistance on the work effort of single-parent and two-parent families. Nearly 5,000 families with low and moderate incomes were selected from the low-income neighborhoods in Seattle and Denver. Some of the 5,000 families selected for the experiment were assigned to a control group. These families have received no benefits from the experiment, but have been interviewed regularly and have remained eligible for existing programs. Other families (usually referred to as "experimentals") received income assistance according to one of a variety of schedules that provided different "guarantee levels" (benefits if the family had no other income) and different benefit reduction rates (the percentage by which these basic benefits are reduced for each dollar of earnings). Actual hours of work, along with a great deal of other socioeconomic and demographic information, were observed for all adults in the family before and after the experiment began for both controls and experimentals.

These data allow us to estimate the effect on labor supply of changes in income and changes in the net wage rate (the wage rate adjusted for the impact on assistance benefits and taxes).<sup>2</sup> We estimated these effects (sometimes called the income effect and the substitution effect, respectively) for husbands and wives in two-parent families and for heads of single-parent families. The more generous the income assistance schedule, the greater the total income associated with all levels of earnings (below the eligibility ceiling) and, in general, the lower the work effort. The more rapidly benefits are phased out as earnings increase, the lower the net wage rate and, in general, the lower the work effort for those receiving cash assistance.

---

<sup>1</sup> The Seattle-Denver Income Maintenance Experiment was sponsored by DHEW, which also conducted the simulations discussed in this paper. Experimental design and most analysis of the experimental data are being performed by SRI-International, with surveying and earlier simulation work performed by Mathematica Policy Research. The experiment was conducted with the cooperation and assistance of the States of Washington and Colorado.

<sup>2</sup> Until the SIME-DIME experiment, the only labor supply result from the experiments had been the difference in work effort between experimentals and controls. This statistic is easily misused because it combines the effects of the benefit levels and the benefit reduction rates and because the statistic cannot be applied to a national program because the participants in the experiments were not chosen to be a random sample of the total population. Obtaining the income and substitution effects by demographic group allows the simulation of many assistance schedules of a nationally representative data base. (Of course, insofar as the responses of the participants are atypical even for their income level, wage rate, and demographic group, the national projections will be biased.) A summary of the SIME-DIME findings on work effort can be found in "Summary Report: Seattle-Denver Income Maintenance Experiment" published by DHEW in February 1978.

At present, we are using information from the experiments on total earnings. A complete analysis will require a disaggregation of earnings changes. Do they take the form of reduced overtime and moonlighting or quitting work completely? Is the purpose greater leisure or investment in the form of training or more intensive job-search? Are the changes made by the primary worker in the family or a secondary worker? We are only beginning to acquire and analyze this type of disaggregated data from SIME-DIME.

## II. The Model

We then incorporated these income and substitution effects into a large and sophisticated microsimulation model<sup>3</sup> designed to simulate the effects of a comprehensive welfare reform proposal (including a large increase in PSE jobs) on transfers, taxes, and private and public earnings. We made all of the labor supply and cost estimates of the President's welfare reform proposal with this model. We made various out-of-computer adjustments in the estimates to deal with questions for which data in the survey were lacking or inadequate (e.g., the institutionalized population).

The model operates on a representative sample of the U.S. population, usually the Survey of Income and Education (SIE) covering 1975, but the model can also operate on any Current Population Survey (CPS). The new tax and transfer system is compared to the prereform tax and transfer system. Facing a new set of net income possibilities and net wage rates, each adult in each family adjusts his or her desired hours of work based on these changes and the relevant labor supply parameters from the SIME-DIME experiment. If a person is eligible for a special PSE job, then he or she decides whether: (1) to switch from the private sector to a PSE job; (2) to take the PSE job during periods of unemployment but remain in the private sector otherwise; or (3) to avoid the PSE job completely. The model assumes that persons will take the alternative with the highest long-run income. The model also assumes that changes in an individual's desired hours of work in the private sector result in a proportional change in actual hours of work.

Many difficult judgments are involved in using the data from the SIME-DIME experiments to estimate the impact of a welfare reform proposal on work effort. The models used at HEW, SRI-International (the prime research contractor on the experiments), and elsewhere are

---

<sup>3</sup> For more detail on this model, see David Betson, David Greenberg, and Richard Kasten, "A Simulation of the Program for Better Jobs and Income," Technical Analysis Paper, Office of Planning and Evaluation, DHEW, forthcoming.

undergoing constant refinement and revision. The findings presented in this paper are, therefore, the interim findings of an ongoing research effort.

With the use of these SIME-DIME findings and the microsimulation model, our office simulated the effects of various welfare reform proposals on federal and state budgets and on hours worked in the private and public sectors by various demographic and income groups. Despite widespread controversy about some of the offsets the Administration claimed in estimating net costs, our estimates of gross outlays and earnings changes have been widely accepted.

### III. Brief Description of the Proposal

Before discussing the impact of the findings from the income maintenance experiments on the Administration's welfare reform proposal, we present a brief description of that proposal as it affected assistance for families with children. At present, single-parent families are eligible for assistance from Aid to Families with Dependent Children (AFDC) and food stamps. AFDC benefits levels vary by state; food stamp benefit levels do not. Families with two able-bodied adults are also eligible for food stamps and, in 27 states, are eligible for AFDC provided the father works fewer than 100 hours in that month. In some states, these two-parent families are also eligible for state and locally financed general assistance programs. All families with children are eligible for an Earned Income Tax Credit (EITC) of 10 percent of earnings up to \$4000 less 10 percent of adjusted gross income in excess of \$4000. The Administration's proposal would provide assistance to families with children through three separate provisions:

*PSE:* The primary earner in a family with children would be eligible for a public service job or training slot paying the minimum wage or slightly more, after a five-week period of supervised job search.

*Cash Assistance:* For families with a member expected to work, the federal cash assistance benefit for a four-person family would be \$2,300 per year less 50 percent of earnings in excess of \$3,800 per year. If such a family did not have a private or public job after eight weeks, the benefit would be \$4,200 per year less 50 percent of all earnings. States would be allowed to supplement this benefit, but the federal government would only subsidize the first \$500 (approximately) of supplements, and the benefit reduction rate could not exceed 52 percent.

For families with children without a member expected to

work, the federal cash assistance benefit would be \$4,200 per year less 50 percent of earnings. The federal government would subsidize supplements up to the poverty line (about \$6,400 in FY78), and benefit reduction rates could not exceed 70 percent.

*EITC:* All families with children would be eligible for an Earned Income Tax Credit equal to 10 percent of earnings up to \$4,000 plus 5 percent of earnings above \$4,000 up to \$9,100 minus 10 percent of adjusted gross income in excess of \$9,100. This credit would not apply to earnings from the special PSE jobs.

#### **IV. Impact on the General Structure of the Proposal**

The most important impact that the SIME-DIME findings on work effort had on the welfare reform policy-setting process was in making explicit a background of concern over the possible impact of welfare reform on the work effort of two-parent families. No one particular finding or computer simulation was responsible. The general pattern of results indicated that if the federally supported guarantee approximated benefits in the high payment states, which are near the poverty line for families receiving AFDC in many states, then no matter what the benefit reduction rate on earnings, the impact on labor supply would be large enough that the decrease in earnings would be a significant fraction of the net increase in benefits.

This problem is merely the reappearance of the dilemma of income assistance first presented more than a decade ago by Christopher Green.<sup>4</sup> If the guarantee is near the poverty line, then costs can be kept down only by setting the benefit reduction rate so high that the financial return for taking a low-wage job is all but eliminated. If benefit reduction rates are kept low enough to preserve work incentives for low-wage workers, then the income maintenance program reaches into dense portions of the earnings distribution, decreasing the marginal return for work for many workers at moderate wage rates and dramatically increasing transfer costs. Both options decrease the net return to work by increasing tax rates. The first sharply lowers the gain from work for a relatively small number of people; the second option keeps benefit reduction rates lower than does the first, but affects more people by providing benefits for more people. Both options decrease private-sector work effort.

Table 1 illustrates this problem. It shows the consequences of extending benefits to all eligible two-parent families at guarantee levels that states now provide to single-parent families. It indicates that be-

<sup>4</sup> Christopher Green, *Negative Taxes and the Poverty Problem* (Washington: Brookings Institution, 1967).

TABLE 1  
Assistance Costs Before and After "Reform" and Changes in  
Earnings for Two-Parent Families

Benefit Reduction Rate =	40%	50%	60%	70%	80%
1. Cash plus food stamps prereform (billions of \$)	4.8	4.8	4.8	4.8	4.8
2. Cash assistance postreform (billions of \$)	14.0	10.6	8.6	7.3	6.8
3. Net increase in cash assistance (Line 2 - Line 1) (billions of \$)	9.2	5.8	3.8	2.5	2.0
4. Estimated decline in earnings due to reform (billions of \$)	3.5	2.5	1.9	.6	.7
5. Net increase in income (Line 3 - Line 4) (billions of \$)	5.7	3.3	1.9	1.9	1.3
6. Efficiency index (Line 5 divided by Line 3)	62%	57%	50%	76%	65%

*Notes:* Figures are in billions of 1975 dollars representing 100 percent participation in available programs. Numerous "out of computer" adjustments have not been made so that the net increase in assistance shown here does not exactly equal the net increase in assistance which we estimate this program would have caused in 1975.

The basic benefit level in each state is set equal to the maximum amount paid in AFDC in that state in 1975 plus the bonus value of food stamps, but not to be less than 65 percent of the poverty line. The highest state (other than Alaska and Hawaii) paid about 100 percent of the poverty line.

tween one-fourth and one-half of the additional assistance provided to two-parent families would be offset by reduced earnings.<sup>5</sup>

These results sharpened debate about what approach to welfare reform should be pursued. A "cash assistance approach" would establish a system of income-related grants based on family size, assets, earnings, and other income. This approach suffers from the difficulties described above. An alternative "jobs approach" would provide assistance to all families with a member deemed capable of working through assurance of employment at a wage sufficient to achieve an acceptable living standard. This approach avoids the shortcomings of the first approach but suffers from the flaw that jobs at wages sufficient to match support now offered to many families through a combination of food stamps and cash assistance would require wages above those now paid to millions of workers. Assuring jobs at such wages would entice many private-sector

<sup>5</sup> Of course, not all reductions in earnings are undesirable. A parent who quits a second job to attend night school or an older child who can afford to finish high school will be viewed very differently from a parent who quits work entirely to live on cash assistance. On balance, however, we believe that, provided total support levels are not decreased, a plan which increases earnings will be a better plan from the point of view of both recipients and taxpayers.

workers, thereby imposing enormous costs on the federal budget and seriously disturbing private-sector labor markets.

To avoid the problems of both of these courses, the Administration proposed the mixed strategy described in Part III above. For families with a member expected to work, the cash benefits available would be inadequate by themselves. The assurance of a job makes this limitation on assistance benefits possible. The wages alone, however, would be well below the poverty line particularly for large families. The combination of jobs and cash assistance permitted total support levels at or above the poverty line and strong financial incentives to work within a reasonable cost constraint.

Many factors contributed to the adoption of this mixed strategy, including the public's preference for job support rather than cash benefits, the recipients' preference for a job rather than a cash benefit, and the value of the public service output. It was certainly not an inevitable result of the findings on work effort. While it is impossible to measure precisely the importance of the labor supply issue in making this choice, it was a strong influence on staff at HEW and the Department of Labor, long familiar with the labor supply results, and was a major factor in winning support of the Council of Economic Advisers.

Table 2 shows the effect of this mixed strategy on the earnings of two-parent families. Earnings and assistance levels before and after reform are shown for the following four plans:

Plan	Maximum Cash Guarantee		Maximum Benefit Reduction Rate	PSE Jobs Program
	as a Percent of Poverty Threshold			
1	100%		70%	No
2	75%		52%	No
3	100%		70%	Yes
4	75%		52%	Yes

Plans 1 and 3 have poorer work incentives than plans 2 and 4 because plans 1 and 3 have higher cash guarantees and higher benefit reduction rates. The effect on labor supply can be seen by comparing the impact on private earnings (column 7) in plan 2 with that in plan 1 and by comparing plan 4 with plan 3. The existence of a large scale PSE program, despite the added reduction in private earnings, changes the impact on total earnings (column 8) from a decrease (Plans 1 and 2) to an increase (Plans 3 and 4).

Not only does the PSE program cause total earnings to increase, it



TABLE 2  
 Impact of Constraining Benefit Levels and Tax Rates and Providing Public Service Employment Jobs  
 on Work Effort of Two-Parent Families  
 All Figures in Billions of 1975 Dollars

Plan	Prereform		Postreform			Effects of Reform		
	(1) Cash Assistance + EITC + Food Stamps <sup>a</sup>	(2) Earnings <sup>b</sup>	(3) Cash Assistance + EITC	(4) Private Earnings	(5) PSE Earnings	(6) Net Change in Assistance (3) - (1)	(7) Change in Private Earnings (4) - (2)	(8) Change in Total Earnings (4)+(5)-(2)
1	4.92	93.77	8.07	92.98	0	+3.25	- .79	- .79
2	4.92	93.77	7.56	93.29	0	+2.74	- .48	- .48
3	4.92	93.77	7.44	92.15	4.48	+2.62	-1.62	+2.86
4	4.92	93.77	6.89	92.37	4.45	+2.07	-1.40	+3.05

<sup>a</sup> Includes state supplements.

<sup>b</sup> Includes recipients of cash, food stamps, EITC, or special PSE jobs either before or after reform, i.e., the affected population. Excluding those who received only the EITC reduces prereform earnings to \$22.31 billion and reduces the decrease in private earnings in Plan #4 from \$1.40 billion to \$.59 billion.

also provides an income support level (PSE earnings plus cash assistance) which is actually above the poverty line,<sup>6</sup> while avoiding the impact on work effort (and caseloads) which such a support level would cause if it were accomplished solely through cash assistance.

In summary, an income maintenance program that provides guarantees to two-parent families as high as current AFDC plus food stamps levels will decrease earnings. That decrease is not a large fraction of present earnings, but it is a significant fraction of the increase in assistance. An alternative approach which uses minimum wage PSE jobs as the basic support and provides more modest income supplementation offers higher total levels of support, greater financial returns to work, and an increase in total earnings. The SIME-DIME findings on work effort allowed us to simulate those results, search for alternative solutions, and present more concrete evidence in support of the solutions we adopted.

## V. Other Specific Uses of the SIME-DIME Findings

In addition to their impact on the general structure of income assistance as described above, simulations based on the SIME-DIME findings on labor supply affected policy in several specific instances.<sup>7</sup>

In one instance, the Administration's proposal contained a provision to reimburse recipients for federal income tax liabilities in order to avoid the very high benefit reduction rates that would arise due to the overlap of the cash assistance system and the federal income tax. The provision was adopted primarily for labor supply reasons, but with no specific reference to any simulations of its effect. When the results were examined, the labor supply effects were so small, particularly in relation to the expenditures and the administrative difficulties, that the provision was quietly dropped in the Subcommittee's deliberations.

In another instance, findings from the SIME-DIME experiments were used to estimate the impact on earnings of moving from the six-month accountable period proposed by the Administration to the one-month accountable period eventually adopted by the Subcommittee. Despite this analysis, the Subcommittee's strong desire to meet needs on a more current basis led to their adoption of the one-month accountable period.

SIME-DIME findings on work effort most directly affected the Ad-

---

<sup>6</sup> Even in a state with no supplements, the total income from a minimum-wage job would be \$6956, \$5512 in PSE wages and \$1444 in cash assistance benefits. This would be 106 percent of the projected 1978 poverty line.

<sup>7</sup> A longer version of this paper, available from the authors, contains a more detailed discussion of these examples.

ministration's attempt to convince the Subcommittee to limit the benefit levels and tax rates for two-parent families and single persons. The Program for Better Jobs and Income had set a limit on the federal subsidization of state supplements for two-parent families at three-quarters of the poverty line and a limit on the benefit reduction rate at 52 percent. The Subcommittee voted to extend federal subsidization to the poverty line and to set the maximum benefit reduction rate at 70 percent for all groups.

A major argument used by the Administration was that the Subcommittee's changes would have a significant effect on work effort (compare lines 3 and 4 in Table 2). Although we lost that particular vote, our capacity to provide quick and direct estimates of these changes in labor supply caused that consideration to be a major factor in the debate.

## **VI. Conclusion**

Analysts designed the early income maintenance experiments primarily to determine how a universal income maintenance program would affect work effort. The early results told us only the average difference in earnings between those on the experiment and those not. This summary statistic, usually in the 5–8 percent range for prime-age males, was then used to answer the question, should we proceed or not? To most observers, the percentage change in earnings was “modest,” and the implication of the experiment's findings was that such a program could be implemented without seriously reducing the earnings of this population.

In comparison, the design of the Seattle-Denver Income Maintenance Experiment, as well as the uses of its findings, have been more sophisticated and are likely to become even more so. The estimation of income and substitution effects for different demographic groups has permitted the simulation on a nationally representative data base of labor supply responses to a wide variety of program structures and parameters. Rather than focusing on the question of whether or not to proceed, we have come to realize that we already have an income maintenance structure, however haphazard and uncoordinated it might be. Therefore, the question is not whether to provide income maintenance, but on what terms we should do so. The SIME-DIME findings have sharpened our analytic tools and our capacity to answer that question. The experiment has also provided a rich source of data on related aspects of income maintenance policy such as family stability, educational attainment, and social attitudes.

While not every policy-maker hangs on our every simulation before

making decisions, the sophistication of our capabilities in making estimates and of the policy-makers and their staffs in interpreting them have both increased substantially. Politicians, like everyone else, tend to discount or dismiss research findings at variance with their own observations and preconceptions. Most of them, however, are willing to give some weight to such evidence, particularly if their preconceptions are not strong or are divided on the issue. While in the end, these choices often come down to competing values, our increased knowledge of the effects on work effort have enabled us to portray those trade-offs with more precision and to design proposals that are more efficient within any particular set of values. This paper has offered some preliminary, first-hand illustrations of those effects.

# Welfare Reform and Labor Markets: What Have We Learned from the Experiments?\*

ROBINSON G. HOLLISTER  
*Swarthmore College*  
*Mathematica Policy Research*

## I. The Basic Issue

The basic issue with regard to welfare reform and labor markets is: Can we reduce inequality in income or extreme economic distress by an income transfer program, both in the short run and in the long run, without imposing serious costs on society in terms of short-run tax costs or disruption of markets or long-run effects on the level of output or its composition? In this limited space, I must confine discussion to the labor market implications of welfare reform and ignore the broader political and sociological implications of such reform and evidence from the experiments which bears on them.

Even within the area of labor markets, I can touch on only the most traditional issue of labor supply and forgo discussion of experimental evidence regarding such topics as human capital formation, fertility, family formation, health and disability, etc., all of which could have long-run effects on labor markets. Furthermore, due to space limits, I have had to eschew all but the most essential elements of the considerable debate over econometric details in the estimation procedures.

## II. Evidence from the Experiments

The large-scale social science experiments I will discuss are the four income maintenance experiments that took place in New Jersey-Pennsylvania; North Carolina-Iowa (hereafter referred to as the Rural experiment); Gary; and Seattle-Denver. I cannot take the space to describe these in detail (for descriptions, see U.S. Department of HEW [11]). In addition, I will draw some information from a large-scale transitional employment experiment, Supported Work.

---

\* A much longer version of this paper is available from the author on request. The author wishes to acknowledge that in developing the paper, he benefited greatly from conversations with Gary Burtless, Robert Moffitt, and Bernard Saffran. Author's address: Department of Economics, Swarthmore College, Swarthmore, Pa. 19801.

## A. LABOR SUPPLY

The 1970s has seen a proliferation of labor supply studies, and there are now several excellent second-generation surveys of these studies (see Cain and Watts [2], Greenberg [3], Keeley [4], and Saffran [10]). There is also an excellent comparison of two of the experiments with cross-section labor supply studies (see Ashenfelter [1]).

1. *Work Effort Responses.* The major problem one faces in trying to summarize findings from the experiments is that each of the investigators used radically different specifications in estimating the responses to the experimental income maintenance treatments. As a result, to date we do not have at hand comparisons of results across experiments on what can be regarded as a completely consistent basis. The best I could do, therefore, was to put together from published reports estimates of the average response to the average experimental negative income tax plan. These results are recorded in Table 1.

Before discussing those results, let me justify my claim of their rough comparability. It is important to note that the experiments did differ from each other in important ways. The negative income tax plan to which experimentals were exposed differed both within each experiment and across experiments. Income guarantees ranged, for a family of four, from a low of \$1,650 to a high of \$5,600. The tax rates—benefit-reduction rates—ranged from a low of 30 percent to a high of 80 percent. Thus, the averages reported in Table 1 are experimental responses to different configurations of income maintenance plans. In addition, the average family income of the experimentals and controls did differ somewhat from experiment to experiment. However, if we look at the responses reported in Table 1 as average responses to average plans, we get as comparable measures as are currently available. For example, in the New Jersey-Pennsylvania experiment, the average payment to families was about \$1,200 per year, raising their income by about 20 percent. For the Rural experiment, the average payment to families was about \$1,500 per year, raising their incomes by about 25 percent. For Seattle-Denver, the average payment was about \$1,380 per year, raising family income by about 18 percent. The average tax rates faced by families in New Jersey and the Rural experiments were between 40 and 50 percent, and for the Seattle-Denver experiment, the figures reported in Table 1 are selected for estimates to a tax rate of about 50 percent.<sup>1</sup> To this degree, then, the results in Table 1 are roughly comparable.

---

<sup>1</sup> Note that the Seattle-Denver figures in Table 1 are translations of the original experimental estimates into a national simulation model rather than the actual original estimates as used for the other table entries.

TABLE 1  
Percent Labor Supply Response in Income Maintenance Experiments

	New Jersey-Pennsylvania				Rural Wage Earners			Seattle-Denver
	(1) Emp. Rate	(2) Hours	(3) Earnings		(1) Emp. Rate	(2) Hours	(3) Earnings	Hours <sup>a</sup>
Husbands				Husbands				- 8
White	- 2.6	- 5.6	+ 0.1	N.C. white	- 0.2	+ 7.7	+ 4.7	
Black	+ 0.8	+ 0.7	+ 8.7	Iowa white	+ 0.5	- 0.3	- 12.7**	
Spanish	- 2.4	- 0.2	+ 5.9	N.C. black	- 0.6	- 8.0*	- 5.7	
Wives				Wives				- 34
White	34.7.7**	- 30.6	- 33.2	N.C. white	- 25.6**	- 20.8	+ 4.8	
Black	- 1.5	- 2.2	+ 7.8	Iowa white	- 38.3**	- 20.0	- 33.3	
Spanish	- 31.8	- 48.3	- 55.4	N.C. black	- 26.0***	- 31.3***	- 42.0***	
Dependents				Dependents				
White	NA	NA	NA	N.C. white	NA	- 65.9***	- 56.3***	
Black	NA	NA	NA	Iowa white	NA	- 25.0	- 8.3	
				N.C. black	NA	- 16.0	- 21.6	
Families				Families				
White	- 13.9**	- 13.4**	- 8.1	N.C. white	- 16.5**	- 17.3**	- 4.1	
Black	- 6.1	- 5.2	+ 3.6	Iowa white	- 8.9**	- 5.0	- 19.2**	
Spanish	- 1.5	- 0.9	+ 4.9	N.C. black	- 5.8**	- 9.3**	- 14.2**	

\* indicates statistical significance at 10 percent level; \*\* indicates statistical significance at 5 percent level; \*\*\* indicates statistical significance at 1 percent level.

Sources: U.S. Department of Health, Education, and Welfare [11a, 11b, 11c].

<sup>a</sup> Estimates for families receiving grants (below breakeven) only under plan with guarantee at 100 percent of poverty line and benefit-reduction rate of 50 percent. Taken from [11a, Table 4].

The first thing to be noted about these results is that in each of the four experiments there was a statistically significant labor supply response to the experimental income maintenance plan. In each case the labor supply of those receiving experimental income support was less than that of the control group members, who received no support. This shows, first, that such programs do have incentive effects on a low-income population, and second, that participants in a large-scale social experiment do respond and that, therefore, the experimental method is feasible.

Now to consider the specific responses:

**Husbands:** In the New Jersey-Pennsylvania results reported in Table 1, there was a negative differential in labor supply for experimental husbands in husband-wife families for whites and Spanish in both the employment rate and hours. There was a positive experimental differential for blacks for employment rate and hours, and for all three groups for earnings. None of these was statistically significant. Results based on more sophisticated models than those used to produce the results in Table 1 found significant experimental differentials for husbands of about 6 to 9 percent in hours worked for whites, and when the effects of welfare alternatives are taken into account, similar responses were found for blacks and Spanish (see Mallar and Kerachsky [6]).

In the Rural experiment, there was a significant negative differential in hours for North Carolina for blacks, in earnings for Iowa whites. In the Gary experiment (not reported in Table 1), which is a black sample, preliminary analyses indicate labor supply responses for husbands in the range of 5 to 9 percent, with various labor supply measures and models. As indicated in Table 1, the preliminary results from the Seattle-Denver experiment yield estimates that are at the upper end of the range found for the other experiments, i.e., around 8 percent.

A reasonable overall assessment of the experimental findings is that an income maintenance plan with a guarantee about equal to the official poverty line and a marginal tax rate of 50 percent could be expected to cause a 5 to 10 percent reduction in the labor supply of husbands in husband-wife families. The results of most of the experiments indicate that such a reduction would take the form of small reduction of hours and earnings on the part of most husbands rather than complete withdrawal from the labor force on the part of a few husbands.

**Wives:** An important fact to have in mind when looking at the results for wives is that, except for the Rural experiments, the levels of labor force activity for the wives was quite low. In the New Jersey and Gary experiments, labor force participation rates are 15 and 19 percent, respectively. The average hours per week were 4 to 5 in New Jersey-



Pennsylvania and Gary, and 6 to 10 for Seattle-Denver; even in the Rural experiment, they ranged only from 6 to 16 hours per week. These levels of work are considerably below the national averages for married women. The reason is that there was a family-income cutoff for eligibility for all of these experiments, and when the wife, as well as the husband, is able to get a steady job, it would in general lift the family well above the family-income cutoff for eligibility for these experiments.

The results for the New Jersey-Pennsylvania experiment presented in Table 1 indicate significant negative experimental differentials only for white wives' employment rate. Estimates derived from more complex models indicate larger significant disincentive effects for white wives in both labor force participation and hours worked. For black and Spanish wives, the results remain about the same with more complex models. The Rural results reported in Table 1 indicate sizable statistically significant effects on employment rates, ranging from 25 to 38 percent. It should be noted that the initial employment rates were much higher for the Rural sample than for New Jersey-Pennsylvania, so there was more room for response. For the North Carolina black sample, there was also a significant reduction in hours and earnings.

The preliminary results from Gary show a statistically significant experimental effect on wives' employment rate only for wives who were working before the experiment started. There the reduction in the employment rate was 20 percent.

It is more difficult to come up with a narrow range of response estimates for wives than it is for husbands. The greater uncertainty appears to be due to the low levels of work activities of wives in the low-income population. The two experiments with the lowest average levels of wives' work activity, New Jersey-Pennsylvania and Gary, were the ones for which it proved most difficult to obtain statistically significant response estimates. In the Rural experiment, which had much higher levels of activity, and the Seattle-Denver, which had somewhat higher levels of activity, statistically significant responses were found.

In summarizing, it appears reasonable to conclude that an income maintenance plan with a guarantee at the poverty line and a 50 percent tax rate, wives' labor supply would be reduced somewhere between 20 and 50 percent. It should be recalled that these percentage reductions apply to labor supply figures that are low to begin with; thus they imply a reduction in hours of work from two to eight hours per week on average. It appears that wives' reduction takes the form primarily of fewer wives working rather than reductions in hours for those working. It should be noted that while participation and employment for wives

at any point in time are low, at least 40 to 50 percent of wives in all the experiments worked at some time during the experiment. Thus, an in-and-out-of-employment pattern for wives appears typical in the low-income population, and the experimental differential appears to occur primarily through a slower rate of reentry after the period out of work on the part of experimental wives as compared to control wives.

Family: The estimates of the labor supply of families as a whole provide more statistically significant and consistent results across the experiments. Since benefits, and therefore total program costs, are determined on the basis of family units, it would seem from the point of view of the implications of national costs of welfare reforms that it is the family responses that are the most important to focus upon.

The estimates of the labor supply of families for New Jersey indicated a statistically significant negative response, and for white families a response of about 13 percent. Estimates with more complex models indicate somewhat larger responses for whites (11 to 16 percent) and some statistically significant differentials for Spanish (see Hollister and Metcalf [8]). The results for the Rural experiments show statistically significant negative differentials for whites in North Carolina and Iowa. These range on different labor supply measures from 9 to 14 percent. Preliminary results for Gary indicate for black families a statistically significant negative experimental differential of 11 to 15 percent for earnings. At this time no results estimated for family totals for Seattle-Denver are available.

For an income maintenance plan with a guarantee at the poverty line and a tax rate of 50 percent, the families' responses would appear to range from 9 to 17 percent in terms of hours or earnings, with responses around 13 percent most typical. These reductions would amount to about 4.5 hours and \$15 to \$20 per week for the typical family.

These, then, are the summary results that could be taken to represent the estimated response to an income maintenance plan with a guarantee at about the poverty line and a benefit-reduction rate of 50 percent. Looking at these results from the income maintenance experiments, we can say that they serve to narrow considerably the range of estimates of labor supply responses to income maintenance plans that had been provided by the previous nonexperimental cross-section studies.

2. *National Costs.* If we take the average response to the experimental negative income tax plan represented in the figures in Table 1, which have been reviewed, and attribute them to the average plan with a guarantee of 100 percent of the poverty line and a 50 percent tax rate, then we can translate these labor supply responses into implications for

the national costs of such a plan. In his review of the Rural income maintenance experiment, Ashenfelter [1] takes the estimated responses of the rural wage-earning family—13 percent—and derives an estimate of the addition to the national costs of the plan due to the labor supply response of the families to the treatment. He estimates that “the first round estimate [ignoring the labor supply response to the treatment] would have been 78 percent of the ultimate transfer cost.” More detailed estimates are reported in the work of the Office of Income Security Policy/Research of HEW, based upon the estimates from the Seattle-Denver experiment. Special estimates taken from the mid-experiment results (all that have been available to date) of the labor supply response of husbands, wives, and female family heads were incorporated into a simulation model that used Current Population Survey data on family characteristics in 1974 to simulate the costs of alternative cash transfer programs. Their estimates are that a straight negative income tax program with a guarantee of 100 percent of the poverty line and a benefit-reduction rate of 50 percent would have costs in 1974 (i.e., using the CPS income and demographic characteristics) of \$27.60 billion. Of that amount, \$4.58 billion, or 17 percent, would have been due to the estimated labor supply response of the families to the program features.<sup>2, 3</sup> A rough estimate emerging from the income maintenance experiments as the data are available to date indicated, then, that the labor supply response to a negative income tax with a 100 percent of poverty line guarantee and 50 percent tax rate would be equivalent to about 17 to 25 percent of the net total cost of the transfer program. Whether this labor supply response should be so great as to preclude adopting such a plan is a matter of one’s point of view.

### 3. *Estimates of Responses to Guaranteed and Tax Parameters and*

---

<sup>2</sup> See the U.S. Department of Health, Education, and Welfare [11a], Table 10, p. 32. Note that a number of different plans are simulated and their cost estimates provided in that document. Care must be taken in comparing these simulation results with others. For example, the Keeley et al. [5] estimates, while also based on the Seattle-Denver data, appear to get somewhat larger national cost estimates, but this is probably due to the fact that the HEW estimates allow for responses to the benefits and benefit-reduction rates which are nonlinear by income level, where those of Keeley et al. are based on a linear specification. As the HEW document illustrates, the cost estimates can be quite sensitive to the details of the negative tax plans, e.g., the degree to which and the nature in which tax relief is provided above the income point where the basic plan benefits become zero.

<sup>3</sup> It is perhaps helpful to note that under this plan in 1974, 17.9 million families would receive some payment; 10.3 million would receive grants, and 7.6 million tax relief. The grants account for 80 percent of the \$27 billion cost and the tax relief for 20 percent. In 1974, there were 55.7 million families, of which 4.9 million (or 8.9 percent) were poor. The plan covers 17.9 million (or 32 percent) of all families. Clearly, a lot of benefits would flow to the nonpoor under such a plan.

*of Income and Substitution Elasticities.* If one examines, as we have done so far, the average response to the average experimental income maintenance plan, the experimental labor supply responses do seem reasonable, and they seem to provide us with solid information about the effects on labor supply and the related national costs of a welfare reform of the negative income tax type. In addition, the estimates fall well within the range of the estimates derived from the nonexperimental cross-section studies (though rather to the low end of that range). Problems begin to arise, however, when one begins to inquire about how the labor supply responses vary with different levels of the guarantee and benefit-reduction rates. All of the experiments were consciously designed to provide such estimates since, in each experiment, different groups among the experimentals were provided with negative income tax plans that have different guarantees and benefit-reduction rates.

Here again, we are plagued by the fact that different labor supply models were utilized to make estimates in each of the experiments, so no neat, comparative summary is possible at this time. However, permit me to give an impressionistic summary of the findings.

**Husbands:** No statistically significant responses to either guarantee or benefit-reduction-rate differences were found for New Jersey-Pennsylvania nor for Gary. In the Rural experiment, significant responses to the tax rate were found for both blacks and whites in North Carolina. For Seattle-Denver, in the published version (Keeley et al. [5]), significant responses were found for the benefit-reduction rate, but not for the guarantee.

**Wives:** In New Jersey-Pennsylvania, there were weak indications of response to the guarantee level, whereas for Gary there were no statistically significant responses to either guarantee or benefit-reduction rate. The Rural results indicate significant responses to the benefit-reduction rate. Seattle-Denver results yield statistically significant responses to both the guarantee and benefit-reduction parameters.

**Husband-Wife Families:** In the New Jersey-Pennsylvania results, statistically significant but imprecise responses to the benefit-reduction rate were found for both white and Spanish families. The Rural experiment found benefit-reduction rate responses for the North Carolina blacks and whites. No estimates for the family as a whole have been published to date for Seattle-Denver.

**Female-Headed Families:** The Seattle-Denver results show significant responses to both guarantee and benefit-reduction rates.

Overall, then, there do appear to be responses to the differences in

the benefit-reduction rates, but the responses to the variations in the guarantee differences are more problematical. Even for the benefit-reduction (tax) rate, the estimates do not appear very precise, as they shift a fair amount under different specifications.

Reasons for the problems in finding either precise guarantee and benefit-reduction responses or income and substitution elasticities are not hard to come by. I do not have space here to delve into the myriad of potential problems in the specification of models and estimation procedures that have been raised. But a few of the problems arising from the design of the experiment can be mentioned. In New Jersey-Pennsylvania, the unanticipated necessity to split the sample (1300 families) into three separate ethnic groups in estimating responses reduced the effective sample sizes drastically. Probably more important, the institution of a generous AFDC-UP program in New Jersey after the experiment had begun essentially wiped out all the high tax rate plans, since the welfare plan benefits dominated those of these high tax rate NIT plans over most of the relevant income range; virtually no family in this experiment who received negative tax benefits was on a 70 percent benefit-reduction plan—all those on such plans had opted for welfare (as they were permitted to do). In the Rural experiment, the already precariously small sample (825 families) had to be split between Iowa and North Carolina, and within North Carolina between white and black and further between pure farmers and wage-earning families. In this case, it is amazing that any significant response to benefit-reduction rates was found. Gary was subject to many start-up problems. Seattle-Denver has by far the largest size sample (5200 families) and in most of the results to date has *not* found it necessary to split the sample by ethnic group in estimating labor supply responses. These data have most consistently yielded statistically significant responses to guarantee and benefit-reduction rates.

It is my expectation that with more complete data from Seattle-Denver and with some more work on the specification of the models incorporating the response to different plan parameters, we will see considerable clarification on the issues of both income and substitution elasticities and guarantee and tax responses. However, until that happens, one should not be surprised if economists are skeptical about the experimental results; it is hard to put away nagging doubts about the significant *average* responses when the responses to the plan parameters cannot be pinned down with reasonable precision. Why should the experimentals' average labor supply differ from the average for controls

when within the experimental group the response to differences in financial treatments does not yield clear, reasonable patterns?<sup>4</sup>

## B. PUBLIC JOB CREATION

A question which has come increasingly to the fore in the welfare reform debate is whether there should, and can, be a strong work requirement attached to any broader cash transfer program. Related to this issue is whether there is, or is likely to be, sufficient demand in the private sector for low-income workers or whether it is necessary to have large-scale public employment programs in the absence of or, even more so, in the presence of a work requirement. The income maintenance experiments shed light on this issue only to the extent that the estimates that they provide of the likely reduction in labor supply in the absence of a work requirement—e.g., the 17 to 25 percent addition to the national costs of a cash transfer program outlined above—is such that it leads one to conclude that a work requirement is essential. I personally don't feel that this magnitude of costs justifies a work requirement, but some policy-makers may.

While policy has thus far run well ahead of careful analysis in the area of public job creation, increasingly theory and nonexperimental evidence is being brought to bear on these issues (see Palmer [9] for the most complete discussions to date).

However, there is one other major social experiment that does, and will, provide some relevant information on this issue of public job creation. It is the National Supported Work Demonstration. This is a transitional employment program for ex-offenders, ex-addicts, youth who have dropped out of school, and long-term female AFDC recipients, which has been going on since March 1975 in 15 sites across the country. In 10 of these sites, the demonstration has been structured partly as an experiment in that about 6,500 persons have been enrolled in a research sample in which about 50 percent have been randomly assigned to participate in the Supported Work program and 50 percent assigned to a control group; all will be followed through periodic interviews for a period of from 18 to 36 months after their enrollment. Only very preliminary data are available on most aspects of the demonstration and the experimental segment. Some relevant information can be provided, however, from the most recently released report on the demonstration (see Manpower Demonstration and Research Corp. [7], hereafter MDRC). It should be noted that the target groups covered by Supported Work are the hardest-to-employ segments of the population.

---

<sup>4</sup> In the longer version of this paper there is an extended discussion of two recent criticisms of the experimental evidence, by John Cogan and Martin Anderson.

Program and Administrative Costs: In the second full year of operation, the Supported Work Demonstration has gross total expenditures per person year of \$12,944. However, the average participant did not stay in the program a full year, so the gross total costs per participant were \$8,089. Data relating to detail of per person year expenditures and costs are provided in Table 2. However, it is important to look more carefully at the details.

TABLE 2  
Expenditures—Supported Work Second Year<sup>a</sup>

Gross total expenditures per person year		\$12,944
Participant wages and earnings per person year	\$5,816	
Expenditures other than participant labor	\$7,128	
Service project revenues per person year	\$2,140	
Net expenditures per person year (subsidy cost per person year) = (gross total exp. — service project revenue per person year)		\$10,804
Estimated opportunity cost of labor per person year <sup>b</sup>	\$1,613	
Social cost (expenditures other than participant wages + estimated opportunity cost of labor) per person year		\$ 8,741
Upper-bound estimate of net social cost (social cost — service project revenue)		\$ 6,601

<sup>a</sup> Estimates derived from Manpower Demonstration and Research Corp. [7, Tables VI-18, VII-3, VII-14].

<sup>b</sup> Derived from [7, Table VI-18], control group nine-month earnings multiplied by 1.33 to convert to person year and 1.15 to allow for fringe benefits.

Of the total expenditures, about 45 percent, or \$5,816, was for participant wages and fringe benefits, and the rest, \$7,218, was for expenditures other than the participant labor. One might take this latter figure as the cost of job creation in this demonstration and, since other programs might have different wage levels, this might be the sort of cost figure one is after. However, these “expenditures other than participant wages” include not only costs of supervision and administration overhead, but also the cost of materials and other intermediate goods that are used in the work project upon which participants work. Different programs might use less materials and intermediate goods (in fact, within Supported Work these items vary considerably across different types of work sites) and therefore have different expenditures per participant year. But more importantly, this concern should alert one to the fact that, as contrasted with most manpower training programs, workers in public employment programs will be producing goods and services. That this is so is in part indicated by the item “service project revenues”

(of \$2,140) shown in the table. This represents the per person year revenues that the Supported Work site obtained for some of the output that the workers produced. But this figure is not an accurate accounting of the value of the output produced by the workers. Some of the services provided to the community were not fully paid for and, for those that were, the prices did not necessarily represent market prices or the social value of the output, i.e., the program subsidized some output to the community.

The problem of making a proper valuation of the output of workers in such a program is much more complex than it appears on the surface. The best discussion of these problems available to date is by Kemper and Moss in Palmer [9]. Careful estimates of the value of output are being made for the Supported Work Demonstration, but the results are not yet available.

The service project revenues probably represent a lower bound estimate of the value of output, so if one subtracts them from the gross total expenditure, one probably has an upper bound estimate of the net costs per person year. In the table, this figure is \$10,805. I call it net expenditure per person year.

This appears to be a large number. It is probably relevant to planning for public employment programs since if these programs operate like Supported Work, this is the best estimate of their budgetary cost per person year. This is clearly above the figure that has been used in costing out various public employment proposals. Whether Supported Work is too different to be relevant for welfare reform estimates is a reasonable question, but it remains true that the size of the estimates from Supported Work must give pause to those who have believed that public job creation will be an inexpensive substitute for cash transfers.

Since participant wages may in one sense be viewed as transfer payments, it may also be informative to evaluate costs by substituting information about the opportunity costs of the participant labor in order to try to get closer to a social cost concept. The information from the control group earnings reported from a preliminary sample analyzed and reported in MDRC [7] gives a tentative opportunity cost estimate of \$1,613. This does show that on average this is clearly a severely disadvantaged group.

If we add the opportunity cost of labor to the "expenditures other than participant labor," we get a figure of \$8,741. Now, subtracting off service project revenue, we get a figure of \$6,601. This could be taken to be an upper-bound estimate of the social cost per person year of the jobs provided in Supported Work. Recall that this figure probably repre-



sents an *upper-bound* social cost because the value of the output of the workers is probably underestimated by using service project revenues. Suppose, for example, that the value of output were twice the service revenue (i.e., \$4,278), then the social cost would be \$4,463. If it were three times the service revenue, the social cost would be \$2,329.

In addition, this is *not the net social cost relevant to the Supported Work project* since it represents only estimates of social costs and not of possible offsetting social benefits, such as improved productivity after the participants leave the program and are employed elsewhere (to be estimated by participant-control earnings differentials from postprogram follow-up), or social benefits or costs saving from reduced criminal activity or lower drug usage, etc. (The design of the research segment of the demonstration will permit the development of such estimates in subsequent years.)

I go through all these figures in order to suggest that this demonstration appears to indicate that the public employment job creation may not be a simple, inexpensive process. Not only may finding jobs be hard, but the kinds of jobs chosen could have significant effects on the non-wage costs. It also indicates that careful attempts to estimate the value of output produced may be crucial if we are to avoid distortions of social decisions that focus exclusively on budgetary costs. My own suspicion is that attempts to lower budget costs by shaving back supervision and good administration may cause an offsetting decline in the value of output produced and that this decline in value of output may be ignored, as it doesn't show up in budgetary costs. If this occurs, decisions about these programs may become distorted.

There is another bit of information from the Supported Work Demonstration that is of relevance to the question of labor demand and job creation. That derives from the information on the length of stay in the program. The data show that the group that stays in the program longest is the AFDC group. This is rather surprising since the eligibility criteria require that these women have been on AFDC for three years continuously prior to enrollment in the program (or control group). Thus, they have very little previous labor market experience. In addition, they would seem to have less to gain from working in Supported Work since if they leave the program, they can go back on welfare. Also, there is no compulsion connected with Supported Work, unlike WIN placements.

If we look at the data on the preliminary sample of AFDC controls (MDRC [7, p. 157]), we find that their earnings were the equivalent of only \$697 per year. The usual conclusion about such a group is either

that welfare saps their incentive to work and that they are not sufficiently skilled or are handicapped and therefore can't hold a job. The fact that the AFDC participants stay in the program for the longest period and have the highest attendance rate (see MDRC [7, p. 111]) suggests that the problem for this group may not be either disincentive created by welfare or lack of ability to hold a job, but rather the lack of effective demand, the lack of job opportunity. Perhaps employers misperceive the employability of this group.

At the very least, these findings are suggestive of the fact that there may be an important role for public employment for AFDC recipients, at least those who meet the eligibility criteria of Supported Work (which, it is important to note, also include having no children under age 6). If in the postprogram period the AFDC participants do better than controls in employment, it will perhaps indicate that it is not just the special work climate of Supported Work—or a similar public employment program—but that perhaps heretofore employers have underrated the job-holding capability of this group.

## Bibliography

1. O. Ashenfelter. "The Labor Supply Response of Wage Earners in the Rural Negative Income Tax Experiment." Working Paper 95, Industrial Relations Section, Princeton University, February 1977.
2. G. Cain and H. Watts. *Income Maintenance and Labor Supply: Econometric Studies*. Institute for Research on Poverty Monograph Series. Chicago: Markham, 1973.
3. D. Greenberg. "Problems of Model Specification and Measurement: The Labor Supply Function." Rand R-1085-EDA, December 1972, mimeo.
4. M. Keeley. "The Economics of Labor Supply: A Critical Review." Stanford Research Institute, September 1977, preliminary draft.
5. M. Keeley, P. Robins, R. Spiegelman, and R. West. "Labor Supply Effects and Costs of Alternative Negative Income Tax Programs: Evidence from the Seattle-Denver Income Maintenance Experiments." Research Memorandum 38, Stanford Research Institute, May 1977, Pts. I and II.
6. C. Mallar and S. Kerachsky. "Alternative Parameterizations of Labor-Supply Responses in the Presence of Welfare." In [8].
7. Manpower Demonstration and Research Corporation. *Second Annual Report on the National Supported Work Demonstration*. The Corporation, April 1978.
8. C. Metcalf, R. Hollister, and W. Nicholson, eds. *Follow-Up Studies Using Data Generated by the New Jersey Negative Income Tax Experiment*. Mathematica Policy Research, March 1976, mimeo.
9. J. Palmer, ed. *Creating Jobs: Public Employment Programs and Wage Subsidies*. Washington: Brookings Institution, forthcoming.
10. B. Saffran. "The Effects of Taxes on the Quantity and Quality of Labor Supplied." Washington: American Enterprise Institute, forthcoming.
11. U.S. Department of Health, Education, and Welfare. (a) *Summary Report: Seattle-Denver Income Maintenance Project*, February 1978; (b) *Summary Report: New Jersey Graduated Work Incentive Experiments*, December 1973; (c) *Summary Report: Rural Income Maintenance Experiment*, November 1976.

# Is Compulsory Work for Welfare Recipients Manageable?

BARRY L. FRIEDMAN  
LEONARD J. HAUSMAN  
*Brandeis University*

As welfare costs have grown over the last decade, pressures have mounted to require work of welfare recipients. In AFDC, a work registration requirement, first passed in 1967, applied specifically only to AFDC-UF fathers and then generally to other persons deemed "appropriate" by welfare agencies. The Talmadge Amendments of 1971 extended it to female heads of families that have no very young children. The latter amendments also changed the priority of the AFDC-WIN program from offering training and towards immediate job placement. Regulations implemented in 1976 required many AFDC applicants to experience pressure from the U.S. Employment Service (USES) as a condition of initial welfare eligibility and urged that the WIN Program increase its emphasis on putting recipients in public service employment (PSE) jobs. In Food Stamps, a work test was added in 1971, seven years after the program started. In 1974 the period allowed for each job search was reduced from three months to one before a registrant had to accept a job outside his major field of experience. The 1977 Food Stamp amendments included an authorization for workfare programs in ten demonstration sites. The Carter Administration's Program for Better Jobs and Income (PBJI) is considerably more stringent than the Nixon Administration's Family Assistance Plan in offering less cash assistance to those assigned to the expected work category while requiring them to accept PSE jobs if they fail to find regular jobs. Now the Carter Administration is considering seriously a plan to permit 15 states to institute workfare programs in AFDC.

Should welfare programs attempt to regulate work behavior? One could start by asking whether welfare programs cause serious work problems. After extensive research on the impact of welfare on work, the results are not conclusive, or at least not politically persuasive.

---

Authors' address: Heller Graduate School, Brandeis University, Waltham, Mass. 02154.

Rather than review old arguments and evidence on this, we concentrate on the problems of managing a work compulsion program linked to welfare.

Policy analysts have come to realize increasingly that program analysis requires explicit attention to how the program will be managed. Particularly where extensive contact with numerous clients is required—as in the case of most welfare programs—the managerial problems can be complex and can influence the general effectiveness of the programs. When work registration requirements, assistive services, and job creation are added to welfare programs, one must consider very carefully questions of managerial feasibility, effectiveness, and cost. Several types of managerial tasks may be involved in a program of compulsory job search or work. First, clients must be screened, at least to determine who is employable. Second, clients must be monitored over time to see if they conform with job search and employment requirements. Third, the delivery of assistive services, if any, must be organized. Fourth, if the program is to include public service employment, the jobs must be created and maintained. Fifth, all of these tasks must be coordinated with each other and with the payment of benefits. We will examine each of these tasks, using the limited amount of evidence currently available to consider questions of effectiveness, cost, and conflict between tasks.

### **1. Screening and Monitoring**

A work registration requirement must first screen welfare recipients for initial eligibility and then monitor them for continuing eligibility. Given the complexity of the behavior that must be evaluated, costs of doing so effectively are likely to be high. We hypothesize that one major reason work tests fail to achieve their objectives is that governments refuse to incur the costs necessary for screening and monitoring.

Their reluctance is not surprising because screening and monitoring are monumental tasks in determining benefits even without a work test. In AFDC, for example, initial eligibility depends upon citizenship status, household composition, physical and mental status of parents, age and school status of children, assets, income by source, payroll deductions, work related expenses, and, in AFDC-UF, work history. In California, the AFDC/AFDC-UF eligibility form is a detailed set of 12 pages, demanding considerable time per client to complete accurately. Among other things, a client must report ownership of all consumer durables, their purchase date, price, and related debt. Eligibility workers then must verify this information.

A recent experiment with retrospective monthly income reporting demonstrates that an important part of the error rate problem is the failure to monitor with sufficient frequency changes in a family's status.<sup>1</sup> In AFDC, changes in income and family status are supposed to be monitored every six months, with benefits adjusted accordingly, but substantial changes often occur within the six month interval. While the above study showed that total costs of benefits and administration can be reduced through better management and computerization, the cost reduction is limited by the quantity of information desired and the frequency with which it must be obtained directly from clients.

Screening and monitoring for a work test adds considerably to information needs and therefore to administrative costs. Screening in a work test may involve determining whether separation from a previous job was for good cause, whether illness or incapacity inhibits search and work, and whether the current spell of unemployment could be terminated by immediate intensification of job search using the services of the USES. Monitoring involves calling people into the USES, making referrals, checking appearances at job interviews, determining whether a job offer was made, determining the suitability of the offer, and, lastly, observing whether the job is accepted and kept. Not only are complicated procedures needed to monitor subtle behavior of clients, but the procedures must apply to large numbers of people. In 1975, there were roughly 1.1 million adult (ages 22-64) male heads of low income families with children who did not work full-time all year. Add to that the near-poor male heads that would be eligible for welfare benefits under a program like PBJI, the eligible female heads of families without young children, and the nonaged, nondisabled persons heading low income families without children. The USES would have to screen and monitor the work behavior of perhaps 5 million people under a program like PBJI.

In addition to arguments about the scope of the screening and monitoring tasks, there are some pieces of evidence available on actual experiences. The Disability Insurance (DI) program illustrates how the tasks of screening and monitoring the ability to work can overwhelm an agency. In 1965, there were 254,000 new disabled worker awards, while in 1975 there were 592,000. As a result of the explosion in the caseload, there was a halt for 18 months in all "Continuing Disability Investigations," the monitoring procedure in DI. The consequence was a reduc-

---

<sup>1</sup> Mathematica Policy Research, *Colorado Monthly Reporting Experiment and Pre-Test: Preliminary Research Results* (Denver, Colorado: February 1977), pp. ix-xvi.

tion in the number of DI case closings at the same time that the caseload had grown by two-thirds.<sup>2</sup>

We conducted a study of the work registration requirements under Food Stamps and AFDC/AFDC-UF which supposedly monitor the job search efforts of registrants. Of those who should have been work tested in our samples, the percent actually called into the USES even once ranged from 34 in Fort Worth to 84 in San Diego. The percent called in frequently ranged from 18 to 65. We did not measure the cost of monitoring. However, we could conclude that in all cities studied, the cost of thorough monitoring would have been considerably greater than what was actually spent.

We are currently evaluating a workfare experiment in Massachusetts. There is strong feeling against the program which has resulted in one lawsuit; more are likely. The courts are particularly responsive on the question of due process when it comes to assigning a client to a required job offering no net wage gain. As a result, welfare departments and the USES must be prepared to defend their actions in court. Protecting clients' rights can only add to the costs of screening and monitoring.

The pieces of evidence we have cited all suggest that failures to screen and monitor adequately are to be expected in a work requirement program. Effective screening and monitoring procedures would impose costs that governments might prefer not to bear. Although we do not have numbers on cost, any work requirement will have to make trade-offs between effectiveness, cost, and the protection of clients' rights in designing its screening and monitoring components.

## **II. Labor Market Assistive Services**

Compulsory work programs also offer labor market services to expand opportunities for recipients. As has been noted for over 30 years in regard to the Unemployment Insurance (UI) program, there is a conflict between effectively delivering assistive services and simultaneously carrying out a coercive function. First, there is a constraint on resources available to the USES: in UI, Food Stamps, and AFDC, both assistance and coercion compete for limited staff time. Second, the tasks themselves conflict. Should the USES refer and assist the most qualified registrants, thereby satisfying employers and leaving the less desirable workers on its rolls? Or should it pressure those most reluctant to work,

---

<sup>2</sup> U. S. Congress, Committee on Ways and Means, Subcommittee on Social Security, "Disability Insurance--Legislative Issue Paper," (May 17, 1976) pp. 1 and 29-30.

risking the antagonism of employers and discouraging them from listing vacancies with the public labor exchange?

### III. Job Creation

Creating jobs suitable for welfare recipients is itself a major managerial problem. Tying the job creation program to a work requirement could make the task impossible. We consider first the problems in creating jobs and then the difficulties in maintaining them as meaningful work experiences. Finally the question of job duration is considered.

The CETA program could be cited as evidence that large numbers of jobs can be created quickly. However, relatively few CETA participants are welfare recipients—about 18 percent in fiscal 1977. Inadequate qualifications probably prevent many welfare recipients from getting CETA jobs. Welfare recipients are a diverse group, including both male and female heads of families. Even male heads of families, who are known to engage in extensive work effort, often have relatively few labor market skills. Special efforts would be needed to create jobs suitable for women with little experience and for men with few skills. The supported work experiment provided useful evidence on the problems of creating jobs targeted to a special population. While it was found that suitable jobs could be created in some lines of work under a limited experiment, the question remains as to how large an effort is feasible if it is to be targeted to the welfare population.

Once jobs are created, a work requirement could threaten the effectiveness of the program. In principle linking a work requirement to job creation would put teeth in the work requirement: the client would be faced with an actual job, not just the requirement that he search for one. However, such a linkage introduces complications in timing and job discipline. First, a work requirement such as that in PBJI aims to place a client in a public job within a specified time period after coming on welfare. Since people come on welfare irregularly over time, jobs must be made available to new workers on an irregular, unpredictable schedule. Second, with some workers assigned to jobs involuntarily, there may be difficulties getting them to work, and, more importantly, preventing them from disrupting the work process. In an ordinary job, the ultimate inducement is the prospect of a pay raise or promotion and the ultimate discipline is the threat of firing. If these are lacking in a public service job, discipline and work efficiency could become serious problems unless the program is voluntary. A disrupted work setting would not provide useful work experience for either voluntary or involuntary workers.

Duration is one further aspect of a created job which matters both for the efficiency of the work and for the appropriateness of the program to the target population. In many types of work, efficiency requires both stability of the organization and of the workforce. In the welfare population some recipients will move on to other jobs, while many others will fail to find opportunities in the unsubsidized sector superior to indefinite subsidized employment. An effective program would accommodate both organizational and individual needs.

The CETA program again provides useful evidence of a negative sort. CETA was intended to be a step toward regular, unsubsidized employment. Eligibility for CETA jobs shortly will be limited to 18 months. Even under CETA, where participants are on the average better qualified than welfare recipients, experience indicates that a large proportion stay the full 18 months and are still not able to move on to unsubsidized jobs. The resentment of laid-off CETA workers could even acquire political weight. Indeed, to the extent that the CETA program involves substitution, it might be described as a system to replace good, permanent jobs with temporary, dead-end jobs. A job creation program targeted toward welfare recipients must consider the possibility of providing permanent jobs.

#### **IV. Coordination of Program Tasks**

A compulsory work program embedded in a cash welfare system necessitates the simultaneous control of several organizations. Based on recent experience with the WIN Program and the plans for PBJI, the various management tasks may be assigned to as many as four distinct agencies: (1) that making cash benefit payments, (2) that offering supportive social services, (3) that providing assistive and coercive labor market services, and (4) that developing job opportunities together with the actual work sponsors. Sections II and III argued that work requirements may interfere with the provision of labor market services and the creation of jobs. We shall now argue that the various agencies involved are likely to be ineffective in carrying out the work requirement program itself, because of additional problems of coordination within and between agencies.

In practice the screening task has been divided between the benefit-payment agency, which makes some initial determinations, and the agency providing labor market assistance and coercion (typically the USES) which makes the final decision on who must register with it. Social services and labor market services are provided by separate agen-



cies, but labor market services are combined with final screening and ongoing monitoring in the USES. Whatever the mechanism used for job creation, a separate agency ordinarily manages this activity.

If a work requirement is to function, the tasks of the USES are central. As the monitor of client behavior, it must decide in conformity with the rules of the program which services to provide and whether to assign the person to a created job. But it must also coordinate the flow of information between the other agencies. For example, the USES will need a system to obtain timely information from the large number of work sponsors about workers assigned to jobs who are uncooperative. The ultimate sanction for noncompliance is a reduction in benefits. After collecting the needed information, the USES must pass it on to the benefit payment agency which must take the final action. Section II argued that with the numerous and conflicting tasks assigned to the USES, its primary placement function is impaired by its work-monitoring tasks. If so, this agency will be unaggressive in these tasks and its central coordinating role will not be effectively performed.

The behavior of other agencies also could reduce the effectiveness of the work requirement. The cash benefits organization primarily is devoted to making accurate payments, with its attention riveted on its benefits error rate. Both in referring clients to the USES and in making benefit suspensions, its cooperation is essential—but not necessarily forthcoming. The latter two are simply not its highest priority tasks. The social service agencies attach highest priority to their own specialties and, moreover, are likely to be staffed by persons unsympathetic to work compulsion. Thus, in cases where receipt of social services is a precondition for a work assignment, the latter may be delayed by the thoroughness of a reluctant agency. Under the WIN Program, this often has been the case. Even work-sponsors may not be fully cooperative. Potential sponsors may not want to lose the goodwill of groups in the community who oppose work compulsion and thus will not participate in creating jobs for mandatorily assigned workers.

As a further complication, categorical programs create problems in controlling recipients, certainly the work resisters among them. It is an enormous task to refer successfully a reluctant person from a cash benefit agency through a series of procedures and agencies and ultimately to an employer with a created job. The fact that a cash-benefit system is categorical rather than unitary complicates the task further. First, families switch categories. Michael Wiseman found that in the California AFDC-UF program roughly 20 percent of AFDC-UF families

lost their male head and a smaller but substantial percent of one-parent families became two-parent families during the year.<sup>3</sup> Such changes would move families from one cash benefits category to another and thereby alter both benefit entitlements and applicable work treatments. Secondly, categorical programs create incentives for individuals to adjust their characteristics to match those required by the most desirable categories. Under PBJI, for example, a substantial incentive would exist for a work resister to appear incapacitated. A unitary system at least avoids the cumbersomeness in managing a categorical system.

### Conclusion

Our arguments suggest an interesting possibility: managerial problems alone may make work requirements ineffective. Attempts to strengthen them may only drive up cost. Indeed, costs are not limited to money alone since greater pressure on clients is likely to disrupt other services and programs intended to encourage work.

It seems to be almost axiomatic that some type of work requirement is a price that must be paid if there is to be any significant welfare reform. Recent experience with the Talmadge Amendments and now with the workfare movement suggests that even this trade might not suffice. This is because there is pressure to strengthen efforts to compel work—even without broad welfare reform. In view of our hypothesis, it would seem desirable to delay strengthening work requirements until more evidence is available. The most persuasive evidence is likely to come from studies of managerial effectiveness. If it can be verified that costs really are high and that work requirements seriously impair the effectiveness of programs to improve work opportunities, then the pressure for a bad program could be reduced.

---

<sup>3</sup> Frank Levy, Clair Vickery, and Michael Wiseman, *The Income Dynamics of the Poor*, unpublished monograph (University of California-Berkeley, January 1977), pp. 247–48.

## DISCUSSION

DANIEL H. SAKS

*Michigan State University*

It has been over ten years since enrollments began for the first Negative Income Tax (NIT) experiment. We ought to be encouraged to hear from Hollister that the experiments have reduced our uncertainty about the effects of NITs on labor supply and to hear from Aaron and Todd that such results have played such a crucial role in the policy debates about the Carter Administration's welfare-reform proposals. Unfortunately, I find myself wanting to tell a somewhat different story. In my view, although the experiments have been extremely valuable, their labor-supply results basically confirm existing estimates from "natural" experiments. Because policy-makers find those labor-supply responses unacceptably costly (or perhaps because they feel that welfare recipients should have more restrictions on their labor-market choices), they find themselves looking for devices to modify those labor-supply responses. The "jobs" component of the Carter proposals is one such device. It does not derive from any experimental results and probably is sufficiently contrary to the assumptions of the NIT experiments so as to invalidate the predictive use of estimated labor-supply parameters. As Friedman and Hausman argue, we know little about how to run such work programs, and it may only be our ignorance which makes them seem cost effective. Indeed some of Hollister's cost estimates from the Supported Work studies make an Ivy League education seem cheap by comparison!

The NIT experiments were complex and there are many important findings about job changing, family composition, the effects of transitory programs, etc. But the main point of the experiments was to estimate conditional parameters of labor-supply functions. And it is clear from Aaron and Todd that it is mainly these results which have entered the policy discussion. If we know how labor supply responds to net wages and income, then we can predict the excess burden of alternative NITs. There are really two issues here. First, have the experiments increased the precision of our estimates of labor-supply responses to NITs? Second, can the sorts of welfare reforms being contemplated be modeled as simply changes in unearned income and net wages?

On the question of narrowing the range of estimated labor-supply

parameters, I think it is simply too early to tell whether Hollister is right or not. My own prediction is that the range of estimates based on the data from the experiments will get larger and larger as time goes on. After all, the experiments generated large and complex micro-data sets which are now generally available to the scholarly community for analysis. As we all know, it is difficult enough even to reproduce parameter estimates from such data sets and it is easy to make "sensible" modifications in the model to yield different estimates. If the underlying distribution of estimates is fixed and unbounded, then the observed range of estimates will be an increasing function of the number of times the distribution is sampled. If one believes that learning occurs and that the profession is progressing, then perhaps we can think of that as reducing the variance of the distribution. On the other hand, one does not get any points for reproducing the same parameter estimate with the same data set and pressures for product differentiation will extend the range. If ideological considerations cause one to prefer some tail of the distribution, then clever ideologues will figure out how to selectively sample from that portion of the distribution. Lest anyone think I am kidding, they might look at the range of estimates reproduced in Table 1 of Hollister's paper. There are five different estimates for the prime-age males from the 1967 Survey of Economic Opportunity (SEO). All use the same basic model; all use basically the same data. This does not mean that I would give equal credence to each of these estimates, but often the game played with such estimates is to do exactly that. Actually, Hollister has only produced a sample of the estimates one could find in published studies based on the 1967 SEO. The range of estimates from the experiments is already growing at a rapid pace, and I think it is just too early to say whether, at the end, the range will exceed that of the SEO or not.

The question of the policy relevance of the labor-supply estimates is complicated by uncertainty about the way the "jobs" component of Carter's plan would be administered. The idea behind the NIT experiments was that the treatments would consist of tax rate and guarantee combinations alone. The heavy administration of our welfare system would not be there under an NIT. Indeed, the model was explicitly the Internal Revenue Service (IRS). In conducting the experiments, considerable effort was devoted to making the treatment (with some exceptions) just like something that might be administered by IRS. It is obvious that estimated treatment effects can only predict responses to treatments just like those used in the estimation. Both the NIT experiments and the "natural" experiments apply to simple tax rate and guarantee treatments. If, instead of IRS, the model of operation is to be

current welfare systems with a lot of hand-holding, cajoling, and administrative discretion, then the place to find parameter estimates is from "natural" experiments on variations in net wages and benefits for people now on welfare. I hate to peddle my own work, but unfortunately my book on AFDC is one of the few places where such work is systematically reported.<sup>1</sup> My findings were that income elasticities are smaller and pure substitution elasticities larger under an administered system. That is hardly surprising, but it would be nice if there were a lot more corroboration of those types of results. The government has spent most of its research money in this area on NITs and almost none on comparable welfare studies.

The question of properly modeling the Carter welfare proposals and their relation to the labor market goes beyond the issue of getting the income and substitution parameters nailed down. There are three criticisms I would like to make of the simulation models being used. Let me say, however, that these remarks are meant to be constructive and that, in general, the models described by Aaron and Todd are substantially better than some of the earlier efforts along these lines.

First, there is the problem of incorporating the demand side of the labor market into the analysis. Only a minimal amount of this is done in the current version as I understand it. For example, if millions of low-skilled workers are sucked out of the low-skilled labor market by the jobs component of the Carter plan, what will happen to wages and employment in the private sector? The answer depends on many things including the degree to which unskilled unemployment is frictional, the wage elasticity of demand for different types of labor, and the elasticity of substitution among different types of labor. George E. Johnson and Arthur Blakemore seem to think these effects on the labor market are rather large, but it is not clear how close we are to knowing the answer with any precision.<sup>2</sup> The point is that these demand aspects of the welfare reforms could be important and yet the demand part of the model sounds a bit primitive. Unfortunately, there is not all that much agreement on the size of the relevant parameters. But it would be useful to know how sensitive simulation results are to such matters.

Second, the models use comparative statics results from the experiments, but none of the dynamic results as far as I can tell. The reform proposals are highly categorical with recipients receiving different treat-

---

<sup>1</sup> Daniel H. Saks, *Public Assistance for Mothers in an Urban Labor Market* (Princeton, N.J.: Industrial Relations Section, Princeton University, 1975), pp. 66-75.

<sup>2</sup> See George E. Johnson and Arthur Blakemore, "The Potential Impact of Employment Policy on the Unemployment Rate Consistent with Non-Accelerating Inflation," 1978, mimeo.

ments depending on their current and previous situations and characteristics. In my judgment, the proper way to handle such problems is to model them as dynamic probabilistic systems rather than to ignore the dynamic information contained in the panel data of the experiment. I must add, however, that this is a description of my own current research in this area and I may be wrong.

Third, there is the question of how to use the model for policy analysis. There are two aspects to this question: what is the appropriate objective (or performance measure) and how sensitive is the performance measure to varying assumptions that could be incorporated into the model. It is disturbing to me to see that after all of the trouble we go to in estimating standard-error measures for our parameters, there is no hint of how alternate parameter estimates which fit within the, say, 95 percent confidence interval would affect the rankings of plans. But rankings with respect to what? The key figure displayed is the earnings leakage from the transfer. Is that the right measure of the excess burden or social efficiency cost of the transfer program? In a second best situation where discrimination and market imperfections may be pushing wages away from "optimal" levels, such an index may be highly misleading. Perhaps home production will be at more appropriate levels after the earnings reduction than before.

As a final matter, I would like to return to my first point. Frankly, whenever I hear about "workfare" proposals I become (perhaps unreasonably) nervous about the restrictions on people's lives that could be involved. I find myself going back to Polanyi's passage on the Poor Law reforms debate of the 1830s:

While the pauper, for the sake of humanity, should be relieved, the unemployed, for the sake of industry, should *not* be relieved. That the unemployed worker was innocent of his fate did not matter. The point was not whether he might or might not have found work had he only really tried, but that unless he was in danger of famishing with only the abhorred workhouse for an alternative, the wage system would break down, thus throwing society into misery and chaos.<sup>3</sup>

This debate continues and we need to be mindful of it. That is why Friedman and Hausman have to be listened to. We have gotten rid of the workhouse, and the NIT experiments should have shown us that we need have no regrets. But some people in our society do seem to have substantial regrets, and we need to be clear that such regrets have nothing to do with the findings of the NIT experiments.

<sup>3</sup>Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 1957), p. 224.

## DISCUSSION

MARKLEY ROBERTS  
*AFL-CIO*

Welfare reform should get poor people out of poverty as fast as possible. Human dignity at a decent standard of living—not the work ethic—is the priority issue. The availability of a job at decent, living wages makes possible self-support from earned income—the best route for “potential worker” welfare recipients and “working poor” people and their families to get off welfare rolls and to rise out of poverty. An important related point: welfare-reform work requirements must not undermine and weaken existing job opportunities and wages and working conditions.

To meet the income needs of the “working poor” who are employed at jobs which do not pay enough to keep their families out of poverty, and to meet the income needs of those who could work outside the home but cannot find jobs, the best, the most logical solution is a healthy, growing, full-employment economy with jobs paying decent, living wages. But if there are not enough such private- and public-sector jobs, the federal government must expand its job-creation role.

These three papers do not deal with the income needs of welfare recipients who are unable to work and who are not expected or required to work to “earn” their welfare benefits. Those who are unable to take a job outside the home because of age, disability, or family responsibilities should get welfare payments big enough to provide a decent, above-poverty standard of living for themselves and their families. Unfortunately, the Carter Administration’s proposal of cash assistance payments of less than two-thirds of the poverty level (with no provision for cost-of-living increases) is simply not adequate. For these people, income support should be raised in stages to no less than the poverty level.

The President’s welfare-reform proposal, although generally aimed in the right direction, fails to go far enough in making sure that welfare recipients who are able to work will in fact find available the jobs and training and wages they need to rise out of poverty. The President’s proposal also fails to protect adequately the jobs and wages and working conditions of workers outside the welfare system.

So I am troubled by this Aaron-Todd description of the Administration's proposal: "For families with a member expected to work, the cash benefits would be inadequate by themselves. The assurance of a job makes this limitation on assistance benefits possible. The wages alone, however, would be well below the poverty line particularly for large families. The combination of jobs and cash assistance permitted total support levels at or above the poverty line and strong financial incentives to work within a reasonable cost of constraint."

This is a sugar-coated, simplistic description of how the cost-constrained "forced labor" system would operate for those "expected to work." In effect, the Carter Administration wants to hold welfare benefits below the poverty line to force recipients who are "able to work" into jobs—regardless of whether or not jobs exist for these people. The "reform" program would force millions of welfare recipients to take public or private jobs at the minimum wage regardless of how much the minimum wage is below the prevailing rate for that particular work. This would undercut wage standards of workers in both public and private jobs. It would permit unscrupulous employers to exploit both the poor people forced to take jobs at substandard wage rates, and also to exploit regular workers by depressing their wage standards down to the low level wages of the "expected-to-work" welfare recipients.

Furthermore, it is misleading to suggest that there will be a job "assurance" for every welfare recipient "expected to work." By the Administration's estimates, 32 to 36 million current recipients of AFDC, SSI, earned income tax credits, general assistance, and food stamps will be eligible for the new welfare-jobs program. Even with the Administration's excessively restrictive and discriminatory eligibility requirements, there will be 2.5 million potential workers eligible for only 1.4 million jobs (of which half are already filled by CETA-PSE workers).

The key point of the New Jersey, Seattle-Denver, and Iowa-North Carolina experiments is that income supplementation does not destroy the work ethic, does not stop people from working. Primary earners may cut back slightly hours worked<sup>1</sup> (probably on overtime) and secondary workers may cut back more on outside work<sup>2</sup> (which may be socially

---

<sup>1</sup> Harold Watts and David Horner, "Labor-Supply Response of Husbands," Chapter 3 in *The New Jersey Income-Maintenance Experiment, Vol. III, Labor-Supply Response*, eds. Harold W. Watts and Albert Rees (New York: Academic Press, 1977), p. 113, point out that for workers in times of high general unemployment, "Any reduction in their desired level of work will be obscured by their inability to work as much as they would like."

<sup>2</sup> U.S. Department of Health, Education, and Welfare, "Summary Report: Seattle-Denver Income Maintenance Experiment," February 1978, p. ix, noted that "While the percentage reduction for wives would be larger than for husbands, their absolute



desirable), but the work ethic continues to operate so strongly that I am convinced "strong financial incentives to work" are unnecessary. People want to work if they can earn a decent living by working. What is necessary is a realistic, effective, large-scale, public jobs program.

I have no quarrel with the Aaron-Todd paper's modest conclusion that "the sophistication of our capabilities in making estimates and of the policy-makers and their staffs in interpreting them have both increased substantially." This is all to the good, although policy-makers should certainly maintain strong skepticism about results from "hot house" social experimentation on the complex welfare issues of income supplementation, labor supply, earnings, and costs. Any careful study of the Watts-Rees volume reporting in excruciating detail on the labor-supply results of the New Jersey experiment will find enough ambiguity and complexity to strengthen skepticism about sophisticated estimates and interpretations.

Hollister rightly raises the important point that for AFDC participants the problem "may not be either disincentive created by welfare nor lack of ability to hold a job but rather the lack of effective demand, the lack of job opportunity" and suggests that "there may be an important role for public employment for AFDC recipients." This supports my concern about the need for a very substantially expanded jobs program for those who cannot find jobs at decent pay levels in the private sector or the nonsubsidized public sector. But this means the Administration's "reasonable cost constraint" is just plain unreasonable.

The Friedman-Hausman paper raises a number of reasonable questions about the manageability of a job program for welfare recipients. I don't doubt that there are a lot of managerial problems associated with a job program. Certainly CETA prime sponsors and the U.S. Department of Labor have already discovered this to be true. And I am sure that the two-year, 15-area, 32,000-welfare-jobs pilot program now being set up by the Labor Department will have a lot of managerial problems—and it will certainly cause a lot of problems with unfairly low wages, which Jodie Allen of the Labor Department calls "the most important rationing device" for these welfare-reform jobs.

But the Friedman-Hausman paper is excessively negative. For all its faults, CETA has worked reasonably well. It can be expanded and it can be made more fair and equitable in terms of equal-pay-for-equal-

---

decline in hours would be smaller because of the large number of wives who work few hours or not at all." The same general point appears in John L. Palmer and Joseph A. Pechman, eds., *Welfare in Rural Areas: The North Carolina-Iowa Income Maintenance Experiment* (Washington: Brookings Institution, 1978), pp. 21, 129-30.

work and prevailing wage rates and in terms of avoiding job displacement and substitution. So there's proof that a large-scale job program can work.

Now we need national economic policies to move the U.S. faster and closer to genuine full employment and thus relieve a substantial part of poverty associated with high unemployment and low wages. We also need—for welfare recipients who can work and other jobless workers—a much bigger public service jobs program paying decent wages to take care of job needs not met in private employment.

## V. CONTRIBUTED PAPERS: LABOR-MANAGEMENT RELATIONS

---

### Final-Offer Arbitration and Intertemporal Compromise, or It's My Turn to Win\*

PETER FEUILLE  
*University of Illinois*

JAMES B. DWORKIN  
*Purdue University*

Final-offer arbitration (FOA) continues to generate substantial interest among observers and practitioners as measured by the quantity of writing on the subject<sup>1</sup> and the growth of final-offer procedures.<sup>2</sup>

\* We are grateful to Morris Slavney, Bernard Diemer, Gary Long, and Craig Olson for their assistance in gathering and supplying data. Feuille's address: Institute of Labor and Industrial Relations, University of Illinois, 504 East Armory Avenue, Champaign, Ill. 61820.

<sup>1</sup> A partial sample of such writing includes Carl M. Stevens, "Is Compulsory Arbitration Compatible with Bargaining?" *Industrial Relations* 5 (February 1966), pp. 38-53; James L. Stern et al., *Final-Offer Arbitration* (Lexington, Mass.: D. C. Heath, 1975); Peter Feuille, *Final Offer Arbitration*, Public Employee Relations Library Series No. 50 (Chicago: International Personnel Management Association, 1975); Peter Feuille, "Final Offer Arbitration and the Chilling Effect," *Industrial Relations* 14 (October 1975), pp. 302-10; Peter Feuille, "Final Offer Arbitration and Negotiating Incentives," *Arbitration Journal* 32 (September 1977), pp. 203-20; James B. Dworkin, "The Impact of Final-Offer Arbitration on Bargaining: The Case of Major League Baseball," in *Proceedings of the 29th Annual Winter Meeting*, Industrial Relations Research Association (Madison, Wis.: IRRR, 1977), pp. 161-69; Joseph R. Grodin, "Either-or Arbitration for Public Employee Disputes," *Industrial Relations* 11 (May 1972), pp. 260-66; Arnold M. Zack, "Final Offer Arbitration—Panacea or Pandora's Box?" *New York Law Forum* 19 (Winter 1974), pp. 567-85; Charles Feigenbaum, "Final Offer Arbitration: Better Theory Than Practice," *Industrial Relations* 14 (October 1975), pp. 311-17; Hoyt N. Wheeler, "Closed-Off: Alternative to Final-Offer Selection," *Industrial Relations* 16 (October 1977), pp. 298-305; and Clifford B. Donn, "Games Final-Offer Arbitrators Might Play," *Industrial Relations* 16 (October 1977), pp. 306-14.

<sup>2</sup> The states that have legislatively implemented final-offer procedures include Wisconsin, Michigan, Massachusetts, Iowa, Connecticut, and New Jersey. This list does not include the numerous situations where the parties have negotiated their own final-offer procedures.

The interested parties include many critics who have objected to various features of the FOA concept, with most of these objections focusing upon the potential for "inequitable," "unworkable," or "low quality" arbitration awards that may result from the arbitrator's inability to compromise between the union and management's final offers.<sup>3</sup> Another and more recent criticism of the final-offer concept is that it may lead to intertemporal compromise, or the purposive issuance of arbitration awards to achieve an even balance between arbitration winners and losers over time. Accordingly, in the following section we examine the theory of intertemporal compromise and present three hypotheses suggested by the theory. Next, we test these hypotheses with data from major league baseball and three public-sector jurisdictions. We then conclude with a discussion of some operational and policy implications suggested by the analysis.

### **The Concept of Intertemporal Compromise**

The intertemporal compromise (ITC) criticism of final-offer arbitration starts with the arbitrators who make the either/or selection decisions final-offer procedures require.<sup>4</sup> The ITC criticism is based on the assumption that interest arbitrators, under all kinds of arbitration procedures, have a natural tendency to avoid alienating either their union or management clients in order to protect their arbitral employment opportunities.<sup>5</sup> In turn, the operational conclusion that flows from this assumption is that arbitrators will render "middle of the road" or "split the difference"<sup>6</sup> awards in which they attempt to fashion a compromise between the parties' own arbitral positions and hence try to keep both sides satisfied (or at least reduce their dissatisfaction). Such arbitral behavior is possible and even expected under conventional arbitration procedures due to the arbitrators' unlimited discretion to fashion whatever awards they deem appropriate.

The one-or-the-other nature of final-offer arbitration, however, theo-

<sup>3</sup> In particular, see Grodin, Feigenbaum, Donn, and Wheeler articles listed in fn. 1.

<sup>4</sup> While many people orally have discussed the intertemporal compromise phenomenon (though not always using that label), so far as we are aware the only published pieces examining it are Gene Swimmer, "Final Position Arbitration and Intertemporal Compromise: The University of Alberta Compromise," *Relations Industrielles/Industrial Relations* 30 (July 1975), pp. 533-36; and James B. Dworkin, "Final Position Arbitration and Intertemporal Compromise," *Relations Industrielles/Industrial Relations* 32 (April 1977), pp. 250-60. Accordingly, our discussion of the substance of the ITC concept is drawn primarily from Swimmer's original article.

<sup>5</sup> In addition to Swimmer's discussion of this point, see Raymond B. Horton, "Arbitration, Arbitrators, and the Public Interest," *Industrial and Labor Relations Review* 28 (July 1975), pp. 497-507.

<sup>6</sup> It should be noted that "split the difference" does not necessarily imply a split exactly halfway between the arbitral positions of the two parties (though we recognize that this phrase often is used in such a manner).

retically makes such compromising behavior either more difficult or impossible, depending upon the arbitral selection requirement. Using issue-by-issue selection (i.e., a separate selection decision is necessary on each issue), an arbitrator in a multi-issue dispute may combine union and management final offers on these issues in an attempt to satisfy both sides, but in a more constrained manner than under a conventional arbitration procedure. With package selection, though, such behavior should not be possible because of the requirement that the arbitrator select one party's position in its entirety, thus branding one side the winner and the other side the loser. The same result would ensue, of course, under issue selection when there is only one disputed issue.

Intertemporal compromise critics of final-offer arbitration with package selection postulate, however, that arbitrators will be able to satisfy both sides by alternating the winners and losers over time. More specifically, with any particular union-management pair, the loser in the first arbitration round will be declared the winner in round two, the round-two loser will be the winner in round three, and so forth. This argument can be extended to  $n$  rounds, where the winner in each round will be the previous round's loser. In other words, final-offer awards will "flipflop" over time as final-offer arbitrators attempt to satisfy both sides.

The final element of the ITC theory is that the parties involved expect such flipflopping to occur and base their behavior upon such expectations. Consequently, the loser in the first arbitration round will press for arbitration in round two because of that party's expectation that it will win the second time around, and so on for each subsequent round. Thus, the ITC theory predicts that in any arbitral round, it will be the previous round's loser who triggers the arbitration mechanism.

The intertemporal compromise theory does not specify why any union and management pair will resort to final-offer arbitration for the first time. Similarly, the theory does not insist that recourse to arbitration continue indefinitely, as it is possible for "random events" to interrupt the parties' use of the procedure. The ITC criticism essentially says that the negotiation incentives which are supposed to exist under final-offer arbitration may be illusory because of the possibility of longitudinal compromising behavior by arbitrators and the parties' incorporation of such a possibility into their negotiating strategies. In other words, final-offer arbitration may do no more than conventional arbitration to spur "real collective bargaining" because it simply replaces the possibility of static or one-period compromise with the possibility of longitudinal or multiperiod compromise.

Empirical support for the ITC concept would indicate that FOA is

not as effective an impasse resolution technique as its proponents have claimed. The ITC theory suggests a number of hypotheses which can be empirically tested, including the following:

H<sub>1</sub>: The incidence of reuse (all the way to an award) of final-offer arbitration with package selection should be quite high and significantly higher than the probability of using final-offer arbitration for the first time.

H<sub>2</sub>: For repeat users (i.e., all but the first time) of final-offer arbitration, there should be a significantly higher proportion of the previous round's losers than winners seeking to use the procedure.

H<sub>3</sub>: For repeat users, there should be a significantly higher incidence of intertemporal compromise or "flipflop" awards rather than successive wins over time by the same party.

In the next section we present some data that allow for tentative tests of these hypotheses.

## Results and Analysis

### MAJOR LEAGUE BASEBALL

Major league baseball players had recourse to final-offer arbitration to resolve negotiation impasses with the baseball clubs during 1974 and 1975. These arbitration experiences have been examined in detail elsewhere,<sup>7</sup> but some aspects of these experiences bear upon the ITC concept and thus are worth mentioning here.

About 500 players were eligible to use arbitration in 1974 and in 1975. Twenty-nine awards were made in 1974 and 14 were rendered in 1975, or 6 percent and 3 percent, respectively, of all negotiations. In the 1975 round, six of the players involved were repeaters from 1974, and eight were using arbitration for the first time. Five of the six repeaters were winners in 1974, and of these five winners, four lost their cases in 1975. One repeater won in both years, and only one repeater lost in 1974 and won in 1975.

These results tell us the following: (1) the probability of going to arbitration at any time was rather low; (2) the probability of going to arbitration in 1975 after experiencing the procedure in 1974 (six of 29, or 21 percent) was higher than the probability of using the procedure for the first time in 1975 (eight of 471, or about 2 percent);

---

<sup>7</sup> See Dworkin's "Final Position Arbitration . . ." and "The Impact of Final-Offer . . ."

(3) flipflop awards occurred in five of the six sets of cases which used the procedure in both years; and (4) five of the six player-repeaters were winners in the first round (1974). Without delving into player performance records, these results are consistent with some of the ITC hypotheses specified above. Players performance statistics, though, strongly suggest that four of the five 1975 flipflop awards were justified on the basis of the players' relatively poorer performance in 1974 compared to 1973.<sup>8</sup> However, which of these two interpretations is more correct cannot be answered with available data, as baseball's arbitration rules prohibit explanatory opinions by arbitrators. Accordingly, the 1974-75 baseball experience suggests that the probability of using arbitration to resolve impasses is low, that parties which have been exposed to the procedure are more likely to use it again than are other parties using it for the first time, that the previous round's winners are more likely to use the procedure again than are the losers, and that flipflop awards are common (though the available data do not indicate if the flipflopping occurred for procedural or substantive reasons). Thus, H<sub>1</sub> receives moderate support from the baseball data (the 1975 arbitration reusage rate was higher than the first-time usage rate, but was not very high on an absolute scale), H<sub>2</sub> is not supported at all, and H<sub>3</sub> is strongly supported.

#### EUGENE, OREGON

The City of Eugene, Oregon, and the four city unions conducted a total of 17 negotiations (13 full contract negotiations and four wage reopeners) during six negotiation rounds in 1972-78.<sup>9</sup> While the parties invoked the final-offer procedure 10 of 17 times (almost 60 percent), only four cases were resolved by the issuance of an award (24 percent), and three of the cases occurred during either the first (two cases) or second (one case) negotiation-arbitration rounds. The only employee group to receive an arbitration award in two consecutive rounds was the firefighters, and the union lost both times. Further, the firefighters were the only group to receive two awards, so in Eugene there was a higher probability of using the procedure for the first time than of re-

<sup>8</sup> Dworkin, "Final Position Arbitration . . .," pp. 254-57.

<sup>9</sup> The Eugene final-offer procedure was revised in 1976 by a city ordinance providing for, among other things, final-offer factfinding, the possibility of final-offer arbitration, and a limited right to strike. See Bureau of National Affairs, GERR Reference File, 51:4619-4624. For some data on the first four rounds, see Feuille, "Final Offer Arbitration and Negotiating Incentives," pp. 207-209. Information on the two most recent rounds was supplied by Gary Long in an April 24, 1978, letter to the first author.

using it. While the absolute number of cases in Eugene upon which to draw conclusions is rather low, the results from these cases provide almost no support for the ITC hypotheses specified earlier. In particular, the ITC theory predicts that in round three the firefighters would be sure to insist on arbitration after having lost the previous two awards.<sup>10</sup> In round three, the firefighters and the city negotiated an agreement without invoking the impasse procedure.

### MASSACHUSETTS

Massachusetts has accumulated three years of experience with FOA for resolving police and fire negotiation impasses. As other researchers have indicated, about half of all police and fire negotiations reached impasse during the first two years of the arbitration procedure's existence, but a very much smaller proportion (about 7 percent) of these cases actually were resolved by an award.<sup>11</sup> For our purposes, Table 1 presents some more detailed information about the number of repeat experiences with arbitration.

TABLE 1  
Massachusetts Arbitration Awards

Calendar Year in Which Award Was Issued	Number of Awards	Number of Repeat Awards	Flipflop Awards
1975	19	0	0
1976	23	1	0
1977	27	5	1

Source: Massachusetts Board of Conciliation and Arbitration records.

Our data do not allow us to state conclusively that in each of the six repeat cases the awards were issued in consecutive negotiation-arbitration rounds, though the data suggest that this is what happened (i.e., all six of these awards occurred either one or two years apart). In 1976, only one union-management pair used arbitration for the second

<sup>10</sup> It was not possible to officially label one Eugene party as the arbitration petitioner, for the former procedure required that impasses existing beyond a certain deadline automatically went to arbitration.

<sup>11</sup> See Paul C. Somers, "An Evaluation of Final-Offer Arbitration in Massachusetts," *Journal of Collective Negotiations in the Public Sector* 6 (1977), pp. 193-228; and David B. Lipsky and Thomas A. Barocci, "Final Offer Arbitration and Public Safety Employees: The Massachusetts Experience," in *Proceedings of the 30th Annual Winter Meeting*, Industrial Relations Research Association (Madison, Wis.: IRRA, 1978), pp. 65-76.



time, and in 1977 five union-management pairs did so.<sup>12</sup> The Massachusetts FOA statute requires that the unions petition for arbitration, so it is not possible to test our second hypothesis (i.e., that the award losers will press for arbitration in the next round).

The data, however, do show that almost no flipflop awards have occurred. In three of the six repeat situations, the union won both awards, in one situation the city won both awards, in a fifth situation the union won the first award and the factfinder won the second award (i.e., the law was amended in 1977 to allow for the selection of the factfinder's recommendations), and in one case the city won the first award and the union won the second award.

Consequently, the early Massachusetts results offer little support for the ITC concept. Specifically,  $H_1$  was not supported,  $H_3$  was not supported, and the statute makes  $H_2$  moot. Only six of 50 cases in the second and third years have involved repeat users, and in both of these years the proportion of repeaters was far lower than the proportion of first-time users (though the proportion of repeaters increased from the second to the third years). Perhaps more important, final-offer arbitrators in Massachusetts seem unaware of the ITC notion, for flipflop awards occurred in only one of six possible situations. However, we expect that as more Massachusetts parties become more familiar with the arbitration procedure, the proportion of repeat users probably will increase, and such an increase would create more opportunities for flipflop awards.

## WISCONSIN

Wisconsin has had a final-offer-with-package-selection statute for resolving police and fire impasses since 1972, and thus it is by far the best jurisdiction in which to test the ITC hypotheses. Table 2 describes some aspects of the arbitration-award experiences in Wisconsin during the 1972-77 period.

The data in Table 2 show that the vast majority of police and fire negotiations have been concluded short of an arbitration award, though there is an upward trend in the proportion of awards over time. We were able to identify 20 cases of repeat arbitration awards within one year (10 cases) or two years (10 cases) of the issuance of the first

---

<sup>12</sup> The Massachusetts FOA statute took effect in June 1974 and the first arbitration award under it was issued in January 1975. As a result, we have grouped the Massachusetts awards on a calendar-year basis. However, as Somers has noted (*ibid.*), the mediation-factfinding-arbitration impasse procedure for police and fire disputes takes a very long time to complete, so these calendar years should not necessarily be regarded as discrete negotiation-arbitration rounds.

TABLE 2  
Wisconsin Arbitration Awards

Calendar Year in Which Award Was Issued	Estimated Number of Negotiations	Number of Arbitration Awards	Repeat Awards Within One or Two Years	Number of Arbitration Petitions from Losers in Previous Periods	Number of Flipflop Awards
1972	n.a.	5	0	0	0
1973	163	15	1	1	0
1974	147	22	1	0	0
1975	174	23	5	2	3
1976	184	28	8	4	4
1977	184	32	5	2	3

*Source:* Wisconsin Employment Relations Commission records for arbitration figures; for the estimated number of negotiations, Craig A. Olson, "Final Offer Arbitration in Wisconsin After Five Years," Industrial Relations Research Association, *Proceedings of the Thirty-First Annual Meeting* (Madison: IRRA, 1979), pp. 111-19.

award, and we used these 20 cases for our Wisconsin analysis on the assumption that these awards were issued in consecutive negotiation-arbitration rounds.<sup>13</sup> We then analyzed the data to see to what extent the Wisconsin figures supported the three hypotheses.

For the first hypothesis we compared the probabilities of receiving an award in period  $n+1$ , given an award in period  $n$ , with the probabilities of receiving an award in the same period  $n+1$ , given no award in period  $n$  (with  $n+1$  defined as within the next one or two years). In six of these nine comparisons, the probability of receiving an award in period  $n+1$  was greater given no award in period  $n$ , and in only three comparisons was the probability of an award in period  $n+1$  greater given an award in period  $n$ . Further, all of the tests for statistical differences in these proportions were nonsignificant at the .05 level, meaning that there was no statistical support for  $H_1$ .<sup>14</sup>

Examining the second hypothesis, we see that 53 percent of the arbitration petitions (10 of 19 cases, with one joint-petition case excluded) in the repeat-awards sample came from winners in the previous period (with 113 of 125 petitions in the total sample filed by the

<sup>13</sup> This assumption is necessary given our inability to examine the actual awards to determine their duration, but it is consistent with an increasing trend in Wisconsin public-safety negotiations to agree upon two-year contracts. We identified a total of 29 repeat awards, but we excluded from our analysis the nine cases where three or more years elapsed between awards because of the highly unlikely possibility that these awards were issued in successive negotiation-arbitration rounds.

<sup>14</sup> These computations may be obtained upon request to either author.

unions). No formal statistical test is needed to see that this result clearly refutes  $H_2$ . Similarly, 53 percent of these cases produced flipflop awards (10 of 19 cases, with one case excluded because of a "split" decision). Given that a random distribution of awards should produce 50 percent flipflop awards (because there are only two possible outcomes, consecutive or alternating wins), this result provides no statistical support for  $H_3$ . Thus, the largest body of arbitration data provides almost no support for any of the three hypotheses suggested by the ITC theory.

### Conclusions

The data from these four jurisdictions provide rather meager support for the intertemporal compromise criticism of final-offer arbitration. It is possible, though, that as more arbitration cases occur in these and other jurisdictions, the ITC phenomenon may happen more frequently, and the Massachusetts and Wisconsin data suggest this possibility. In addition, supporters of the ITC concept can point to selected cases in baseball and Wisconsin as support for the fact that longitudinal compromising can and does occur.

We believe, however, that these data suggest that the ITC concept has three substantial flaws. First, the theory does not allow for the possibility that winning an arbitration award in one period will encourage the winning parties to use arbitration again in the next period to a greater extent than will losing the award in the first period. Second, the theory does not account for the fact that in most arbitration cases the union is the arbitration petitioner. Third, the theory tends to gloss over the possibility that arbitrators actually select the most reasonable offers as defined by their mandated selection criteria, and that whether these selections produce successive wins by the same party or flipflop awards, these outcomes occur for meritorious reasons rather than because of any desire to balance winners and losers over time.

In short, there are a variety of criticisms which may be levied against final-offer arbitration, but intertemporal or longitudinal compromising does not appear to be one of the stronger ones. As a result, there is no reason to date for policy-makers to reject final-offer arbitration as an impasse resolution option because of the fear that arbitrators will attempt to keep the world in perfect balance.

# Attitudes and Public-Sector Labor Relations\*

JAMES E. MARTIN, LIZABETH A. BARCLAY, AND LAWRENCE L. BIASATTI  
*Wayne State University*

The folklore of private sector collective bargaining has long held that attitudes are an important factor influencing the success of a union-management relationship.<sup>1</sup> While formal research to test this hypothesis is scarce, several published studies do provide some support.<sup>2</sup> With the rise of collective bargaining in the public sector, it seems appropriate to explore the role of attitudes on labor relations in government organizations.

A review of the literature discloses that attitudes may be a determining factor in the functioning of union-management relationships when public employees become unionized. For example, Dimock and Dimock felt that the most difficult questions affecting the future of unionization in the public sector related to management attitudes.<sup>3</sup> Warner and Hennessey stated that "Success or failure of public management at the bargaining table may well depend upon [management] attitudes."<sup>4</sup> Little of the published research relates union attitudes to success.

While the concept of "success" has been defined in different ways, there is some evidence which indicates that management attitudes are associated with the success of union-management relations in the public sector. Saltzstein related favorable management attitudes to the avoid-

---

\* This study was partially supported by grants from the Penrose Fund of the American Philosophical Society and the Office of Research and Sponsored Programs Services, Wayne State University. The authors would like to thank John Sheridan, Richard Smith, Ross Stagner, and Donald Vredenburg for their helpful comments. A longer version of this paper will appear in the *Journal of Collective Negotiations in the Public Sector*, Vol. 8, No. 3 (1979). Martin's address: School of Business Administration, Wayne State University, Detroit, Mich. 48202.

<sup>1</sup> Milton Derber, W. E. Chalmers, and Milton T. Edelman, *Plant Union-Management Relations: From Practice to Theory* (Urbana: Institute of Labor and Industrial Relations, University of Illinois, 1965).

<sup>2</sup> *Ibid.*; National Planning Association, *Fundamentals of Labor Peace* (Washington: NPA, 1953); Ross Stagner, "Do Management Attitudes Determine Union-Management Relations?" *Current Economic Comment* (February 1955), pp. 3-9; and William F. Whyte, *Pattern for Industrial Peace* (New York: Harper & Bros., 1951).

<sup>3</sup> Marshall Edward Dimock, and Gladys Ogden Dimock, *Public Administration*, 4th ed. (New York: Holt, Rinehart and Winston, 1969), p. 273.

<sup>4</sup> Kenneth O. Warner and Mary L. Hennessey, *Public Management at the Bargaining Table* (Chicago: Public Personnel Association, 1967), p. 308.

ance of disruption in labor-management relations.<sup>5</sup> Yager associated management attitudes to the use of collective bargaining as a problem-solving tool.<sup>6</sup> In the Tennessee Valley Authority, management attitudes have been tied to union-management communication<sup>7</sup> and cooperation.<sup>8</sup> These studies, however, have no empirical measure of success.

The present study provides empirical measures of management attitudes toward the union and union attitudes toward management as well as an organizational assessment of the success of a union-management relationship. It examines whether either favorable management attitudes toward the union or favorable union attitudes toward management are related to successful public sector union-management relationships.

## Method

Six federal government organizations were studied in 1972 and again in 1976. The six included two hospitals, two record centers, one warehouse, and a procurement and supply center. They employed all the federal employees covered by facility-wide collective bargaining agreements in a large midwestern metropolitan area at the time of the first data collection. The characteristics of the six union-management relationships and the organizations have been described elsewhere.<sup>9</sup>

A total of 62 managers and 55 union leaders from the facilities, in approximately equal numbers in both time periods, completed questionnaires about the relationship. In addition, those managers and 57 union leaders (including 52 of the 55 who completed the questionnaire)<sup>10</sup> were interviewed personally. These interviews focused on such

<sup>5</sup> Alan L. Saltzstein, "Can Urban Management Control the Organized Employee?" *Public Personnel Management* 3 (July-August 1974), pp. 332-39.

<sup>6</sup> Paul Yager, "The Federal Experience," in *Proceedings of the Twenty-Sixth Annual Winter Meeting, December 28-29, 1973, New York* (Madison, Wis.: Industrial Relations Research Association, 1974), pp. 93-97.

<sup>7</sup> Aubrey J. Wagner, "TVA Looks at Three Decades of Collective Bargaining," *Industrial and Labor Relations Review* 21 (October 1968), pp. 20-30.

<sup>8</sup> J. E. Massey, "Labor-Management Cooperation in TVA," *Public Personnel Review* 26 (July 1965), pp. 130-34; Arthur A. Thompson, "Collective Bargaining in the Public Service—the TVA Experience and its Implications for Other Government Agencies," *Labor Law Journal* 27 (February 1966), pp. 89-98; and Arthur Thompson and Irwin Weinstock, "White-Collar Employees and the Unions at TVA," *Personnel Journal* 46 (January 1967), pp. 14-21.

<sup>9</sup> James E. Martin, "Application of a Model from the Private Sector to Federal Sector Labor Relations," *Quarterly Review of Economics and Business* 16 (Winter 1976), pp. 69-78; and James E. Martin, "Union-Management Problems in the Federal Government: An Exploratory Analysis," *Public Personnel Management* 5 (September-October 1976), pp. 353-362.

<sup>10</sup> The numbers of union respondents in 1972 changed due to employee turnover and the election of officers between the administration of the measures.

areas as how the relationship originated, the future of the relationship, and feelings concerning the relationship. The complete interview schedules are published elsewhere.<sup>11</sup> Those interviewed were identified by both the personnel officers and the union presidents as being those persons most responsible for setting and implementing policy in the areas of contract negotiation, grievance handling, and day-to-day relations. The management group included the chief personnel officer and/or labor relations officers, other involved personnel staff, top-level managers, and members of the negotiating team. The union group included the presidents, the chief stewards or grievance officers, members of the negotiating team, and past presidents and/or other officers. Due to turnover between the two time periods, different individuals were interviewed in each period. The interviews generally lasted an hour and terminated when the respondents had exhausted the topics on the focused interview guide. The interviewer ensured that all respondents had the same opportunity or time to discuss each area.

#### ATTITUDE MEASURES

The respondents completed questionnaires measuring management attitudes toward the union and union attitudes toward management. Operational attitude measures were taken from scales developed by Stagner, Chalmers, and Derber<sup>12</sup> and refined in a later study.<sup>13</sup> The management scale contained eight items concerning: union-management relations, reasonableness of union claims, union interference in running the installation, officer interest in rank and file welfare, officer effectiveness, union support by the workers, union power, and how the union carries out its agreements. Its alpha reliability was .85. The union scale contained nine items measuring union attitudes toward: union-management relations, management reasonableness in discussing union claims, management understanding of the problems of a union officer, management protection of the union position, management interest in rank and file welfare, management effectiveness, management attitude toward the union, management power, and how management carries out its agreements. The alpha reliability of the union scale was .92.

#### SUCCESS MEASURE

The relative success of union-management relations was operationally defined in terms of the frequency of reported union-management prob-

<sup>11</sup> Martin, "Union-Management Problems . . .," pp. 360-61.

<sup>12</sup> Ross Stagner, W. E. Chalmers, and Milton Derber, "Guttman-type Scales for Union and Management Attitudes Toward Each Other," *Journal of Applied Psychology* 42 (October 1958), pp. 293-300.

<sup>13</sup> Derber, Chalmers, and Edelman.

lems within that particular relationship. The focused interview transcripts were content-analyzed to identify problem statements. These were defined as specific events or situations interpreted as indicating conflict between the parties, having a negative effect on the union-management relationship, or as being a cause of concern to the relationship. Examples of union-management problem statements included ineffective union stewards, abuse of official time for union business, violations of Civil Service regulations or the union-management agreement, and weak leadership. Statements concerning problems relating to organizational or environmental characteristics or to any other subject that did not relate to the union-management relationship were not counted.

A relationship's success could be measured by the number of distinct problems mentioned or the frequency of the respondents' problem statements. This last measure could involve double counting, but highlights the perceived saliency of the problems. Both methods of measurement can use data from union or management respondents or both. A management, union, or relationship score for each measure can be derived by averaging the appropriate respondents' scores in each organization. Since this study was examining the total union-management relationship, the best representation of success was hypothesized to be a relationship measure incorporating problems as perceived by both union and management. A relationship measure also eliminates one of the potential sources of confounding that could occur if a measure from just one side were used. The frequency of problem statements was selected because it showed the relative degree of perceived severity of the problems. This measure was similar to the climate measure of Stagner, which consisted of the proportion of favorable to unfavorable worker comments about the relationship.<sup>14</sup>

There were two phases of the analysis. In the first phase, two two-way analyses of variance (ANOVAs) (one for the 1972 data and one for the 1976 data) were computed using the respondent's facility, and group (management or union) as the independent variables, and the frequency of problem statements score as the dependent variable. In addition, two one-way ANOVAs were computed for each time period with the union attitude score and the management attitude score as the respective dependent variables. The respondent's facility was the independent variable. In the second phase, the data were aggregated by facility to make it the unit of analysis because the organizational or relationship approach to union-management relations was taken. Then, for each time period, the six facilities were ranked in terms of the aver-

---

<sup>14</sup> Stagner.

age number of problem statements made and mean attitude scores. Spearman rank order coefficients were used to test for relationships between problem scores and attitudes.

## Results

In both periods, ANOVAs on the frequency of problem statements showed significant differences between facilities (1972,  $F = 13.36$ ,  $df = 5, 50$ ,  $p < .001$ ; 1976,  $F = 7.76$ ,  $df = 5, 45$ ,  $p < .001$ ), but no significant differences between union and management and no significant interaction effects. Thus, because the results showed that the facilities differed in problem statements and that union and management respondent scores within each facility were not significantly different, the choice of the relationship measure of success, already selected for theoretical reasons, was further supported. The ANOVAs of the management attitudes toward the union by facility for both years found significant differences (1972,  $F = 12.63$ ,  $df = 5, 28$ ,  $p < .001$ ; 1976,  $F = 10.68$ ,  $df = 5, 22$ ,  $p < .001$ ). The ANOVAs of the union attitudes found a significant overall difference between facilities only in 1972 ( $F = 3.45$ ,  $df = 5, 20$ ,  $p < .05$ ).

The rank correlation between problem statements by facility and management attitudes was a significant  $-.94$  ( $p < .01$ ) in 1972 and again in 1976. The Spearman rank order correlation of the union attitudes toward management and the problem statements was a non-significant  $-.54$  in 1972 and also nonsignificant in 1976 ( $-.74$ ). Thus a more favorable management attitude toward the union in each year was associated with a reduced frequency of problems in a public-sector union-management relationship. Union attitudes were not significantly related to the frequency of problems.

## Discussion

It is not clear whether changes in management attitudes resulted in changes in the relationship or vice versa. However, evidence from other parts of the focused interviews appeared to support the concept that changes in management attitudes toward the union resulted in changes in the success of the union-management relationships. In two facilities where significant increases in the frequency of problem statements occurred, the role occupants in management leadership changed considerably from 1972 to 1976. The new leaders had significantly less favorable attitudes toward the union, along with different policies in dealing with the union. The union leaders perceived those policies as more restrictive, and thus management may have precipitated more problems. In other



facilities, the managers of 1972 were replaced with new managers who felt they had different attitudes toward the union. Some of these new managers felt that they had succeeded in changing the union-management relationship. Thus, in those cases, the changes in management attitudes toward the union may have affected the overall success of the relationship.

This direction of causality also gets some support from private-sector cases studies by Whyte and Derber et al.<sup>15</sup> Both gave several examples in which changed management attitudes had affected the success of the relationship. However, there are few quantitative studies in this area. The only relevant study, by Stagner,<sup>16</sup> supports the same direction of causality. Stagner analyzed eight unionized organizations and found a strong relationship between favorable management attitudes and a favorable union-management climate. He concluded that the important role of management attitudes was related to its greater freedom to act and to initiate changes when compared to the union. Other investigators, such as Chamberlain and Kuhn, Stone, and Perline, also support the concept of a more influential management role in the union-management relationship.<sup>17</sup> Management attitudes may be even more important in the federal service because the union has no right to strike. In addition, wage rates are not determined by collective bargaining. Hence, non-economic issues, where management has considerable power, play a larger role than in the private sector.

The lack of significant correlation between the union attitudes toward management and the frequency of problem statements either as reported by unionists, or as stated by both union and management interviewees, appears to support extension to the public sector of the view that the union has a lesser role in determining the overall union-management climate. Additional empirical support for that view was found in the current study where the union leadership had changed since 1972 and had different attitudes toward management. In those situations, the union leaders reported their belief that it was the change of management attitudes that then caused the union-management relationship to change.

This study lends support for the hypothesis that management atti-

---

<sup>15</sup> Derber, Chalmers and Edelman; and William Foote Whyte, *Organizational Behavior: Theory and Application* (Homewood, Ill.: Richard D. Irwin, 1969).

<sup>16</sup> Stagner.

<sup>17</sup> Neil W. Chamberlain and James W. Kuhn, *Collective Bargaining*, 2nd ed. (New York: McGraw-Hill, 1965); Martin M. Perline, "Organized Labor and Managerial Prerogatives: An Empirical Study," *California Management Review* 14 (Winter 1971), pp. 46-50; and Morris Stone, *Managerial Freedom and Job Security* (New York: Harper and Row, 1964).

tudes toward the union have a strong influence on the success of the union-management relationship in the public sector. However, the causal direction of this correlation was not thoroughly determined. In view of the exploratory nature of the study and the small sample size, the relationships found here should be subjected to further research in the public sector through a larger sample across time. Such further research should attempt to establish the direction of causality among the variables researched.

# Labor-Management Relations in Canada's Construction Industry\*

JOSEPH B. ROSE  
*San Francisco State University*

Employer accreditation, which provides contractors in the construction industry with countervailing power, represents a significant experiment in Canadian public policy. The purpose of this paper is to examine the impact of accreditation legislation on labor-management relations.

## Labor Relations Problems

During the 1960s instability characterized construction labor relations in both Canada and the United States.<sup>1</sup> The industry, which employs only 7 percent of the nonagricultural labor force, accounted for about 20 percent of the total number of man-days lost due to work stoppages. Additionally, wages rose at an average annual rate of 11 percent (after 1965) and the differential between construction and manufacturing wages increased from 13 to 40 percent.<sup>2</sup>

The interaction of market forces and decentralized bargaining structures have had a significant impact on construction instability.<sup>3</sup> Increasingly, the problems of industrial conflict and escalating wage rates have been associated with the superior bargaining power of the building trade unions. This advantage stems from their ability to exploit weaknesses in contractor organization and the localized nature of most bargaining relationships.<sup>4</sup> Accordingly, recent reforms in public policy

---

\* I would like to thank George Strauss and Gary Chaison for their comments on an earlier draft of this paper. Author's address: School of Business, Management Department, San Francisco State University, San Francisco, Calif. 94132.

<sup>1</sup> Howard G. Foster, "Wages in Construction: Examining the Arguments," *Industrial Relations* 11 (October 1972), pp. 336-49; and David B. Lipsky and Henry S. Farber, "The Composition of Strike Activity in the Construction Industry," *Industrial and Labor Relations Review* 29 (April 1976), pp. 388-403.

<sup>2</sup> Statistics Canada, *Review of Man-Hours and Hourly Earnings, 1960-1969*, and Canada Department of Labour, *Strikes and Lockouts in Canada, 1960-1969*.

<sup>3</sup> Daniel Quinn Mills, *Industrial Relations and Manpower in Construction* (Cambridge, Mass.: The MIT Press, 1972), p. 61.

<sup>4</sup> Howard G. Foster and George Strauss, "Labor Problems in Construction: A Review," *Industrial Relations* 11 (October 1972), p. 310.

and the reorganization of contractors into province-wide construction labor relations associations (CLRA organizations) have been undertaken to stabilize labor-management relations.

### **Accreditation: Meaning and Purpose**

Between 1968 and 1973, eight of Canada's ten provinces adopted some form of accreditation legislation. Accreditation may be defined as a process by which an employer association is designated as the exclusive bargaining agent for a group of contractors. It resembles union certification in that bargaining rights are normally acquired on the basis of a unit being appropriate for collective bargaining and a showing of majority support. Two exceptions exist. In British Columbia, accreditation covers only those union contractors who choose to belong to an association. Quebec, on the other hand, compels all contractors to bargain through a single labor relations association designated by law.

Accreditation may be granted on a trade or sector basis. Under the trade approach, accreditation is based on existing bargaining rights and the bargaining unit corresponds to the description contained in the collective agreement between an employer association and a trade union. The sector approach permits an association to seek accreditation in any sector and geographic area for which it claims support. Since sector accreditation is not restricted to existing bargaining rights, it appears to provide greater encouragement for centralized bargaining.

Accreditation was perceived as improving labor-management relations in three ways. First, it would provide employer associations with more effective control over their members by prohibiting them from abandoning their associations and bargaining on an individual basis. Thus by restricting the behavior of individual contractors and strengthening the role of associations, accreditation would alleviate fragmentation and equalize bargaining power in the industry. A second objective would be the broadening of bargaining structure "since contractor associations would be in a better position to insist on it."<sup>5</sup> By strengthening local contractor organizations, it was felt that accreditation would eventually lead to greater cooperation among associations and broader patterns of collective bargaining.

The stabilization of contractor associations and the consolidation of bargaining were perceived as contributing to a third objective—industrial relations stability. By providing contractor associations with coun-

---

<sup>5</sup> H. W. Arthurs and John H. G. Crispo, "Countervailing Employer Power: Accreditation of Contractor Associations," in *Construction Labour Relations*, eds. H. Carl Goldenberg and John H. G. Crispo (Ottawa: Canadian Construction Association, 1968), p. 410.

tervailing power, they would be in a better position to resist union pressure tactics and take a strike if necessary. Moreover, the coordination and centralization of bargaining should facilitate the establishment of common expiration dates and minimize the leapfrogging of wage settlements. It was also hoped that broader-based bargaining would reduce "economic conflict through the sobering effect of centralized power."<sup>6</sup>

The remainder of this paper examines the impact of accreditation on (1) employer unity, (2) the coordination and centralization of collective bargaining, and (3) industrial relations stability as measured by wage trends and strike activity.

### 1. Employer Unity

Interviews and newspaper accounts indicate that accreditation has greatly reduced employer fragmentation in collective bargaining. In British Columbia, where accreditation is limited to association members, employer unity has been quite remarkable. The Construction Labour Relations Association (CLRA) has weathered four lengthy disputes (more than 4,000,000 man-days lost), and imposed three province-wide lockouts.<sup>7</sup> Similar results have been reported among accredited associations in other parts of the country. An exception has been Quebec, where the substitution of compulsion for employer choice under its accreditation system may well have contributed to, rather than quelled, divisions in contractor ranks.<sup>8</sup>

There have also been signs of improved employer unity in the absence of accreditation. Contractors in Saskatchewan (1974) and Manitoba (1975) withstood lengthy strikes despite severe economic pressures. One reason for their success was the recent formation of provincial labor relations associations modelled on CLRA of British Columbia.<sup>9</sup> Nevertheless, an important distinction exists between accredited associations and nonaccredited bodies. In the former case, unity is legally enforceable, whereas in the latter case voluntary arrangements may be more easily destroyed by disagreement. Whether these

---

<sup>6</sup> *Ibid.*, p. 412.

<sup>7</sup> For a detailed analysis of the British Columbia situation, see Joseph B. Rose, "The Construction Labour Relations Association of British Columbia: A Case Study," *Labor Law Journal* 27 (July 1976), pp. 407-19.

<sup>8</sup> The uniqueness of the construction industrial relations system in Quebec is described in Gerard Herbert, *Labour Relations in the Quebec Construction Industry: Part I The System of Labour Relations* (Ottawa: Economic Council of Canada, 1977).

<sup>9</sup> An evaluation of these province-wide bargaining agencies is contained in Joseph B. Rose, "Construction Labour Relations Associations in Canada," *Relations Industrielles*, 32:1 (1977), pp. 35-49.

associations will be as successful as accredited associations have been in reducing fragmentation must await the outcome of future negotiations.

Employer unity may also be indicated by the absence of dissatisfaction with the accreditation system. Since 1970, nearly 90 accreditation orders have been issued. A perusal of published labor relations board decisions in construction reveals no accreditation orders have been terminated, withdrawal from an accredited association is extremely rare, and the duty of fair representation has not been an issue. Notwithstanding the recent origin of the legislation, it is noteworthy that the internal problems common to contractor associations have not surfaced in board hearings. This may be due in part to the stringency of most laws. To be accredited, employer associations must normally demonstrate that they are properly constituted and satisfy a double-majority requirement.<sup>10</sup> In summary, both the bargaining experience of most accredited associations and the absence of serious internal disputes suggest that accreditation has had a salutary effect on employer unity.

## **2. Coordination and Centralization of Bargaining**

Table 1 examines the extent to which bargaining is conducted by a single employer association (CLRA) and denotes shifts in the geographic scope of bargaining over the past decade.<sup>11</sup> Significant differences in bargaining patterns exist among provinces which have adopted accreditation. In the four provinces where sector accreditation exists,<sup>12</sup> CLRA organizations now negotiate about 95 percent of all collective agreements and, with one exception, province-wide bargaining covers 90 percent of the construction workforce. In Nova Scotia, bargaining takes place over two broad geographic areas, and these regional agreements embrace the vast majority of construction workers. Under trade accreditation, CLRA organizations were signatory to less than 50 percent of all collective agreements and there was a proliferation of other contractor associations engaged in collective bargaining. For example, of the 232 agreements reported in Ontario, only 6 were negotiated by CLRA and the remainder by 158 associations. In addition, the extent of province-wide bargaining is substantially lower in these provinces, as most negotiations are conducted on a metropolitan or regional basis.

---

<sup>10</sup> An employers' organization must normally represent a majority of the unionized contractors who employ a majority of the workforce in the bargaining unit. This procedure prevents the accreditation of an association dominated by a few large firms employing the majority of the workforce.

<sup>11</sup> Like CLRA organizations elsewhere, the Association of Building Contractors of Quebec is an organization devoted exclusively to labor relations.

<sup>12</sup> Because of its relatively small size and data limitations, the province of Prince Edward Island is not included in the analysis.

TABLE 1  
Employer Coordination and Bargaining Structure

Type of Accreditation	Employer Coordination			Bargaining Structure <sup>a</sup>		
	Total Number of Collective Agreements 1977	CLRA Agreements (%)	Other Employer Bargaining Agents	Province-Wide Agreements (%) <sup>b</sup>		Proportion of Employees Covered 1977
				1967-68	1977	
<i>By Sector</i>						
British Columbia	50	47 (94%)	1	8 (40%)	32 (64%)	90%
Nova Scotia	31	30 (97%)	1	1 (10%)	6 (20%)	17%
Newfoundland	11	8 (72%)	3	9 (100%)	10 (90%)	95%
Quebec	1	1 (100%)	0	0 (0%)	1 (100%)	100%
<i>By Trade</i>						
Ontario	232	6 (3%)	158	6 (9%)	23 (10%)	25%
Alberta	36	18 (50%)	15	4 (10%)	6 (17%)	20%
New Brunswick	18	0 (0%)	10	0 (0%)	5 (28%)	22%
<i>No Accreditation</i>						
Saskatchewan	17	14 (82%)	2	4 (16%)	13 (76%)	82%
Manitoba	9	7 (78%)	2	11 (100%)	8 (89%)	84%

<sup>a</sup> 1967-68 figures are based on a study of selected trades and is reported in Gordon W. Bertram, "The Structure and Performance of Collective Bargaining Systems," in *Construction Labour Relations*, eds. H. Carl Goldenberg and John H. G. Crispo (Ottawa: Canadian Construction Association, 1968), pp. 416-519. The 1977 data cover all building trades and are contained in *Construction Collective Agreements—Summaries*, published by the Canadian Construction Association.

<sup>b</sup> Includes approximately provincial, provincial, and interprovincial agreements (excluding national contracts).

The consolidation and centralization of bargaining reflects the degree to which accreditation is tied to previously established bargaining rights. Sector accreditation envisioned broader-based bargaining by enabling contractors to organize province-wide associations to succeed the multiplicity of regional and specialty associations involved in collective bargaining. In each case, CLRA had established itself as the dominant association in the province prior to obtaining accreditation. Subsequently, accreditation has facilitated broader geographic negotiating units and multitrade talks in British Columbia (CLRA groups were not accredited until 1976 in Nova Scotia and Newfoundland). An exception to this pattern exists in Quebec, where the law mandates there shall be only one contractor association and one collective agreement for the entire industry.

Under trade accreditation, industry-wide employer cooperation is either nonexistent (New Brunswick) or efforts to form a single bargaining agency have produced only modest gains. Since accreditation is largely based on historical bargaining patterns, it has been difficult for a single employer association to secure bargaining rights within the industry. While CLRA organizations have been formed in Alberta and Ontario, their efforts to coordinate bargaining on an industry-wide basis have been inhibited by traditional attitudes and rivalries.<sup>13</sup> This has recently prompted both provinces to amend their accreditation laws to provide for more integrated forms of bargaining.

Broader bargaining patterns have also evolved in the absence of enabling legislation as evidenced by trends in Saskatchewan and Manitoba. It can be seen that CLRA organizations negotiate about 80 percent of the collective agreements, and these are predominantly province-wide in scope. This finding suggests that the establishment of a provincial contractors' association can stimulate centralized collective bargaining, and that such a development can occur independently of accreditation.

### **3. Stability in Construction**

To what extent does broader-based bargaining contribute to stable labor-management relations? Table 2 examines the relationship between bargaining structure and stability during the recent period of legislative and organizational change (1970-76). Centralized bargaining structures denote those provinces in which a majority of the construction workforce is covered by province-wide bargaining. Stability is

---

<sup>13</sup> Alberta law permits the transfer of accreditation from one association to another, but some contractor groups have opposed giving CLRA their bargaining rights.



measured by two bargaining outcomes—the average annual increase in wages and the relative volume or severity of industrial conflict ( $MDI/WKRS \times 1000$ ).<sup>14</sup>

TABLE 2  
Bargaining Structure and Stability in Construction, 1970–76

Bargaining Structure	Average Annual Wage Increase	Relative Volume or Severity of Industrial Conflict ( $MDI/WKRS \times 1000$ )
<i>Centralized</i>		
Quebec	13.3%	3,653
Newfoundland	14.1%	1,547
British Columbia	11.8%	9,721
Manitoba	14.0%	1,364
Saskatchewan	13.9%	2,685
<i>Decentralized</i>		
Ontario	11.2%	834
New Brunswick	15.9%	651
Alberta	14.5%	1,119
Nova Scotia	12.9%	3,291
Canada-wide	12.8%	2,779

Sources: DBS 72-002, *Employment, Earnings and Hours, 1971–1976* and *Strikes and Lockouts in Canada, 1970–1976*.

The data do not reveal any consistent relationship between bargaining structure and stability. In some cases, centralized bargaining was associated with either above-average wage increases or industrial conflict, and in other cases both measures exceeded the national average. The same is generally true of provinces in which bargaining is decentralized. Equally significant was the absence of a positive relationship between the severity of industrial conflict and the percentage increase in wages. For example, New Brunswick enjoyed relative labor peace while recording the highest increases in wages, while in British Columbia lengthy work stoppages were associated with relatively modest wage gains. It is noteworthy that the greatest degree of stability was achieved in Ontario, where employer organizations and collective bargaining remain highly fragmented.

Space limitations precluded an in-depth discussion of factors contributing to construction instability. In brief, the 1970s has been a period in which bargaining structure itself has become a major issue in negotia-

<sup>14</sup>  $MDI/WKRS \times 1000$  signifies man-days idle due to work stoppages per thousand workers in construction. This measure of the relative severity of industrial conflict was selected because provincial statistics for the number of man-days worked in construction were unavailable.

tions. The creation of more stable contractor associations has stimulated demands for broader-based bargaining, and this has resulted in protracted labor disputes in the western provinces and Nova Scotia. In some cases, it has also produced wage settlements above the national average. The legal imposition of industry-wide bargaining in Quebec has not been a panacea, and the construction demands of the 1976 Olympics have placed further strains on labor-management relations. The relative tranquility in Ontario appears to be associated with the fact that the structure of bargaining has remained largely unchanged over the past decade (see Table 1). It was not until 1975 that structural issues emerged as a major issue in negotiations. The result was a substantial increase in strike activity.

### **Conclusion**

This paper has attempted to assess the impact of accreditation on labor-management relations in the construction industry. It appears that accreditation has promoted unity within contractor associations during negotiations but has fallen short of promoting industry-wide bargaining and industrial relations stability.

During the 1970s, instability remained a serious problem in most parts of the country. These preliminary results do not necessarily mean that policy-makers should abandon their efforts to promote broader-based bargaining. They do suggest, however, that bargaining outcomes are strongly influenced by general economic factors, e.g., inflation and employment insecurity. It is also apparent that, in the short run, the consolidation of bargaining structure will be a source of conflict. Once this transitional period is complete and the parties have adjusted to the situation, greater stability may be achieved. Researchers will have to monitor future collective bargaining developments to determine if centralized bargaining increases industrial relations stability.

# Final-Offer Arbitration in Wisconsin After Five Years\*

CRAIG A. OLSON  
*Purdue University*

While debate over appropriate methods of settling impasses in the public sector continues, jurisdictions are turning increasingly to some form of interest arbitration, including final-offer arbitration. While the final-offer experience has been analyzed in several jurisdictions, including Wisconsin, now that there have been five full years of experience in Wisconsin, some of the issues may now be more closely examined.<sup>1</sup>

## **Interest Arbitration: The Dependency and Chilling Effect**

The impact of arbitration on the bargaining process forms the basis for two criticisms of the procedure. First, it is argued that interest arbitration is not a good strike substitute because after using it once, the parties become dependent on the process.<sup>2</sup> This argument is based on the proposition that for some reason(s) the parties would rather have an arbitrator decide the unresolved issues than make the interorganizational and intraorganizational compromises required to reach agreement. For similar reasons, conventional interest arbitration is criticized as having a "chilling" effect on the bargaining process. Since the parties expect that the arbitrator will split the unresolved issues down the middle, they believe any compromise at the prearbitration stage will prejudice their respective positions in arbitration. Therefore, both parties are less willing to make concessions.

---

\* The author would like to thank J. L. Stern, R. U. Miller, and J. B. Dworkin for comments on earlier drafts of this paper and the WERC for their cooperation in the collection of the data. Author's address: Krannert Graduate School of Management, Purdue University, West Lafayette, Ind. 47907.

<sup>1</sup> See James L. Stern, Charles M. Rehmus, J. Joseph Loewenberg, Hirschel Kasper, and Barbara D. Dennis, *Final-Offer Arbitration* (Lexington, Mass.: D.C. Heath, 1975); Peter Feuille, "Final Offer Arbitration and the Chilling Effect," *Industrial Relations* 14 (October 1975), pp. 302-10; Gary Long and Peter Feuille, "Final Offer Arbitration: 'Sudden Death' in Eugene," *Industrial and Labor Relations Review* 27 (January 1974), pp. 186-203; and Fred Witney, "Final Offer Arbitration: The Indianapolis Experience," *Monthly Labor Review* 96 (May 1973), pp. 20-25.

<sup>2</sup> W. Willard Wirtz, "The Challenge to Free Collective Bargaining," in *Labor Arbitration and Industrial Change*, Proceedings of the National Academy of Arbitrators, ed. Mark L. Kahn (Washington: BNA Books, 1963).

While the dependency and chilling effects of arbitration are frequently discussed, the constructs have not been well defined, and hence the relationship between the two phenomena has been unclear. One might argue that the two constructs are identical; because dependency means a failure to reach an agreement in successive negotiations and chilling occurs when the parties do not make the compromises necessary to reach an agreement, the constructs represent two views of the same event. However, if dependency is defined simply as the frequent use of arbitration in one or more communities, this view is not completely accurate because the "chilling" effect of the procedure may be only one of several factors causing arbitration dependency.

Given the above definition of dependency, there exist two subtypes. First, there is the frequent use of the procedure by many *different* communities. The causes of this form of dependency are important when addressing such issues as the relative use of interest arbitration in the public sector and the use of the strike in the private sector. A comparative framework where the experience in two or more jurisdictions can be compared is perhaps best for investigating this type of dependency. The important independent variables in such an analysis would be measures of the comparative costs to the parties of using the two procedures where costs are broadly defined to include fees of neutrals, lost wages and income, and political costs.

The second type of dependency is the frequent use of the procedure in the *same* community, identified as within-community dependency. It, in turn, can be divided into two aspects—*within*-bargaining-unit dependency which occurs when the community arbitrates frequently with the same bargaining unit over a number of years, and dependency *across* bargaining units which occurs when a community frequently arbitrates with more than one bargaining unit.

The within-community dependency is theoretically distinct from the first type of dependency (across communities) and has different implications for policy. It is possible to have two procedures in different jurisdictions that on average are used with equal frequency. However, under one of the procedures, the within-community dependency is high so that a minority of communities use the procedure a majority of the time. In the other jurisdiction, within-community dependency may be very low so that the use of the procedure is evenly distributed across communities. The effect on industrial and political democracy in any one community may be minimal under the procedure where the use is evenly distributed. On the other hand, in the other jurisdiction in a few com-

munities, the bargaining process as envisioned by the private-sector model may be seriously undermined by arbitration dependency.

Both the across-community and within-community forms of dependency can be viewed as dependent variables. In the rest of this paper, I will talk primarily about within-community dependency and the effect of previous experience on arbitration dependency.

Several sets of variables are likely to affect dependency. The first potential variable is the chilling effect of the procedure caused by the parties' unwillingness to make concessions because of their perceptions about what the arbitrator will do (i.e., split the difference). When chilling occurs and precludes agreement in several negotiating rounds, then some degree of dependency exists. While chilling may occur under all types of arbitration procedures, within a state where all parties are covered by the same statute, chilling due to the procedure cannot differentiate between those bargaining relationships that do and do not become dependent on the process. Thus, chilling does not directly affect within-community dependency, and we must identify what other factors are likely to cause the parties not to reach agreement in several successive rounds of negotiations.

Variables that are likely to be important determinants of within-community dependency include the internal union political environment, the local community political environment, local fiscal constraints, early arbitration experience, and interunion rivalry. Four of these five variables may affect within-community dependency either within bargaining units or across units. Space limitations allow only a discussion of previous arbitration experience and interunion rivalry, which are the two variables subject to empirical testing and interpretation when we examine the final-offer experience in Wisconsin.

Previous arbitration experience may affect dependency in at least the short run. Early victories under the process by one of the parties may cause the winning party to utilize the procedure in later years with the hope of continued success. Unlike the other variables, however, previous arbitration experience cannot differentiate between those that have not used arbitration and those that have used arbitration one or more times. Nevertheless, it may serve to differentiate between communities that have used arbitration only once and those that have used it more than once.

Previous arbitration experience may also serve as a proxy for the effect of interunion rivalry, which is hypothesized to affect only across-unit dependency. In cities where police and fire union rivalry is strong,

arbitration in period  $t + 1$  may be utilized by the unit that did not use arbitration in time period  $t$ . The reason for this is that the early award may upset the intracity comparison between units so that the unit that did not use arbitration in the early period will utilize it in the later period in an attempt to restore the old relationship. In the rest of this paper, the experience under Wisconsin's final-offer arbitration law is examined, and portions of the model presented in this section are tested.

### **Final-Offer Arbitration in Wisconsin**

From 1973, the first full year of the law, through negotiations for the 1977 calendar year, about 65 percent of the 852 negotiations were settled without any third-party assistance. The approximately 300 remaining cases were mediated by the Wisconsin Employment Relations Commission (WERC), and more than 50 percent of them were settled at this stage. In 145 negotiations, an impasse was declared by the WERC and an arbitrator was appointed. However, in 23 of these 145 cases the parties, usually with the help of the arbitrator, reached an agreement without the issuance of an award. Thus, for the period 1973-77, although third-party assistance was required in 35 percent of the negotiations, an award was issued in only 14 percent.

### **The Chilling Effect of Arbitration**

Analyzing the "chilling" effect, or the parties' willingness to compromise in any given year, is very difficult because we don't have information on the dynamics of the process such as when and how frequently the parties made concessions. Despite these problems, two methods of indirectly examining the parties' willingness to make concessions seem reasonable. First, an examination of the issues that have gone to arbitration may provide evidence on this point. If there is significant chilling effect, we would expect that a large number of issues have been decided by arbitrators over the five years. Through the 1976 negotiations, 32 percent of the final-offer awards involved only one issue, and 76 percent of the total number of arbitrations involved three or fewer issues.

A second method of assessing the chilling effect of arbitration is to examine the number and percent of negotiations that have gone to arbitration over the five-year period. Table 1 shows the bargaining experience for the three groups of employees covered by Section 111.77 of the law for 1972-77. To determine if more parties utilized arbitration in each of the years, the experience for 1972 must be discounted because some of the contracts were settled under the old fact-finding law.

The table shows that the parties resorted to arbitration more fre-

TABLE 1  
Final-Offer Experience by Year and Occupation<sup>a</sup>

	1972	1973	1974	1975	1976	1977
Police						
Total negotiations	74	89	74	87	87	87
Arbitrations	3	7	9	11	15	12
Firefighters						
Total negotiations		47	39	47	47	47
Arbitrations	0	5	6	8	11	6
County sheriffs						
Total negotiations		37	34	42	50	50
Arbitrations	4	5	5	7	8	7
Total negotiations		163	147	174	184	184
Total arbitrations	7	17	20	26	34	25
Arbitrations as a percent of negotiations		10	13	15	18	14

<sup>a</sup> There is no centralized source in Wisconsin where one can obtain information on the total number of negotiations under Section 111.77 of the law for each of the five years. Therefore, the number of negotiations is an estimate based on research by Stern et al., the number of eligible communities, and conversations with knowledgeable individuals in the state. Although we believe these estimates to be reasonably accurate, any percentage that uses this figure must be viewed as only an approximation.

quently in four successive years. In 1973, 10.4 percent of the negotiations were settled with an award; by 1976 this percentage had almost doubled to 18 percent, but it declined in 1977. While there is an upward trend, the experience in 1977 may represent a turning point or leveling-off due, perhaps, to greater experience by the parties with the procedure.

The percentages shown in Table 1 reflect the chilling effects of the procedure: across-community dependency, within-community dependency, and the variables hypothesized to affect this dependency. The increasing percent of negotiations that ended in an award over the time period may be due only to the fact that certain bargaining relationships ended in arbitration in successive negotiations and not because more different bargaining relationships ended in an award. In the next section, the extent of within-community arbitration dependency is examined.

### Arbitration Dependency

Since most communities bargain with both police and firefighters, the two separate forms of within-community dependency can be examined.

Within-bargaining-unit dependency can be measured by whether a community or county uses arbitration in successive negotiations with a single bargaining unit. Some support for this dependency is found in the 1976 negotiations where 15 of the 34 arbitrations involved parties that had previously used arbitration. Lines 1-3 of Table 2 show the number of

TABLE 2  
The Number of Bargaining Relationships and  
Communities That Have Used Arbitration  
a Specified Number of Times, 1972-77

	Number of Times Arbitration Has Been Used				
	1	2	3	4	5
(1) Firefighter-community	19	4	3		
(2) Police-community	36	9	1		
(3) Sheriff-county	15	9	1		
(4) Police and/or firefighters-community	34	18	2	3	1

times different bargaining relationships have used arbitration through the 1977 negotiations. Ten different police-community relationships and seven firefighter-community relationships have used arbitration two or more times over the five-year period.

Arbitration dependency across bargaining units but within communities is supported by line 4 which shows the number of communities that have used arbitration with police and/or firefighters a given number of times. The fact that lines 1 and 2 in each column do not add up to the numbers in line 4 shows there is some overlap between those communities that have used arbitration for both police and fire disputes. In fact, 24 communities, or 41 percent of all communities that have used arbitration, have used it more than once. These 24 communities accounted for 63 percent of the awards from 1972-77.

Two variables affecting within-community dependency—previous bargaining experience and interunion rivalry—can be more fully explored with the data available by looking at those bargaining relationships that used arbitration in the early years of the law. If victories by one party are likely to lead to later use of arbitration, then we should examine who wins in the early years and use of the procedure in later years.

In addition, the attempt by one union to use arbitration in a later period in order to maintain an intracity pattern that had been changed in a previous arbitration involving another bargaining unit can also be



examined indirectly by looking at victories and subsequent use of the procedure. If across-bargaining-unit dependency is caused by a union's attempt to restore an intracity pattern, then we would predict the other union within the community will seek arbitration in later years only if the first union won in arbitration in the earlier years. This is based on the assumption that an arbitration between a community and the police (firefighters) will adversely affect only the intracity pattern from the firefighters' (police) point of view when the police (firefighters) win during the first years under the law.

To determine if arbitration victories are associated with subsequent use of the procedure, Table 3 was constructed. In each section, communities and/or counties that arbitrated from 1972-74 were classified according to the winning party and then whether or not they arbitrated in later years, 1973-77.<sup>3</sup>

TABLE 3  
Arbitration Activity in 1972-77,  
Given Previous Arbitration Outcomes

	(a) Police and Firefighters, 1972-74		(b) Police, Firefighters, and Sheriffs, 1972-74	
	City Won	Union Won	City Won	Union Won
Arbitrate	5	9	7	15
Did not arbitrate	8	3	13	4

Table 3 indicates that if the police or fire union wins in 1972-74, 75 percent (9/12) of the communities use the procedure again with one of the bargaining units. On the other hand, when the city wins, arbitration is used again in only 38 percent (5/13) of the cases. These results remain essentially unchanged when county data are added to the analysis. The chi-square values for these tables are 3.38 ( $p=.10$ ) and 7.64 ( $p=.01$ ), respectively.

These results do not provide evidence separately on within-unit and across-unit dependency. When Table 3 is expanded to examine both within-unit and across-unit dependency, the hypothesis that union victories upset the intracity comparison and cause the other unit to use

<sup>3</sup>The communities that arbitrated from 1972-74 were included in this analysis because this period represents about half the time spent under the Act. Dependency might be understated by including communities that arbitrated for the first time after 1974 because they would obviously have fewer opportunities to use the procedure again by 1977.

arbitration is not strongly supported. The probabilities of arbitration with the other unit *only* is about the same for both union and city victories (1/12 v. 1/13). However, 25 percent of the communities with union victories arbitrated with *both* units in later years, compared to 8 percent of the communities where the employer wins. It is possible that interunion comparisons contributed to the use of arbitration in the three communities that arbitrated with both units following a union victory. This possibility cannot be tested with the data presently available.

The lack of support for the interunion-rivalry hypothesis suggests that repeated use of the procedure across units is caused by other factors in the dependency process that are not measured in this paper. For example, other variables in the model such as local fiscal constraints or local political pressures may cause the city to treat each unit similarly and force each union into arbitration. This possibility is supported by the fact that 8 of the 13 communities that have arbitrated with both units have done so *within* the same year.

### Conclusions

While there has been an upward trend in the use of arbitration in Wisconsin, the percentage of negotiations ending in an award are similar to the incidence of strikes in private-sector manufacturing.<sup>4</sup> Also, during the last year for which data were available, there was a decline in the use of final-offer arbitration in Wisconsin. It's obviously impossible to tell if this represents a lower equilibrium level in the use of arbitration or simply an "outlier."

Although the overall use of arbitration averaged about 14 percent of all negotiations over the five years, the distribution across communities in the use of arbitration was very uneven. A model for explaining this within-community dependency was proposed, and rudimentary tests of the model were conducted. The results indicate that when the union wins in early arbitration cases, the community is much more likely to arbitrate in later years than if the city wins. This may be because the local unions believe early victories are good predictors of success in later proceedings. The fact that employer victories do not lead to dependency may be because, despite the victory, public employers have a strong dislike for third-party determination and do not wish to use it again. Alternatively, unions may learn from employer victories and may be more

---

<sup>4</sup> Over the period 1972-75, between 13.6 and 29.7 percent of major collective bargaining negotiations resulted in a strike. See Bruce E. Kaufman, "The Propensity to Strike in American Manufacturing," *Proceedings of the 30th Annual Meeting, IRRA* (Madison, Wis.: The Association, 1978), pp. 419-26.

willing to make concessions to keep from having to use the procedure again.

Comparisons between bargaining units as a cause of across-bargaining-unit dependency on arbitration within a community was investigated based on the assumption that a union victory upsets the intracity pattern and causes the other union to arbitrate later. Little support was found for this hypothesis.

Several areas of research are suggested by these results. First, a more complete test of the model of dependency presented in this paper should be conducted. This analysis should include an examination of those bargaining relationships which have never used the procedure.<sup>5</sup> Possible additional explanatory variables might include union leadership characteristics, internal union politics, the community political and economic environment, and the degree of interunion rivalry. Each of these variables may have an independent effect and may also interact with award content (who wins) to differentiate between communities with different degrees of dependency on the arbitration process.

---

<sup>5</sup> While it is difficult to estimate the number of communities that bargain and have not used the procedure, the number in this category is probably as great as the number of different communities that have used the procedure.

## DISCUSSION

ANTHONY P. ALFINO

*General Dynamics Corporation*

### ATTITUDES AND PUBLIC-SECTOR LABOR RELATIONS

Among the attributes of this study, two elements are centrally important. One is that it identifies candidly—as, of course, any study should—those areas of research which are beyond the reach of the study and which the reader of a paper of this quality inevitably wishes were here rather than in the future. This is important to careful, reliable research and the avoidance of unsubstantiated folklore. We have some of that in the private-sector literature. The other element is the candor with which it recognizes the strong possibility that research studies in the private sector are more plentiful and informative with respect to how strongly *management* attitudes bear upon a successful union-management relationship than are studies that deal in a penetrating way with union attitudes in the same context.

If there were a better balance in the literature so that attitudes had been thoroughly explored at both ends of the spectrum in the private sector in terms of the influence from union *or* management attitudes, or both, it would then be possible to develop sharper analogies from one sector to the other or, at least, to make an easier transfer of expertise. The literature makes the point, of course, that the important role played by management attitudes in influencing the degree of success of the union-management relationship lies largely in management's greater freedom to act and to initiate change. The private-sector studies by Stagner and others support this. What is needed is research concerning the impact from union attitudes in terms of union inhibitors or obstacles to change. For example, where union stewards—whether officers or not—are able to influence or even control the operation of the day-to-day grievance system and, in turn, the facility's regular operations, then unmistakably the potential for resistance to change is present at many points. Union attitudes in the aggregate become critically important in such a situation. An area of study could well be the situation where union stewards work for eight hours a day, five days a week, on griev-

ances and do no production work at all. I know of such a case. The stewards were hostile to change of any kind.

For purposes of this study, the authors have sought to measure the success of the union-management relationship by means of an interactive organizational measure, with elements from *both* union and management. Thus, the focus was on the *total* union-management relationship, measured by the frequency of the problems perceived by *both* union and management. The authors conclude that their feelings lend support to the view that management attitudes toward the union do have a strong influence on the success of the union-management relationship in the public sector, although it is admitted that the causal direction of this correlation was not fully determined and further research over a larger sample than the six facilities here will be needed over a longer span of time.

The authors note that there was absent a significant correlation between union attitudes toward management and the frequency of problem statements (whether those from unionists alone or from *both* union and management personnel). This is seen as lending support to the view that in the public sector, the union has a "lesser role in determining the overall union-management climate." I would urge exploration of all the factors that were perceived by management and union personnel to contribute to this "lesser role"—and whether the union did in fact *attempt* to play a more significant role than it did. By this I mean that with respect to the present study, the performance and attitudes of the union seem less crucial to the success of the overall relationship. It is important, however, to distinguish between their *performance*, on the one hand, and their *potential* to make a positive contribution to the relationship on the other. This question, that of their potential, might well be the object of future research efforts.

#### FINAL-OFFER ARBITRATION AND INTERTEMPORAL COMPROMISE

One of the authors' contributions to research on final-offer arbitration will be, I hope, the permanent departure of the so-called flipflop theory of compromise as one form in the array of possible kinds of intertemporal compromise or, as the authors refer to it, longitudinal compromise.

Certainly, the careful research, statistical analysis, and writing contained in this study by these two authors should help greatly to achieve that result. I am concerned, however, that the critics of final-offer arbitration, or FOA, as it has now been labeled, will charge that the "flipflop form" of unwarranted compromise is a straw man that few serious critics of FOA would espouse. Some support may be gleaned for such refuta-

tion. Critics of FOA describe it far too narrowly if they see it as no more than a system under which “arbitrators will be able to satisfy both sides by alternating the winners and losers over time.” Or that it raises the expectation that, “with any particular union-management pair, the loser in the first arbitration round will be declared the winner in round two.”

The critics of FOA, as I understand them, are not likely to reduce their criticisms of the many varieties of longitudinal compromise which they decry to those two alone—or even to those two chiefly. I suggest further that if, as the authors indicate, “ITC theory predicts that in any arbitral round it will be the previous round’s loser who triggers the arbitration mechanism,” the critics of FOA will abandon that position and go on to more serious problems relating to FOA.

The experience gained over a number of years with respect to grievance arbitration may be useful in assessing the factors that may impel one party or the other in interest arbitration to try it the first time—or try it again. In the same sense, to the extent that arbitrators may tend to want to equalize or balance awards either in one arbitration case or in a group of arbitration cases over grievances—because, as the FOA literature has it, this may be seen by arbitrators as a way of protecting “arbitral employment opportunities”—grievance-arbitration studies should be helpful. By the same token, studies of intertemporal compromise as it may now exist on the grievance side of the labor arbitration field may be helpful in the development of comparable studies of this form of interest arbitration.

In a larger perspective, we must distinguish between intertemporal compromise—and the dangers inherent in that—and the kind of award which views a particular level of settlement as an integral step in a history of settlement levels. That may look like a compromise to some observers, but, given the constraints imposed by FOA, especially the constraints from *package* FOA, the arbitrator may be in fact choosing the better of two courses, neither of which is entirely sound, in his view. An arbitrator would be remiss in his central responsibility if he did not study the succession of previous settlements that affect a union position relative to the other unions in the community and to the economy in general and assess carefully—and sometimes unhappily—what the upcoming award inevitably will do. That’s what it is all about.

#### LABOR-MANAGEMENT RELATIONS IN CANADA’S CONSTRUCTION INDUSTRY

This study is a valuable interim report on what are the achievable gains as accreditation of employer associations in Canada’s construction industry takes hold. We know that the evolutionary period of this legis-

lative and organizational change, 1970-76, is largely behind us with eight of the ten provinces espousing accreditation. This has to be an *interim* report because the general economic factors which have asserted themselves—inflation and unemployment, for example—have clouded observation of results.

Employer unity within contractor associations has been promoted, and consolidation of bargaining structures is on the way—at least, it is a major bargaining issue, one squarely in the middle of the table to be dealt with directly on a go or no-go basis. But in any case, the desired results with respect to (1) industry-wide bargaining, and (2) industrial relations stability, have not yet materialized. It is simply too early for progress in these two areas to have shown itself—or even to tell whether they will surely come at a later date, although they are, of course, widely expected.

The study points out that there is absent a positive or consistent relationship between bargaining structure and bargaining stability and that the same effects are evident under *both* centralized and decentralized bargaining. Sometimes above-average wage increases or above-average conflict are evident under both kinds of structures. Sometimes *both* phenomena are present. The particular kind of bargaining structure does not appear to be a factor, at least at this time.

Mr. Rose makes another point very clearly, citing the experience in three provinces—New Brunswick, British Columbia, and Ontario. It is that there is no necessary relationship between the level of industrial conflict and the level of the wage increase agreed upon. No one will be surprised at this, of course. New Brunswick has had labor peace, but it also had the highest wage increases. British Columbia had a great deal of labor conflict, but had relatively modest wage gains. Ontario, where employer organizations and collective bargaining are much fragmented, had the greatest degree of industrial stability.

In addition to the general economic factors at work that directly impact the evolutionary process, Mr. Rose points out that the very process of consolidation of bargaining structure is itself a source of conflict. Not until the transitional period is complete and the parties have adjusted to the new approach will we be able to determine if increased stability will indeed flow from centralized bargaining.

#### FINAL-OFFER ARBITRATION IN WISCONSIN AFTER FIVE YEARS

Although at several points early in the paper, I would have liked a clearer exposition, this study is a valuable contribution to the literature of FOA. I consider particularly important that there be a report and

analysis of the manifestations of dependency both *across* communities and *within* communities, a distinction highlighted in this paper. I consider important also that we gather and analyze data concerning the chilling effect and dependency of interest arbitration in the public sector *both* in terms of use and reuse by the *same* bargaining unit in the community, as well as the various bargaining units within a given community. If we identify bargaining units or communities that *appear* to be making inordinate reuse of FOA, we will be able to move quickly toward in-depth case studies of the reasons and try to determine their significance in terms of legislative policy.

Especially interesting are the indicators in Table 2. Arbitration as a percent of the negotiations undertaken during the five years of the study increased to 18 percent in 1976 and then dropped to 14 percent in 1977. It is, of course, far too soon to speculate on whether this may be a leveling-off point. The figures in Table 3 may be meaningful even at this early date in terms of indicators of dependency.

We note that, in 1976, 15 of the 34 arbitrations involved parties that had used FOA previously. And dependency *across* bargaining units may be indicated by the fact that 18 communities have used FOA twice in the five years, two of them have used it three times, and three of them have used it four times. These figures may now indicate where the in-depth studies need to be made.



## VI. CONTRIBUTED PAPERS: LABOR MARKETS

---

### The Long-Run Effects of Teenage Unemployment: Some Preliminary Results\*

BRIAN E. BECKER  
*State University of New York  
at Buffalo*

STEPHEN M. HILLS  
*Ohio State University*

#### Introduction

The fact that a substantial portion of this nation's young people (age 16 to 24) face an overwhelming problem when attempting the transition from school to worklife is well documented. Unemployment for those aged 16 to 19 is on the order of 18 to 19 percent and is nearly twice as high for nonwhite teens. Youth between 16 and 24 years of age make up nearly one-half of all those unemployed.<sup>1</sup>

While this experience involves some obvious short-run costs, much of the discussion of this issue has focused on the possible long-run effects as well. In making the case for devoting more resources to this problem, some observers have claimed that high teenage unemployment rates jeopardize the employment success of a whole generation.<sup>2</sup> There

---

\* The authors wish to thank William Sanders and Dennis Grey for their assistance in this research. This report was prepared under a contract with the Employment and Training Administration, U.S. Department of Labor, under the authority of the Comprehensive Employment and Training Act. Researchers undertaking such projects under government sponsorship are encouraged to express their own judgments. Interpretations or viewpoints do not necessarily represent the official position or policy of the U.S. Department of Labor. Becker's address: School of Management, SUNY Buffalo, Crosby Hall, 319D, Buffalo, N.Y. 14214.

<sup>1</sup> U.S. Department of Labor, *Employment and Training Report of the President*, 1977, Tables A-19 and A-20.

<sup>2</sup> See, for example, Herbert Hill, *Labor Union Control of Job Training: A Critical Analysis of Apprenticeship Outreach Programs and the Hometown Plans* (Washing-

is the feeling that if one does not "get off on the right foot" in the labor market, this experience will linger with him or her over the years and continue to be a source of employment problems. However, as others have noted, unemployment rates decline dramatically as youth approach age 25, and it may in fact be that unemployment during the teenage years has little or no lasting effect.<sup>3</sup>

Despite the implication for longitudinal studies of this issue, the gaps in the available research continue. Echoing the judgments of others who have studied the youth labor market, Richard Freeman concludes: "Teenage unemployment *may* have deleterious effects on [subsequent labor market experience], but this has not been documented."<sup>4</sup>

The purpose of this research is to make a first step in filling this obvious gap in the literature and to provide some preliminary evidence of the magnitude of any long-run effects of this teenage experience. For a sample of out-of-school youth, these results suggest that at least for black youths such a "scarring" process may exist in the form of lower subsequent wage rates. The effect with respect to subsequent unemployment levels is less clear.

### Analytical Framework

While there is certainly no well-developed paradigm from which the long-run effects of teenage unemployment can be rigorously derived, two dimensions of the problem seem to emerge. Namely, the available literature would suggest that both the duration of the unemployment experience and the stability of employment during these years are important. Human capital theory, dual labor market theory, and the job competition model all point to the potential long-run consequences of any inability to take advantage of on-the-job training opportunities. Diminished training levels, in turn, would contribute to lower future earnings through both lower wages and fewer weeks worked. The latter would be an expected consequence of the tendency for turnover costs to decline with skill level.

---

ton: 1974); Charlayne Hunter, "Black Teenagers' Jobless Rate Constant Despite U.S. Recovery," *New York Times*, July 11, 1976; and James Reston, "41% of Black Teenagers Jobless!" *New York Times*, February 23, 1975.

<sup>3</sup> Richard Freeman, "Teenage Unemployment: Can Reallocating Educational Resources Help?" in *Report of Congressional Budget Office Conference on the Teenage Unemployment Problem: What Are the Options?* (Washington: 1976), pp. 43-44.

<sup>4</sup> Freeman, p. 44. See also Willard Wirtz and the National Manpower Institute, *The Boundless Resource: A Prospectus for an Education and Work Policy* (Washington: 1975), p. 24; and Edward Kalachek, *The Youth Labor Market* (Washington: 1969), p. 67.

The net effect of the tendency of teenagers to incur several "spells" of unemployment during these years is somewhat more ambiguous. Certainly dual labor market theory and the job competition model would argue that high turnover rates in those early years have an especially detrimental influence on later employment success. Both point to the negative reaction of employers to an unstable work history, while dualists would maintain this instability further compounds the problem by contributing to poor work habits and attitudes.<sup>5</sup> Job search theory, however, would suggest that, at least in part, this phenomenon may represent an investment in improved job prospects and is therefore healthy.<sup>6</sup> Much of the job switching may merely be a method of generating information on the labor market and should not be considered abnormal.<sup>7</sup>

Finally, to the extent that labor market discrimination against blacks continues, the influence of teenage labor market problems may differ significantly by race. This would occur not only if this poor work record were used as a means of "statistical" discrimination, but also because of the prospect that, among black youth, increased spells of unemployment do not represent the same improvement in the quality of employment as they might for whites.

Given this brief analysis, we can summarize the three principal research questions as follows: (1) What is the effect of *duration* of teenage unemployment on subsequent labor market experience? (2) How does the *number of spells* of teenage unemployment influence subsequent labor market experience? (3) To the extent these influences exist, are there racial differences in the effects of labor market problems during the teenage years?

In the remainder of the paper, we focus on subsequent wage rates as the principal measure of subsequent labor market success. While space limitations prevent a complete discussion of the influence on subsequent employment levels, these results will be noted briefly.

---

<sup>5</sup> See, for example, Lester Thurow, *Generating Inequality* (New York: Basic Books, 1975); Michael J. Piore, "Jobs and Training," in *The State and the Poor*, eds. S. H. Peer and R. E. Barringer (Cambridge, Mass.: Winthrop Press, 1970), pp. 53-83; and Peter B. Doeringer and Michael J. Piore, *Internal Labor Markets and Manpower Analysis* (Lexington, Mass.: D. C. Heath and Co., 1971).

<sup>6</sup> For a review of job search theory, see Steven A. Lippman and John C. McCall, "The Economics of Job Search: A Survey," *Economic Inquiry* 14 (June 1976), pp. 155-89.

<sup>7</sup> As indirect evidence of the benefits of this kind of activity, see Kalachek, Table 6, p. 45. These data suggest that at least for older teens (18-19) who are not in school, "improvement in status" is the most likely reason for job shift. While many of these job shifts may have occurred without incurring a spell of unemployment, teens would probably be more likely than adults to require full-time job search to generate information and also be in a better position to absorb potential short-term wage loss.

## Data and Estimation Models

### DATA

No doubt the paucity of longitudinal studies in this area has reflected the availability of an appropriate data set. Fortunately, the National Longitudinal Surveys can now make a limited test of the hypotheses feasible. Using the young men's cohort, we are able to estimate the effect of labor market experience for teens (16 to 19) in 1967 on subsequent outcomes in 1975. These eight years are important because it means that teens in 1967 will for the most part have had the opportunity to enter what is generally termed the adult labor market of the 25 and over age group. This latter age group marks the point where the youthful maturation process apparently ends and any residual effect of the teenage years might genuinely be expected to represent long-run consequences. The sample is limited to those teens who were not enrolled in school during 1967 and who were employed in 1975. The analysis is intended to focus on that group for whom unemployment represents a significant interruption in their employment experience rather than a secondary consideration to one's education.

### ESTIMATION MODEL

Drawing on existing empirical work and the implications of the previous discussion, an individual's hourly wage ( $W$ ) on his current job is posited to be a function of (1) the quantity and quality of human capital investment ( $HC$ ), (2) geographic differences in the cost of living ( $CL$ ), (3) teenage labor market experience ( $TLME$ ), and (4) a variety of control variables representing individual differences in attitudes and motivation as well as market imperfections ( $C$ ).

Measures of ( $HC$ ) include high school degree status ( $HSD$ ), years of education ( $ED$ ), vocational training since leaving high school ( $T$ ), health status ( $HLTH$ ), prior mobility ( $M$ ), general labor market experience ( $EXP$ ), and company tenure ( $TEN$ ). ( $T$ ) measures the total training (in months) an individual has completed since leaving high school. ( $EXP$ ) is simply the number of years since the individual last attended high school. Health status and mobility are dummy variables coded, respectively, one if a respondent's health limits his work and if in 1975 the individual lived in the same state as he did in 1966, zero otherwise.

Graphic region ( $REG$ ) will serve to pick up differences in prevailing money wage rates. ( $REG$ ) is coded one if the individual lives in the

South, zero otherwise. Included among the control variables will be race ( $R$ ), area unemployment rate ( $UER$ ), veteran status ( $VET$ ), marital status ( $MAR$ ), and number of dependents ( $DEP$ ). Also included to control for differences in initiative is an 11-point version of the Rotter scale ( $IE$ ). The measure is widely used by industrial psychologists and has recently been demonstrated to be a useful predictor of labor market outcomes.<sup>8</sup> The Rotter scale bears the principal burden of controlling for individual differences in motivation and "tastes" which may contribute to both  $TLME$  and subsequent wages. To the extent these variables are omitted from our model, the effect of teenage unemployment will be overstated.

The influence of teenage labor market experience will be reflected in the following variables: spells of unemployment in 1967 ( $NSP_{67}$ ) and duration (weeks) of unemployment in 1967 ( $DUR_{67}$ ). ( $DUR_{67}$ )<sup>2</sup> is included to control for the possibility that the relationship between ( $W$ ) and ( $DUR_{67}$ ) may be nonlinear. A priori it is difficult to know whether the effect may be constantly increased or tend to diminish with duration.  $NSP_{67}$  is a series of dummy variables indicating 1 spell ( $ISP_{67}$ ), 2 spells ( $2SP_{67}$ ), or 3 or more spells ( $3SP_{67}$ ) of unemployment. To test the hypothesis that blacks suffer greater harm from these experiences than do white youth ( $R * NSP_{67}$ ) and ( $R * DUR_{67}$ ) are also included. Because of space limitations, the hypotheses with respect to all variables in the model will simply be summarized. However, any results which conflict significantly with the stated hypotheses will be discussed in the following section.

The estimation model and hypotheses would be as follows:

$$(1) \quad W = a_1 + a_2(HSD) + a_3(ED) + a_4(T) + a_5(HLTH) + a_6(M) \\ + a_7(EXP) + a_8(TEN) + a_9(REG) + a_{10}(R) \\ + a_{11}(UER) + a_{12}(VET) + a_{13}(MAR) + a_{14}(DEP) \\ + a_{15}(IE) + a_{16}(DUR_{67}) + a_{17}(DUR_{67})^2 \\ + \sum_{i=18}^{20} a_i(NSP_{67}) + a_{21}(R * DUR_{67}) \\ + \sum_{i=22}^{24} a_i(R * NSP_{67}) + e \\ a_{2-4}, a_6, a_7, a_8, a_{13}, a_{14} > 0; a_5, a_{9-12}, a_{15}, a_{16}, a_{17-24} < 0; \\ a_{17}, a_{18-20} = ?$$

Descriptive statistics for each variable are reported in Table 1.

<sup>8</sup> Paul J. Andrisani, "Internal-External Attitudes, Personal Initiative and the Labor Market Experience of Black and White Men," *Journal of Human Resources* 12 (Summer 1977), pp. 309-28. Each of the 11 points has four possible values, creating a maximum of 44. Higher scores represent more "external" individuals who would be expected to show less initiative in the labor market.

TABLE 1  
 Descriptive Statistics of Selected Variables  
 N = 187

	Mean	Standard Deviation	Symbol
Hourly wage (1975)	\$ 4.72	2.56	<i>W</i>
Marital status 1975 (1 = married)	.732	.443	<i>MAR</i>
Number of dependents	1.37	1.16	<i>DEP</i>
Veteran status (1 = yes)	.269	.434	<i>VET</i>
High school degree (1 = yes)	.572	.498	<i>HSD</i>
Highest grade completed	10.96	2.18	<i>ED</i>
Health limits work (1 = yes)	.058	.235	<i>HLTH</i>
Vocational training completed (months)	5.52	9.73	<i>T</i>
Region (1 = South)	.502	.50	<i>REG</i>
1975 unemployment rate, local labor market (X 10)	89.79	25.38	<i>UER</i>
Reside in same state 1975 as 1966 (1 = yes)	.727	.446	<i>M</i>
Race (1 = nonwhite)	.66	.47	<i>R</i>
Rotter score	23.10	4.34	<i>IE</i>
Experience (years)	9.14	2.26	<i>EXP</i>
Tenure on current job (months)	45.97	38.67	<i>TEN</i>
Weeks unemployed in 1967	2.42	6.38	<i>DUR<sub>67</sub></i>
1 spell of unemployment	.18	.38	<i>1SP<sub>67</sub></i>
2 spells of unemployment	.075	.26	<i>2SP<sub>67</sub></i>
3 or more spells of unemployment	.032	.176	<i>MRS<sub>67</sub></i>

## Discussion of Results

The results reported in Table 2 are the ordinary least squares regression estimates from equation (1). The results are generally consistent with the expected signs, though not all are significant at conventional levels. Excluding for the moment the influence of teenage labor market experience, these results indicate that marriage, dependent responsibilities, education and high school graduation, good health, training, company tenure, mobility, initiative, and general labor market experience all pay off in higher wages. Similarly, blacks and individuals living in high unemployment areas or the South can expect lower wages, *ceteris parabis*.

In evaluating the *TLME* results, it is important to remember that the total effect of duration cannot be understood without simultaneously considering the effect of *spells*, since to experience duration one will necessarily incur at least one spell of unemployment. Given the negative sign on the *duration* variable and the positive sign on the *spells* variable, unemployment may have a net positive effect if the duration is not too long. In other words, it is not the number of spells of unemployment that are harmful, but rather the total duration. More importantly, because blacks

TABLE 2  
Regression Results of Equation (1) (*t*-values in parentheses)

Dependent Variable:	Hourly Wage Rate ( <i>W</i> )
Independent Variables:	[( <i>W</i> ) in cents per hour]
Constant	444.00**
Marital status ( <i>MAR</i> )	20.32 (.472)
Dependents ( <i>DEP</i> )	10.05 (.60)
Veteran ( <i>VET</i> )	- 4.31 (.10)
High school degree ( <i>HSD</i> )	.56.8 (1.05)
Health ( <i>HLTH</i> )	-20.85 (.285)
Training ( <i>T</i> )	5.19*** (2.65)
Region ( <i>REG</i> )	- 138.59 (3.52)
Area unemployment rate ( <i>UER</i> )	- 1.241* (.701)
Mobility ( <i>M</i> )	-8.76 (.22)
Education (years) ( <i>ED</i> )	10.72 (.84)
Race ( <i>R</i> )	+43.23 (1.05)
Rotter ( <i>IE</i> )	- 6.85* (1.68)
Experience ( <i>EXP</i> )	10.74 (1.19)
Company tenure ( <i>TEN</i> )	.379 (.80)
<i>DUR</i> <sub>.7</sub>	- 22.03* (1.81)
<i>DUR</i> <sub>.67</sub> <sup>2</sup>	.402 (1.42)
<i>R</i> * <i>DUR</i> <sub>.67</sub>	+ 8.28 (1.47)
Spells	167.25*** (2.47)
<i>R</i> <sup>2</sup> = .219	
N = 187	
SEE = 226.54	

\* = significant at .10 level.

\*\* = significant at .05 level.

\*\*\* = significant at .01 level.

suffer disproportionately from an additional week of unemployment, when the employment experience is evaluated by race, blacks are the only group to bear any long-run costs from teenage unemployment.

One of the hypotheses under investigation was the notion that numerous spells in and of themselves would have negative consequences for the individual. This is one of the implicit assumptions of dual labor market theory and underpins much of the current interest in high turnover rates among youth. However, these data do not support that concern.<sup>9</sup> Therefore, the NSP variables were collapsed into one dummy variable (spells) taking the value of 1.0 if the individual had any spells of unemployment in 1967 and zero otherwise. This latter conclusion has been incorporated into the results reported in Table 2.

The hypothesis with respect to the differential effect for blacks and whites receives only modest support. The ( $R*NSP$ ) variables were highly insignificant and were dropped from the model. ( $R*DUR$ ), while not significant by conventional standards, is in the expected direction and the coefficient is nearly one-and-one-half times its standard error. The variable is left in the model because the magnitude of the coefficient is such that it should not be ignored simply because the statistical significance is marginal.

The extent to which these results describe the magnitude of the problem of teenage unemployment can be seen in a comparison of the experience of three groups: the average youth, the average unemployd youth, and the long-term unemployed youth. As only a minority of teenagers experience *any* unemployment (28.7 percent) the effect on the teenage group as a whole is quite small. For whites the effect is slightly positive (3.7 percent), while blacks average nearly 3 percent *lower* subsequent wages. Second, for the average unemployed youth the experience remains positive for whites but negative for blacks. The average duration of unemployment for blacks and whites is 10.6 weeks and 7.2 weeks, respectively, for those experiencing *any* unemployment. For whites, these levels represent a 17 percent increase in wages, while for blacks the effect is to reduce their wages nearly 4 percent below the average. If whites did not benefit disproportionately from this duration (if  $a_{21} = 0$ ), their wage effect would be a much more modest 5.7 percent. The subsequent effect on wages for the long-term unemployed (15 weeks) follows a similar pattern. Only black youth bear a substantial long-run cost. The

<sup>9</sup> With separate dummy variables representing 1, 2, or more spells of unemployment (NSP), we tested  $H_0: a_{13} = a_{19} = a_{20}$  against  $H_1: a_{13} \neq a_{19} \neq a_{20}$ . An F-test failed to reject  $H_0$  at conventional levels of significance. A more accurate and stringent test would have been  $H_0: a_{13} = a_{19} = a_{20}$  vs.  $H_1: a_{13} < a_{19} < a_{20}$ , but it was not required given these results.



predicted effect is on the order of  $-14$  percent for blacks and  $+10$  percent for whites.

When combined with results not reported here, the emerging pattern suggests that today's long-term unemployed black teens are tomorrow's working poor. Where duration of unemployment in 1975 is the dependent variable, those with high levels of teen unemployment incur fewer weeks of subsequent unemployment. This is consistent with the pattern of unemployment in the secondary labor market where jobs are low paying but plentiful. On the other hand, for white youth this relationship would simply reinforce wage results which suggest that teenage unemployment is a generally positive experience for this group.

### Conclusion

Taken together, these results suggest that for the average out-of-school teenager, the subsequent effects of his labor market experience during those years may not require an active policy response. Moreover, for white teens, the experience is essentially a positive one in which the apparent benefits of job search and job switching decline only slightly with duration. Black youths, on the other hand, appear to have a quite different experience and suffer a significant loss in future wages as a result of long-term unemployment.

Clearly, these results are only a first step in defining the magnitude of the problem represented by teenage unemployment. Particularly important issues requiring attention in the future are the identification of the process by which *TLME* influences subsequent experience and the isolation of motivational and quality differences which, because they are correlated with both *TLME* and later success, may overstate the true effect of *TLME*.

# Youth Labor Markets, Enrollments, and Minimum Wages

J. PETER MATTILA  
*Iowa State University*

A growing body of literature suggests that minimum wage legislation has adversely affected employment opportunities of young persons. Recent papers by Gramlich, Mincer, Ragan, and Welch, to name just a few, make it clear that higher minimum wage rates have reduced employment and may have contributed to the extremely high unemployment which young persons have experienced in recent years.<sup>1</sup>

Critics of minimum wage legislation point out that firms may not be able to afford to hire inexperienced, unskilled teenagers because their productivity is too low relative to their cost. And critics stress that high legislated minimums reduce any incentive that firms might have to invest in training youths.

## Alternatives Available to Displaced Youths

It is less clear as to what happens to these people after minimum wages have displaced them from jobs. There are several possible adjustments which we can identify. First, youths may remain unemployed and actively search or passively wait for job vacancies in the minimum wage industries to occur (due to labor turnover). Presumably, this strategy is feasible only so long as income grants from parents and government assistance programs subsidize it. Second, so long as there are firms and industries exempt from a minimum wage law (as there are in the U.S.), displaced youths may flow to these "uncovered" industries. As the supply of applicants increases, relative wages in the "uncovered" sector should

---

Author's address: Department of Economics, Iowa State University, Ames, Iowa 50011.

<sup>1</sup> This is not to imply that there is unanimity in the profession. There are major disagreements as to the size of the various effects and their welfare implications. Edward M. Gramlich, "Impact of Minimum Wages on Other Wages, Employment and Family Income," *Brookings Papers on Economic Activity* (2:1976), pp. 409-51; Jacob Mincer, "Unemployment Effects of Minimum Wages," *Journal of Political Economy* 84 (August 1976), Pt. 2, pp. S87-S104; John F. Ragan, Jr., "Minimum Wages and the Youth Labor Market," *Review of Economics and Statistics* 59 (May 1977), pp. 129-36; Finis Welch, "Minimum Wage Legislation in the United States," *Economic Inquiry* 12 (September 1974), pp. 285-318.

fall, inducing firms to expand employment. However, the lower wages may discourage some youths from wanting to work. Third, when confronted by this unpleasant choice of unemployment or low-wage jobs, some young people may reject both and withdraw from conventional labor force activity. One important alternative is to remain in school and to continue one's education.

Displaced youths have incentives to return to school. In a human capital model, this investment should raise the youth's productivity so as to reduce the minimum wage barrier to employment. In this sense, the adverse effects of minimum wages may stimulate their own antidote. To advocates of the screening hypothesis, continued education helps the youth "signal" employers that she/he is a good prospect, has the motivation to complete tasks, and is reliable. Unlike the human capital model, however, this education does not alter productivity but simply moves the individual past others in the queue for available jobs. Although their welfare implications differ, both the human capital and the screening models suggest that young people may be motivated to remain in school when displaced from employment. This paper presents evidence which suggests that displaced youths do in fact continue their schooling.

### Empirical Framework

Very few studies have investigated the tendency for youths to withdraw from the labor force as a result of minimums. Mincer makes the most thorough attempt. Essentially he found, using quarterly data 1954-68, that the labor force withdrawal effect is almost as large as the disemployment effect. At most, one-third of those disemployed appear to remain unemployed while the rest withdraw from the labor force. Mincer goes on to speculate (for all age groups) that "Incentives to drop out of the labor market are presumably increased by availabilities of alternatives such as retirement, welfare, and *school enrollment*."<sup>2</sup> Mincer did not have data by school enrollment so could not pursue this hypothesis.

One relatively good body of data exists which does allow us to explore the impact of minimum wages on schooling and the labor market. This is the survey of school enrollment which has been conducted as part of the Current Population Survey each October. This survey provides us with a consistent time series 1947-76 for each of six sex and age groups (16-17, 18-19, 20-24).<sup>3</sup> The major shortcoming is that these

<sup>2</sup> Mincer, p. S88 (*italics added*).

<sup>3</sup> U.S. Bureau of the Census, *Current Population Reports*, Ser. P-20 (1947-1976) and Ser. P-50 (1947-1958); U.S. Bureau of Labor Statistics (BLS) *Special Labor Force Reports*, (1959-1976).

school enrollment estimates are only available for October of each year. This makes it impossible to exploit the information which we have on the seasonal timing of minimum wage increases, and it also reduces our sample size to the 30 observations available over these three decades.

On the other hand, there are some definite advantages to this data set. First, this sample spans nine general increases in the minimum wage rate in the post-World War II period compared to five in the Mincer paper, thus providing variation in this crucial explanatory variable which may more than offset the lack of quarterly variation. Second, the longer time period allows for more secular and cyclical variation in enrollment ratios which may help to offset the lack of quarterly variation. If we were to obtain data on enrollments in January 1977 to supplement the available data on October 1976 enrollments, would we double our *independent* information? To the extent that students enroll for school years rather than school months or quarters, quarterly data may not add as much independent information as would an equivalent number of additional October observations. This is not to say that we wouldn't prefer having quarterly data 1947-76, but that its absence may not be as costly as it might seem. One additional advantage of our data set is that we can also disaggregate enrollment status by labor force status 1947-76, allowing us to test whether minimum wages displace only the nonenrolled from jobs or whether the enrolled are also displaced. Similar tests of the labor force withdrawal effect can be performed.

Our estimation approach closely follows Mincer's. That is, we estimate the following equation for each demographic group:

$$(1) \quad Y = f(T, T^2, U, DRAFT, GI, MW, MW_{-1})$$

The dependent variables ( $Y$ ) are ratios of various enrollment/labor force/armed forces categories to population (including the armed forces). The independent variables include time ( $T$ ) and the unemployment rate of males age 45-54 ( $U$ ). Time is entered nonlinearly in order to control for changing trends in enrollment and labor force status. Minimum wage ( $MW$ ) is the ratio of the minimum wage to average hourly earnings weighted by coverage.<sup>4</sup> Because Mincer found evidence of a lagged response, we include  $MW$  lagged one year as well as current  $MW$ .

Enrollment and labor force status of men 18-19 and 20-24 were affected by the draft and GI Bill educational benefits. The ratio of all men inducted (but not voluntarily enlisted) into the armed forces to

<sup>4</sup> U.S. BLS, *Youth Unemployment and Minimum Wages*, Bull. 1657 (1970), pp. 12-13.

the male population age 18–29 (*DRAFT*) provides an exogenous measure of draft pressure on young men. Unlike Mincer, we treat the proportion of men in the armed forces as endogenous and estimate the impact of higher minimum wages upon armed forces enlistments. Because we are particularly interested in school enrollment, we also have attempted to control for the impact of the GI Bill. Our variable (*GI*) is computed as the ratio of eligible veterans to population within each age group weighted by a measure of the attractiveness of benefits.

### Estimates of Minimum Wage Effects

Our first step is to verify that there has been an employment displacement effect 1947–76 and to test whether there has been a labor force withdrawal effect. If minimum wage increases have had these effects, we expect them to be most pronounced among those young people who are not enrolled in school and who otherwise would be employed.

Rows 6 and 7 of Table 1 present our estimates of the elasticities of response of the not-enrolled labor force and employed to minimum wages.<sup>5</sup> In all cases our elasticities are negative and (with the exception of women 20–24) range from  $-.16$  to  $-.50$ . F-statistics are given in parentheses and are significant seven out of twelve times. Our elasticities are similar in magnitude to those estimated by Mincer. Like Mincer, we find that the labor force withdrawal effect is almost as large as the employment displacement effect. Hence minimum wages do increase unemployment among those not enrolled, although the size of this effect is not large relative to the displacement effect.

What happens to these displaced youths? Rows 1, 8, and 9 of Table 1 suggest some answers. There is little evidence that they leave the labor force for nonschool activities. Only one out of six of these elasticities is positive. Nor do they appear to enter the armed forces after being displaced. The elasticity for 20–24-year-old males is positive but is not close to standard levels of statistical significance.

Rather, as seen in row 1 of Table 1, it appears that they return to school. School enrollments do appear to increase as minimum wages rise. All six elasticities are positive and one-half are significant. Although the elasticity for youngsters age 16–17 is quite small (.065), we must remember that the vast majority of this age group has always been in school and relatively few of them have been employed. One puzzling

---

<sup>5</sup> The regression equations, summary statistics, and construction of the control variables are reported in the longer version of this paper which is available from the author.

TABLE 1  
Elasticity of Response to Minimum Wage Increase  
October 1947–October 1976

Dependent Variable as a Fraction of Population	16–17		18–19		20–24	
	Male	Female	Male	Female	Male	Female
Enrolled in School:						
1. Total	+ .067 (3.49)*	+ .064 (2.71)	+ .310 (3.64)*	+ .294 (5.18)*	+ .264 (1.40)	+ .301 (2.42)
2. Labor force	+ .024 (.24)	+ .055 (.07)	+ .328 (2.03)	+ .315 (1.69)	+ .488 (5.44)*	+ .362 (1.44)
3. Employed	– .009 (.08)	+ .037 (.11)	+ .310 (1.85)	+ .238 (1.00)	+ .419 (4.35)*	+ .278 (1.04)
4. Not in labor force	+ .092 (1.19)	+ .070 (.53)	+ .303 (2.39)	+ .283 (2.59)	+ .068 (.14)	+ .264 (.59)
Not Enrolled:						
5. Total	– .257 (2.73)	– .269 (2.77)	– .196 (4.01)*	– .138 (5.16)*	– .177 (5.41)*	– .037 (2.42)
6. Labor force	– .322 (3.34)	– .393 (4.07)*	– .209 (3.79)*	– .163 (3.82)*	– .210 (7.82)*	– .009 (.90)
7. Employed	– .233 (1.71)	– .504 (4.84)*	– .212 (4.36)*	– .169 (3.25)*	– .228 (11.97)*	– .001 (.28)
8. Not in labor force	– .066 (.18)	– .165 (.70)	– .053 (.44)	– .098 (1.19)	+ .329 (1.01)	– .068 (2.78)
9. Armed forces			– .248 (.95)		+ .285 (.66)	

Note: F-Statistics in parentheses.

\* Significant at .05 level;  $F_{7, 24}^{.05} = 3.40$  for females and men 16-17,  $F_{2, 22}^{.05} = 3.44$  for men 18-19 and 20-24.

result is the positive enrollment elasticity for women 20–24. Although it is not quite statistically significant, it is still surprisingly large, given that we found virtually no employment displacement effect.

As displaced youths enter schools because of minimum wages, do they continue to look for jobs? Rows 2 and 3 of Table 1 suggest that many do, at least among the older youths. In fact, rather than displacement and withdrawal effects, we found that rising minimum wages tend to increase employment and labor force participation of the enrolled. Eleven out of 12 elasticities are positive in clear contrast to the 12 negative elasticities which we obtained for not-enrolled youths.

Our interpretation of this interesting result is that a given set of enrolled youths may be adversely affected by a minimum wage increase, but that this impact is dominated by the net inflow of youths into

school who continue to work or seek work. There are a number of reasons for believing that enrolled youths may be able to find and accept jobs at the same time that not-enrolled youths are being displaced. First, retail trade, service, and finance are the industries having the largest percentage of jobs exempt from the minimum wage law.<sup>6</sup> Since over 72 percent of male and 89 percent of female students age 16-24 work in these industries, it appears that they have access to some of these exempt jobs.<sup>7</sup> Second, the Fair Labor Standards Act includes provisions that allow certain students to work for 15 percent less than the regular minimum wage. These provisions were probably of limited impact during the 1960s but were liberalized in the 1974 amendments.<sup>8</sup> Third, there is reason to believe that students are more willing than nonstudents to accept subminimum wages. In May 1977, 18 percent of part-time workers aged 16-24 reported earnings less than \$2.25 per hour compared to only 3 percent of full-time workers. (The minimum wage was \$2.30.) Since most (83 percent in October 1976) students 16-24 work part time, it is likely that some students are able to get subminimum wage jobs and, most important, are willing to accept these jobs.<sup>9</sup>

Although we did not anticipate observing a positive impact of minimum wages upon the enrolled labor force and employed, these results seem quite reasonable upon reflection. One implication is that minimum wage studies that combine students and nonstudents are probably underestimating the size of the disemployment and labor force withdrawal effects. That is, those studies may not count, as displaced, youths who are forced out of full-time jobs but who return to school and take part-time jobs.

Further analysis of rows 2 and 3 of Table 1 indicate that minimum wages have increased unemployment among students on net. That is, minimum wage increases appear to have expanded the enrolled labor force more than they have expanded enrolled employment (for six age/sex groups out of six). The net effect has been to raise unemployment. Hence minimum wages may have increased unemployment in two ways, by displacing youths who directly take up the search for

---

<sup>6</sup> See U.S. Department of Labor, *Minimum Wage and Maximum Hours Standards Under the Fair Labor Standards Act* (1977 and earlier issues).

<sup>7</sup> U.S. BLS, *Special Labor Force Report*, No. 200, p. A-15.

<sup>8</sup> U.S. BLS, *Youth Unemployment and Minimum Wages*, pp. 107-15. Peyton Elder, "The 1974 Amendments to the Federal Minimum Wage Law," *Monthly Labor Review* 97 (July 1974), p. 36.

<sup>9</sup> Data are from unpublished tabulations supplied by Paul Flaim of the BLS and from U.S. BLS, *Special Labor Force Report*, No. 200, p. A-11.

full-time jobs and by displacing youths who return to school and then look for part-time jobs.

Another interesting observation from Table 1 is that minimum wages raise the enrolled labor force more for older youths than for 16–17-year-olds. Comparing rows 2 and 4, we conclude that when displaced, 16–17-year-olds are more likely to remain out of the labor force while enrolled than to look for work. The opposite is true for persons aged 20–24. These results were not unexpected in that younger persons can rely more upon financial support from parents than can older youths.

### **Implications and Directions of Further Research**

We find evidence that displaced youths do attempt to “beat the system” by raising their productivity through further education. To the extent that the increased education actually does raise their productivity, these people will eventually become more employable and the law will no longer be a barrier. Although minimum wage laws still create distortions and impose economic costs, the availability of education appears to provide a loophole that helps to minimize these costs. Of course, if the additional education does not raise productivity (or only has the screening effect mentioned earlier in the paper), then one might argue that the distortion costs are even larger.

We are in the process of extending this research. Of most interest, we are attempting to determine whether there are response differences between whites and nonwhites. In addition, we are analyzing other bodies of data in order to determine whether we can replicate our results as reported in this paper. We expect to test the sensitivity of our results to alternative specifications. In particular, we hope to improve upon our control for the payoff to schooling by constructing an explicit proxy variable rather than simply relying upon the trend and cycle variables utilized in this paper.



# Age and Reactions to Unemployment: An Empirical Examination of Job Search Methods and Postunemployment Earnings

DONALD E. PURSELL  
WILLIAM D. TORRENCE  
*University of Nebraska, Lincoln*

This study examines the duration and postunemployment earnings of persons unemployed in October 1976. The study traces their job search history through a period of unemployment to subsequent re-employment. The study has been stratified into a group of older workers, over 45, and a group of younger workers, 45 and under, for the purpose of comparing unemployment experiences. In particular, this study examines the duration of unemployment and job search methods of the older and younger employees. The study also examines post-unemployment earnings of these two groups. The objective of the study is to determine if there are significant job search and reemployment patterns peculiar to the older or younger unemployed worker.

The study is divided into three components for convenience in analysis. Part I reviews the sample base while Part II discusses the statistical analysis and tests used in the study. Part III reports the findings and is followed by a section of conclusions and policy recommendations.

## **I. Sample**

This sample includes approximately 2,300 persons seeking unemployment insurance during October 1976. Of the original 2,300 individuals, 2,190 presented usable sets of information. This group was further stratified into two subsets, one over 45 ( $N = 577$ ) and a second category 45 or under ( $N = 1,613$ ). The skills of these persons ranged from unskilled laborers to skilled artisans and professionals. Approximately 40 percent of the sample were male, the balance female. Information was collected from the application for unemployment insurance. These data were supplemented by questionnaire information which was merged into a single file. In addition to the usual unemployment insur-

---

Authors' address: 204 Business Administration College, Bureau of Business Research, University of Nebraska, Lincoln, Neb. 68588.

ance and questionnaire data, information on earnings was available quarterly from 1975 through 1977.<sup>1</sup> Unemployment during the five-quarter period, October 1976 through 1977, averaged 4.1 percent with rates in some major labor markets as low as 3.5 percent. Chronic and persistent unemployment was not a problem facing the sample population.

## II. Statistical Analysis

The data files contain a substantial quantity of information on each individual. In order to make maximum use of this information, two equations were used to estimate the duration of unemployment and postunemployment earnings of the two groups. The equations test for differences in job search patterns and postunemployment earnings between the younger and older groups. The equations may be summarized as follows:

$$D = f(A)$$

$$EARN = f(A)$$

where  $D$  represents benefit weeks accepted (duration of unemployment),  $EARN$  represents peak quarter earnings in the five quarters following unemployment,<sup>2</sup>  $A$  represents a set of economic, demographic, and social factors hypothesized to influence earnings and includes such diverse factors as the reservation wage or price asked by the unemployed, union membership, spouse earnings, job search intensity, and several other factors (see Table 1). Separate equations were run for those 45 and under and for the subsample over 45. Regression analysis was used to estimate the coefficients. While many of the coefficients showed negligible age differences between the samples, there were important differences between the groups which provides a sound basis for comparing unemployment and job search patterns between older and younger workers.

## III. Findings

### DURATION OF UNEMPLOYMENT, RESULTS

Persons over 45 were unemployed approximately one and one-half weeks longer than their younger colleagues (9.6 weeks compared with 8.0 weeks). The regression coefficients in Table 1 indicate that union

<sup>1</sup> The file was restricted to persons eligible for unemployment insurance.

<sup>2</sup> Some workers would have a maximum of five quarters with earnings, others less than five if unemployed for a longer period.

TABLE 1  
Regression Coefficients

Variables	Duration of Unemployment		Postunemployment Earnings	
	45 or Under	Over 45	45 or Under	Over 45
<i>UNION</i>	-1.8157*** (0.2223)	-1.0383*** (0.3973)	-126.08** (56.52)	-120.34 (87.92)
<i>RACE</i>	0.2641 (0.1734)	0.3606 (0.2277)	-7.03 (5.13)	11.41 (16.92)
<i>WAGES</i>	-0.00030*** (0.0001)	-0.00072*** (0.00019)	000.00 <sup>a</sup> (00.00)	000.00 <sup>a</sup> (00.00)
<i>TKW</i>	0.0000 <sup>a</sup> (0.000)	0.0000 <sup>a</sup> (0.000)	-18.62*** (6.23)	-35.10*** (9.21)
<i>NSM</i>	-0.0248 (.0229)	0.0761** (0.0347)	11.75** (5.70)	0.48 (7.68)
<i>SP</i>	-0.0022 (0.2830)	-0.3422 (0.5737)	-161.22** (70.47)	-191.52 (126.16)
<i>SPEM</i>	-0.2212 (0.2784)	-0.7795 (0.4830)	359.28*** (68.87)	99.91 (106.57)
<i>SP\$\$</i>	0.0044** (0.0020)	-0.0031 (0.0038)	-0.88 (0.50)	0.05 (0.83)
<i>DEP</i>	0.0557 (0.0720)	-0.0049 (0.1131)	31.66* (17.93)	10.33 (24.91)
<i>Age</i>	0.0106 (0.0858)	0.2033* (0.1206)	14.54 (21.39)	111.11*** (27.34)
<i>Mfg</i>	1.2179** (0.4830)	0.6724 (0.9281)	199.88* (120.62)	-192.32 (204.40)
<i>CON</i>	-0.7548 (0.8092)	-7.426*** (1.584)	-228.18 (201.81)	-1281.40*** (351.69)
<i>WKB</i>	0.0891*** (0.0156)	0.0969*** (0.0268)	66.91** (30.54)	65.78 (45.28)
<i>W<sub>r</sub></i>	0.6399* (0.3662)	-0.3429 (0.6623)	-342.80** (91.02)	-557.91*** (144.03)
<i>Qual</i>	-0.0668 (0.1854)	-0.1372 (0.2755)	-33.84 (42.19)	-23.41 (30.01)
<i>SER</i>	-0.9536* (0.5596)	-0.2498 (1.0043)	95.27 (139.68)	203.23 (221.10)
<i>Hours</i>	-0.0182 (0.1998)	0.7368 (0.4668)	18.42 (34.01)	139.15** (58.68)
<i>DIST</i>	1.0254*** (0.3455)	1.1006*** (0.5205)	-38.10 (86.40)	-91.19 (115.06)
<i>RECAL</i>	-0.4661 (0.4092)	0.3663 (0.8450)	77.37 (122.77)	-137.80 (186.10)
Constant	5.3033	14.9827	-1710.02	1032.05
$\bar{R}^2$	0.0748	0.1368	0.286	0.366
F	8.2368	6.073	36.97	19.45
Std. error	7.7072	8.4206	1.922	1.855
(N - 1)	1612.0000	576.000	1612.000	576.000

Levels of significance: \*\*\* significant at the 0.01 level or beyond; \*\* significant at the 0.05 level or beyond; \* significant at the 0.10 level or beyond.

Definition of Variables: *UNION*, union member, 1 = yes, 2 = no; *RACE*, 1 = white, 2 = nonwhite. *NSM*, number of search methods; *SP*, spouse, 1 = spouse present, 2 = spouse not present or no spouse; *WAGES*, earnings prior to unemployment, by quarter; *SPEM*, spouse employment status, 1 = spouse employed, 2 = spouse not employed or no spouse; *SP\$\$*, spouse earnings; *DEP*, number of dependents; *Age*, at time of unemployment; *WKB*, weekly benefits, UI;  $W_r/W_p$ , reservation wage to potential wage; *Qual*, number of jobs applicants felt qualified for; *Hours*, number of hours per week spent searching for employment; *DIST*, distance in miles of search; *RECAL*, recall, 1 = yes, 2 = not on recall; *Mfg*, industry when employed, 1 = manufacturing, 2 = nonmanufacturing; *CON*, 1 = construction, 2 = nonconstruction; *SER*, 1 = service, 2 = nonservice; *TKW*, number of weeks unemployment benefits accepted.

<sup>a</sup> Not estimated for this equation.

membership was a definite asset for the older worker.<sup>3</sup> All union members were unemployed longer than nonunion members, as the negative coefficient indicates. Union members over 45, however, had a briefer period of unemployment than union members 45 and under, 1 week versus 1.8 weeks (see Table 1). The union coefficient indicates that seniority provided quicker relief for the older worker. Unions in this sense provided security for the older, more experienced employee.

A union provided the older worker with some protection, but it was one of the few institutions which assisted the older employee in his job search. Job search patterns were markedly different between the older and younger unemployed. The person over 45 tended to apply directly to a prospective employer for a position as opposed to using many of the conventional job search institutions and techniques.

For instance, the older employee was less likely to check with employment service for vacancies. Younger workers tended to use the state employment service system far more intensively than did older workers.<sup>4</sup> The  $\chi^2$  statistic of 44.0 indicates a statistically significant difference between the younger and older groups in terms of using the employment service. Younger workers also asked friends and relatives about jobs far more frequently than did older workers. Younger workers responded to newspaper ads more readily than did older workers (Table 2).

The older workers' reluctance to use the state employment service as intensively as younger persons may be related to the apparent (real or imagined) discrimination against older workers at such offices. The older worker was relatively infrequently offered advice about his personal employment situation. Of the older workers in the sample, only 3 percent were offered counseling while approximately 18 percent were tested for training and job skills. For purposes of comparison, among workers 45 and under, 7 percent were offered job counseling and 33 percent were tested—rates twice as high as that prevailing for the older workers. These differences are statistically significant and reflect an apparent systematic bias upon the part of the employment service. Persons over 45 tended to suffer from a self-imposed limitation on their job search options. Advice, counseling, and testing are needed to open the older workers job search methods and ultimately their job opportunities. A persistent lack of counseling and testing of older workers only reinforces an older worker's perception of his limited employment opportunities.

---

<sup>3</sup> The coefficient of determination,  $\bar{R}^2$ , is relatively low, Table 1, 0.138 and 0.074, but acceptable for large behavioral samples. The signs of the regression coefficients are more important than the coefficients of determination.

<sup>4</sup> Chi-square test indicates significant differences in job search patterns between the two groups (Table 2).

TABLE 2  
Chi-Square Tests for Significant Differences in Job Search Methods  
Between the Younger Group and the Older Group

Job Search Procedures	Predominant Use By		$\chi^2$ Statistic
	45 or Under	Over 45	
Testing	X		13.3
Suggested courses	X		3.8
Apply directly to employer		X	25.3
Ask relatives about jobs where they worked	X		40.4
Ask relatives about jobs elsewhere	X		56.0
Ask friends about jobs where they worked	X		48.6
Ask friends about jobs elsewhere	X		58.0
Check with state employment service	X		44.0
Check with private employment agencies	X		8.0
Use newspaper ads	X		42.3
Use union hiring hall	No significant difference		1.5
Take civil service test or apply for state, local govt. job	X		16.4
Contact action community organi- zation for job search assistance, e.g., Urban League	No significant difference		3.3

*Note:* The  $\chi^2$  tests for significant difference in use indicates when one group proportionately used a job search method more heavily than the other group. Most  $\chi^2$  statistics are significant beyond the 0.01 level, critical values, 0.01 = 6.635, and 0.05 = 3.841.

The reservation wage ( $W_r$ ) is the asking price that the unemployed person is seeking. The reservation wage will likely bear some relationship to past earnings, as is not uncommon for an employee to seek an increase in pay when faced with searching for a job. The reservation wage coefficients in Table 1 were statistically inconclusive. Seeking a higher wage in the new position compared to the employee's last position seemed to have little impact upon the duration of unemployment (Table 1).<sup>5</sup>

#### POSTUNEMPLOYMENT EARNINGS, RESULTS

The data permitted tests to determine the influence of job search methods and other characteristics on postunemployment earnings. The sample was divided into a group of over 45 and one 45 and under. The results of job search methods on postunemployment earnings are summarized in Table 1.

<sup>5</sup> S. A. Lippman and J. J. McCall, "The Economics of Job Search," *Economic Inquiry* 14 (June 1976), pp. 155-89, and (September 1976), pp. 347-89; and R. G. Ehrenberg and R. L. Oaxaca "Unemployment Insurance, Duration of Unemployment and Subsequent Wage Gain," *American Economic Review* 76 (December 1976), pp. 765-66.

Union membership, which decreased the older workers length of unemployment, had little significant impact upon postunemployment earnings for the older worker. Construction employees over 45, however, earned far more following unemployment than did their younger colleagues. The construction coefficient indicates that older workers in the construction industry were likely to earn \$5,000 a year more after unemployment than older workers not in the construction industry. This was a far higher differential than younger construction employees faced. The differential for younger construction employees was less than \$1,000. The coefficient for older workers is highly statistically significant, while that for the younger workers is not significant.

Younger employees reported using more search methods than older employees and this difference did show up in terms of postunemployment earnings. There was no apparent advantage to the older worker in increasing his number of search methods, whereas an advantage was recorded for the younger worker. Each additional search method used by the younger worker resulted in an annual earnings boost of approximately \$50. This differential did not show up for the older worker and speculation would suggest that this may be due to a lack of use in search methods. The age coefficient was positive for both groups, indicating that older workers in both groups tended to have higher earnings following unemployment than younger workers in both groups. This difference may be attributable to experience.

There was no pattern regarding spouse employment and spouse earnings. For both groups, the briefer the period of unemployment, the higher postunemployment earnings—a not unexpected finding.

Finally, it should be noted that a high reservation wage cost the older employee more in lost earnings following unemployment than it cost the younger worker. The coefficients of Table 1 ( $W_r$ ) indicate that a 10 percent increase in asking wages (10 percent above earnings in the last position before unemployment) cost the older worker approximately \$2,200 a year ( $\$557 \times 4$ ) compared to \$1,400 a year ( $\$434 \times 4$ ) for the younger worker.

## Conclusions

The study discloses that older workers were counseled or tested significantly less often by employment agencies during their job search interval, that older workers used different job search procedures than younger workers, that unions were one of the few institutions which benefited the older union member worker during his search for employment, and that the reservation wage or the asking price, if raised above

previous earnings, cost the older worker more than it cost the younger worker, i.e., a raise was more costly for the older employee.

It bears repeating that older workers should be tested and counseled regarding their unemployment and job search situation as younger workers are counseled. Our survey reveals that the older worker had about 50 percent or one half the same chance of being counseled and tested during his period of unemployment as the younger worker had. The older worker needs to have the same attention and assistance given younger workers. Lack of assistance for the older worker only forces him/her into accepting suboptimal employment.

Perhaps because of the less frequent counseling and testing, the older worker had a noticeably different job search behavior. The older worker tended to apply directly to the employer for work. The older worker tended to rely far less upon the employment service, asking friends or relatives about positions, or answering newspaper ads than the younger unemployed individual. More testing and counseling upon the part of the employment service could perhaps overcome the older worker's reluctance to use these traditional job search methods and thereby broaden his or her job horizons.

Using the seniority procedure, unions were an institution which favored older union members. Older members were given preference, and in a case of construction employees, this preference translated into not only briefer periods of unemployment but considerably higher post-unemployment earnings. Finally, cognizance should be taken of the fact that if the older employee asked for a raise or a higher wage when unemployed and looking for work, this cost him more than it cost the younger employee. If the older worker requested a 10 percent improvement in his wage, i.e., a reservation wage 10 percent above what he was previously making, this cost the older worker \$2,200 annually once he returned to work. By way of comparison if the younger employee asked for the same 10 percent increase over previous earnings, his postunemployment earnings were adjusted downward annually by \$1,400.

Given these results, state employment service agencies should take note of the fact that older workers as well as younger workers require training and counseling when unemployed. This point needs to be reinforced among employment security personnel because stereotypes work against the older worker.<sup>6</sup>

---

<sup>6</sup> For one recent and apparently effective approach, see Anderson and Fine, "Older Workers and Client-Centered Placement Services," *Age and Work: Journal on Age, Work and Retirement* (Winter 1978), pp. 52-57; and U.S. Department of Labor, *Jobseeking Methods Used by American Workers*, BLS Bull. 1886 (Washington: 1975), p. 5.

Older workers were noticeably less flexible in their job search patterns. They tended to apply directly to the employer and to shy away from using institutions and persons in searching for employment. Employment service personnel are crucial to expanding job search patterns of older workers.

This examination of older worker search patterns implies that the dynamics of this segment of the labor market are impaired by institutional factors and the older workers' tendency to use less intensive job search procedures. Extension of the retirement age increases the urgency of restoring vitality to the older worker segment of the labor force and leads us to suggest the following procedural and policy changes. There is an urgent operational need to intensify Employment Security's service to older workers. Delivery of this service could be enhanced by a national directive requiring employment service assistance on a priority basis to bring the older worker into closer contact with the service. As the labor force ages, this need becomes increasingly pressing.



# Rural Female Labor Force Participation

CRIS HEATON

PHILIP MARTIN

*University of California, Davis*

## I. Introduction

Recent labor force expansions and persisting high unemployment rates have focused attention on the growing importance of women in the nation's labor supply. Since 1950, the labor force participation rate of females has risen from 33.9 to 48.0 percent. During the same period the proportion of males 16 and older in the labor force declined. When coupled with population increases, this rapid growth in female labor force participation resulted in a near doubling of the female labor force during the third quarter of this century. Today women comprise over 40 percent of the civilian labor force.

This aggregate trend toward rising female labor force participation masks variations in the labor force behavior of women living in different residential sectors. Although nonmetro and rural women have traditionally performed less market work than their urban counterparts, both the metro-nonmetro and the metro-rural gaps in female labor force participation rates are narrowing. Between 1960 and 1970, the labor force participation rate of nonmetro females rose substantially more, in both absolute and percentage terms, than that of urban women. Furthermore, with the exception of females living in the most rural areas, there was a positive correlation between the degree of rurality and the size of the participation rate increase during the period.

Coinciding with the most recent expansions in the labor force participation of nonmetro and rural females is an unusual shift in the distribution and flow of the national population. After remaining at a level of about 53 million persons for half a century, 1920-70, population growth in nonmetropolitan counties between 1970 and 1976 increased both the number and percentage of people living in counties with populations of less than 50,000. Today, over 67 million persons, nearly one in three Americans, have nonmetro residences.

---

Authors' address: Department of Agricultural Economics, University of California, Davis, Davis, Calif. 95616.

Given these three factors: (1) the growing importance of women in the labor force; (2) the rising labor force participation of nonmetro and rural females; and, (3) the renewed population growth in nonmetro and rural areas, it is apparent that the potential exists for further expansions of the female labor force in both nonmetro and rural areas, making an understanding of the participation behavior of women living in these areas vital for comprehending current rural manpower developments and for designing effective policies to deal with continuing rural labor problems.

## II. Objectives and Methods

This paper explores the determinants of nonmetro and rural female labor force participation via an econometric analysis of cross-sectional data from the 1970 Census of the Population. Specific issues investigated are: (1) whether, and to what extent, the explanatory power of the cross-sectional model differs across geographic cohorts; and, (2) whether the relative influence of a particular variable, or set of variables, differs either between, or among, females living in metro and nonmetro areas.

To examine these differences, the 3,097 United States counties are arrayed along a ten-way rural-urban spectrum which (presumably) reflects inter-county differences in employment density and transportation networks, as well as tastes for and availability of (certain types of) market work, e.g., nonmetro counties with no urban residents tend to have few administrative, clerical, or manufacturing jobs. (See Appendix A for a more complete description of this classification scheme.)

The cross-sectional regression model employed in this research to explore the determinants of labor force participation among married women is adapted from Mincer (1962), Cain (1966), and Bowen and Finegan (1969). The labor force participation rate for married women, 16 years old and older, with husband present (*LFPRMW*) is regressed on: (1) mean earnings of employed females 16 and over in 1969 (*EF*); (2) mean earnings of employed males 16 and over in 1969 (*EM*); (3) the total civilian unemployment rate (*TUNEMP*); (4) the percentage of females 26 years old and over that graduated from high school (*EDF*); (5) the percentage of county employment in sales, clerical, operative (except transport), and private household occupations (*INDMX*); (6) the percentage of nonwhite population (*NWPOP*); (7) the growth in total county employment between 1960 to 1970 (*CHEMP*); (8) mean nonemployment income of families (*NEIFAM*); and, (9) the percentage of married women 16 years old and older with husband present and children under the age of six (*CLTSXM*).

The model

$$\begin{aligned} LFPRMW = & b_0 + b_1EF - b_2EM - b_3TUNEMP + b_4EDF \\ & + b_5INDMX + b_6NWPOP + b_7CHEMP \\ & - b_8NEIFAM - b_9CLTSMX \end{aligned}$$

is fitted to county-level data for (1) all counties together; (2) the two subgroups of metro and nonmetro counties; and, (3) each of the ten county classes. Although the resulting coefficients may not accurately reflect the influence of a particular independent variable because of measurement problems (e.g., education), a *comparison* of coefficients is meaningful unless measurement errors also vary with rurality.

The heterogeneity of single women, a group which includes those never married, separated, widowed, and divorced, has inhibited the development of economic models to explain single females' labor force behavior. However, since two single women of labor force age exist for every three married women, an understanding of the labor force behavior of this cohort is imperative.

The regression model used to analyze the determinants of single female labor force participation can be written as

$$\begin{aligned} LFPRSW = & b_0 + b_1EF - b_2TUNEMP + b_3FHH + b_4EDF \\ & + b_5INDMX + b_6NWPOP + b_7CHEMP - b_8NEII \end{aligned}$$

where *EF*, *TUNEMP*, *EDF*, *INDMX*, *NWPOP*, and *CHEMP* are as defined above, *LFPRSW* is the labor participation rate of women aged 16 years and older who are either separated, divorced, widowed, or never married, *FHH* is the percentage of families with a female head, and *NEII* is the mean nonemployment income of unrelated individuals 14 years old and over. This model is fitted to the same data categories as that for married females.

### III. Empirical Results<sup>1</sup>

#### EXPLANATORY POWER OF THE MODELS

Considering first the results for married women, the percentage of explained variation and the number of significant *t*-statistics are greater for the nonmetro than the metro subgroup.<sup>2, 3</sup> This apparent advantage

<sup>1</sup> Comprehensive tabular summaries of the empirical results are available from the authors upon request. The following discussion focuses on qualitative interpretations because spatial limitations prevent a complete presentation of the empirical results and any partial summary would be misleading since the study is comparative in nature.

<sup>2</sup> Admittedly these statistics are only two of several criteria which could be em-

disappears, however, when the model is estimated for the individual county classes. In contrast, the explanatory power of the single women model is greater in metro than nonmetro areas, regardless of the level of aggregation. In fact, ranking of  $\bar{R}^2$  indicates a systematic decline in explanatory power with increasing rurality.

#### RELATIVE IMPORTANCE OF EXPLANATORY VARIABLES

Our results suggest that, overall, married women are more sensitive to variables reflecting the current state of the area labor market (e.g., *TUNEMP* and *INDMX*) than to those reflecting changes in labor market conditions (*CHEMP*) or characteristics of the potential labor force (e.g., *NWPOP*, *CLTSXM*). Results from the metro-nonmetro regressions suggest that high area unemployment levels will depress the participation rate of metro females far more than that of nonmetro females. Examination of the individual county regressions indicates that the influence of certain factors varies substantially within metro and nonmetro county groups (e.g., *EDF*, *TUNEMP*, *CLTSXM*, and *INDMX*) as well as across all groups (e.g., *TUNEMP*, *CLTSXM*), although the influence of both industry mix and total unemployment tends to decline with increasing rurality.

Turning to the earnings-income variables, unearned family income is the most influential factor in the aggregate and metro subgroup regressions for married women, while female earnings is by far the most important in the nonmetro category. Results from the individual county regressions appear to confirm the relative importance of female earnings, although it declines with rurality. This final result may be reflective of lower levels of unearned income in rural areas which make it necessary for rural females to work merely to reach a subsistence income.

Examination of the results for single females reveals substantial variation in the relative importance of most variables within metro and nonmetro groupings, as well as across all county classes. In general, however, it appears that the relative importance of current labor market conditions (*TUNEMP* and *INDMX*) declines with rurality, while that of education and employment growth increases with rurality. A given

---

ployed when judging the adequacy of a particular model. Correctness of expected signs and appropriateness of functional form should also be considered. Since the sign of all but two significant coefficients was as expected and theoretical reasoning does not suggest a particular functional form, these latter factors are not included in this discussion.

<sup>3</sup>Precise comparisons should recognize that differences in sample sizes should favor the nonmetro model. This caveat also applies to the other women model.

percentage increase in female earnings consistently (with a single exception) induces a larger percentage increase in the labor force participation rate of metro single females than does an equal increase in unearned income. Among those living in nonmetro counties, however, the relative importance of the two variables fluctuates.

Finally, contrasting the results from the married women and the single women models reveals that few broad generalizations can be drawn. Nevertheless, some interesting patterns do emerge: (1) married women appear to be more sensitive to changes in the unemployment rate than other women, regardless of location; (2) the importance of industry mix for married vs. single women varies with location (i.e., nonmetro, married women are more sensitive to changes in industry mix than their single counterparts, but the situation is mixed in metro areas); (3) education is more important for other women living in metro and nonmetro, nonadjacent counties, but among nonmetro adjacent counties it has a greater effect on the participation rates of married women; and, (4) the influence of employment growth seems to be stronger for married than for other women in mid-range county groups (i.e., medium metro to urbanized rural), while its impact in the extreme county groups is greater for other women.

#### **IV. Comparisons with Results of Previous Studies**

In comparison with previous studies, our results support the findings that (1) participation rates of single women are in general less sensitive to labor market conditions than those of married women (Bowen and Finegan, 1969), although differences in sensitivity to total unemployment declined with rurality, whereas differences in sensitivity to industry mix increased with rurality; (2) an increase in education has a significant positive effect on *LFPRs* (Cain, 1966); (3) an increase in the unemployment rate has a significant negative influence (Cain, 1966; Bowen and Finegan, 1969); (4) *LFPRs* of married women with favorable industry mixes are higher (Bowen and Finegan, 1969), but the influence declines with rurality; and (5) the effects of family composition may be insignificant (Mincer, 1962). Our results, however, do not support the conclusion (Bowen and Finegan, 1969) that *LFPRs* of rural married females are more sensitive to variations in unemployment rates. Rather, our findings indicate that the influence of the unemployment rate declines systematically with rurality among both married and single females. This result is conditional, however, upon the assumption that both metro and nonmetro unemployment rates are measured with the same degree of precision.

## V. Conclusions and Policy Implications

The recent population "turnaround" and surveys indicating that the newly established flow of persons into rural America may continue (De Jong and Sell, 1977) highlight the new rural dynamism of the 1970s.<sup>4</sup> One aspect of this renewed rural vigor has been a disproportionate expansion of the female labor force, relative to both rural male and urban female labor force growth. This study has explored the extent to which models first generated to explain female labor force behavior in largely urban areas fit the rural experience. The findings suggest that a new direction is necessary, that rural manpower issues are peculiar enough to justify separate explanatory models and, by implication, unique intervention efforts.

If rural manpower problems are unique, applying a single model to both rural and urban data sets should find (1) that models explain different amounts of observed variations in rural and urban areas and (2) that independent variable coefficients change with rurality. The results of this study tend to confirm the existence of unique determinants of rural female labor force behavior. Among nonmarried women, the model accounted for far more of the observed variation in metro than in nonmetro participation rates. Indeed, correlation coefficients declined in a uniform pattern with rurality. For married female participants, the explanatory model performed equally well within and across the urban and rural sectors. Although married women accounted for 62.2 percent of the total female labor force in 1975, their relative importance has been falling over time, suggesting that the dynamic female labor force component, nonmarried women, deserves special attention.

The purpose of examining both the absolute magnitude and the relative importance of the regression coefficients contained in this paper was to identify the major determinants of labor force participation among the rural female population so that more effective rural manpower policies can be developed. If rural manpower policies can promote greater labor force participation among rural females, they may enhance the welfare of the rural population by increasing overall family and per capita incomes in rural areas, thus reducing the incidence of poverty in rural America and narrowing the gap between rural and urban income levels.

---

<sup>4</sup> Used in this context the definition of the term "rural" corresponds to that employed by the U.S. Bureau of the Census and refers to places with a population less than 2,500 persons (county groups 8 and 9 in the present analysis).

The results of this research contain several implications for the design of efficient rural manpower programs. The failure of the single women model to predict equally well across county groups and the numerous differences between the relative importance and absolute magnitude of coefficients for a given variable across equations in both the married and single female models suggest that significant differences exist between the labor force behavior of rural and urban females as well as between married and single women within the rural (and other) sectors. This lack of homogeneity implies that (1) new theoretical models may be necessary to assess the labor force behavior of rural residents; (2) specific manpower policies to deal with the employment problems of rural females may be warranted; and (3) to be most effective such programs should distinguish between the needs of married and single women. Finally, our results indicate that policies derived from an analysis of metro vs. nonmetro analyses will not necessarily coincide with strategies suggested by an inspection of individual county group data. We feel results from the latter approach will be more indicative of areas in which rural manpower policies should concentrate.

### Appendix A

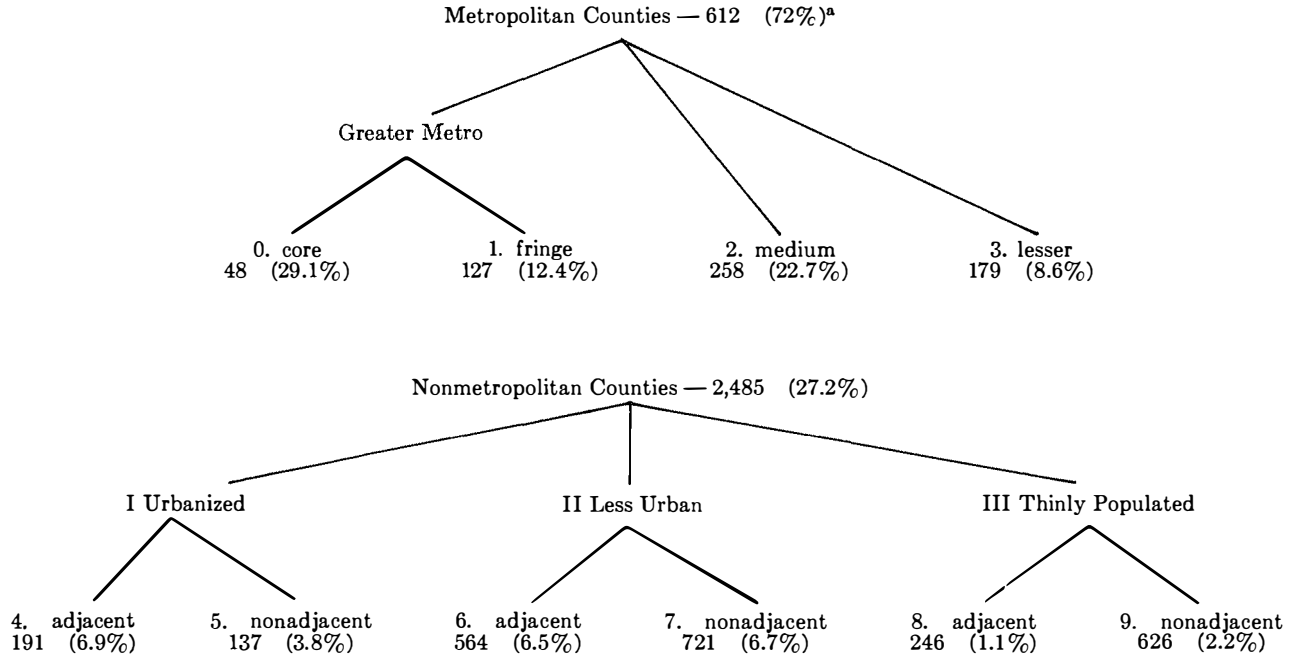
The 3,097 U.S. counties are grouped into ten classes, based on the number of urban residents and the county's contiguity to an SMSA. Metro counties are divided into four categories: (1) core metro (SMSAs of one million or more); (2) fringe metro (the suburbs of core metro counties); (3) medium metro (SMSAs from 250,000 to 999,999); and (4) lesser metro (SMSA counties with less than 250,000 residents). Nonmetro counties are defined by the number of urban residents they contain and their adjacency to an SMSA, e.g., nonmetro urban adjacent counties contain at least 20,000 persons and are adjacent to an SMSA, while nonmetro urban nonadjacent counties contain 20,000 persons and do not border on an SMSA. Similarly, nonmetro less urbanized counties contain 2,500 to 19,999 residents while totally rural counties have fewer than 2,500 residents. Figure A.1 shows the distribution of the U.S. population in 1970 according to this classification scheme. Unless otherwise specified the terms urban and metro will be used synonymously.

### References

- W. Bowen and T. A. Finegan. *The Economics of Labor Force Participation*. Princeton, N.J.: Princeton University Press, 1969.
- G. Cain. *Married Women in the Labor Force*. Chicago: University of Chicago Press, 1966.

FIGURE A.1

Distribution of the 3,097 Counties in the United States by County Class



<sup>a</sup> Numbers in parentheses are percentage of U.S. population in 1970.



- C. F. De Jong and Ralph R. Sell. "Population Redistribution, Migration, and Residential Preferences." *Annals of the American Academy of Political and Social Science* 429 (January 1977): 130-44.
- F. Hines et al. *Social and Economic Characteristics of the Population in Metro and Nonmetro Counties, 1970*. Washington: USDA-ERS, 1975.
- P. Martin. "The Study of Rural Labor Markets." *Western Journal of Agricultural Economics* (December 1976).
- J. Mincer. "Labor Force Participation of Married Women." In *Aspects of Labor Economics*, NBER. Princeton, N.J.: Princeton University Press, 1962.

## DISCUSSION

CARL J. SCHRAMM

*The Johns Hopkins University*

At the outset I must say that the four papers we have heard this morning were the best of a very high quality group submitted for competition. This speaks well for the authors and is a promising sign for future manpower studies and for the Association which was able to draw the attention of such talented researchers.

Today's papers present an interesting array of topics, methodological approaches, and policy considerations. Topically, each focuses on problems related to labor force participation of specific groups of persons: youthful, would-be workers; farm women; and various cohorts of unemployed persons. While each uses regression models, the interpretations and applications vary. Finally, their conclusions suggest some interesting policy initiatives which might be particularly appropriate for the present economy.

Heaton and Martin present an interesting examination of the working patterns of rural females. In passing, I think it important to point out that the labor force participation of women as an area of study is probably the most well studied area in labor economics, sociology, and demography. Personally, I believe that so many persons are engaged in this work that Glen Cain's doctoral thesis is probably one of the few pieces of modern social science that has been subjected to exegetical scrutiny. Thus, it is heartening to find two scholars who are ready to push on to, as they argue, an entirely different population, namely, rural women workers.

The authors are well advised to point out the problems which aggregation of data present. Indeed, while they offer a spectral test of their proposed regression formula, one is not quite certain what to make of the differences in coefficients between, say, "nonmetro" counties, types 4 and 9. Sharp differences do not emerge from Tables 1 and 2. Moreover, it is conceivable that in rural counties which might be more proximate to urban areas, the functioning of the market for women more approximates big-city markets rather than small-country ones.

Quite clearly, as Heaton and Martin point out, the difference be-

tween the market behavior of rural marrieds and rural "others" mimics the analytic problem presented by participating urban women. While certain stable patterns repeatedly emerge for married women, the heterogeneity of the "others" category occasions much confusion and is in need of more research.

As to the policy conclusions which the authors draw, I counsel caution. While to some extent one should establish more equal distribution of income between rural and urban families, absolute real money equality may not be the proper goal of labor policy. The nonpecuniary benefits of rural, nonfarm labor force commitment are real, and they obtain in large part because the necessity of entrepreneurial activity is relatively lower in rural America. Thus, while we should move to incorporate rural women into the paid labor force, the sole reason for this should not be increased family income but, rather, should include equality in career aspirations and goals for rural women with their urban counterparts.

In sum, the paper examines a key area of labor market inequality, namely, the disparate labor force participation rate of nonurban women. Because of (1) the out-migration of urban families from cities, (2) the general and, I suspect, real, economic dynamism of rural America, and (3) the changing birth rate, and particularly the differential birth rates between urban and rural women, the research begun here deserves continued attention.

Peter Mattila has rendered an empirical comment on one of the most abiding enigmas of our discipline, namely, does minimum wage legislation increase the welfare of marginal workers or, contrariwise, cause their displacement? This is a question which has been the subject of research for more than 40 years, yet last year when the Congress took up the question of indexing the minimum wage, the testimony offered was nothing if not uncertain as to the real impact of mandated minimum wage levels in most U.S. employments.

Notwithstanding his somewhat troublesome implicit premise that there is a displacement effect, Matilla's research is helpful in pointing to new avenues of research. Of the various options open to youths who might be displaced or temporarily excluded from work because of minimum wages, the author finds that such youths return to schooling. Whether to invest in themselves à la Becker, or merely to distinguish themselves to the market, Mattila shows that through time, school enrollments grow with historic increases in the mandated minimum. One problem with such a model is that the underlying data hardly seem adequate. Formal, year-long intervals of schooling is not the exclusive type of continued education which marginal workers affected by the

minimum wage would take. The fact that the model holds using merely formal schooling is suggestive but not conclusive. Moreover, it is not particularly helpful from a policy perspective. Little is understood about how one goes about inducing students to stay in school, and, if education is as bad as everyone now reports, then the distortion costs of this outcome might be high indeed.

In summary, I think Mattila is on to something. He must now turn to his own answering of the questions of just what effect minimum wage laws have and offer his own conclusions. But the price of this effort is high. Quite clearly he needs better data. But should such data present themselves, his preliminary research as to the reaction of youths to increases in the minimum wage may prove downright critical in shaping positive manpower policy.

Of the four papers presented this morning Pursell and Torrence win the prize of the most likely to find their research findings incorporated into text books without further work. One reason, of course, is that the inquiry is a bit more prosaic than those of the other researchers. But their findings also have a finality about them lacking in the other papers. The authors tell us about the discrepant behavior of unemployed workers by age groups. While younger workers appear to bear a somewhat less expensive burden connected with unemployment than do older workers, the latter group seems to have a support system in unions which younger workers do not share. The paper thus appeals to those of us who continue to look for positive things to say about trade unionism in a time when most of society is heaping abuse on organized pressmen, coal miners, and postal workers. The paper also appeals to all industrial relations scholars who were weaned on the notion that employment counseling services are more often than not irrelevant. To some extent, this paper serves as an indictment of counseling; yet the authors conclude that job counseling will be helpful to older men. I would suggest the authors do further work on the real effect counseling has in getting workers back into the labor force, particularly older workers where age alone may be a powerful barrier imposed by the market. Also, the authors should pursue the unemployment-search phenomenon with more narrowly drawn age groups.

Finally, to round out an examination of disemployment, Becker and Hills offer an intriguing piece on the long-run effects of teenage unemployment. The paper relies on the Parnes data on the longitudinal work experience of a sample of American workers. Becker and Hills find that the total duration of unemployment, and not the discrete episodes of joblessness for teenagers, is the key determinant of adult wages. This

is an important finding in light of the current concern over high turnover rates among youths and suggests that, on balance, teenagers probably benefit from the learning experience of multiple employment episodes; they may be better informed and better adjusted adult workers as a result of a period of trial-and-error testing.

The paper also isolates persons who have experienced long terms of unemployment as youths and finds that a high correlation exists between extended adolescent unemployment and relatively lower wages as young adult workers. Similarly, all the correlations between teenage unemployment and adult earnings indicate particular problems for blacks.

Becker and Hills establish firm caveats on their findings and show admirable restraint in reaching policy conclusions. Indeed, this is preliminary research which strikes me as indicating more extensive analysis would be very much in order. Further work could potentially underscore the need for new programs of ensuring current and cheap information in teenage labor markets with a system of back-up employment.

In closing, I think it is interesting to note that our researchers this morning are more than ready to take on sacred cows and to open to scrutiny areas once thought settled. We have been alerted to new research on the effects of minimum wage legislation which indicates that the level of the mandated minimum is important, not just to employment opportunities for teenagers and marginal workers, but to their decisions as to what options to work they should explore. We have also been served with notice that the human capital and dual labor market models are undergoing critical examination and that in five years our text books may be offering several additional reasons why people go to school. Finally, it is good to see that older workers and women continue to be the subject of examination as our national labor policy is grossly deficient with respect to these groups.

## VII. DISSERTATION ROUND TABLE

---

### The Impact of Collective Bargaining Laws Covering Police and Firefighters on Municipal Expenditures and Fiscal Strain<sup>\*</sup>

JEAN BADERSCHNEIDER  
*University of Kansas*

Based on a review of the municipal expenditure determination and collective bargaining literature, this research presents a theoretical model outlining the possible impacts of collective bargaining legislation covering police and firefighters on the level and functional distribution of municipal resource allocations. For the subgroup of cities covered by collective bargaining legislation, it also outlines the role of compulsory interest arbitration in exacerbating this impact.

The research focuses on expenditure levels and is designed to answer such questions as: (1) Has collective bargaining resulted in relatively larger total budgets? (2) Has it resulted in relatively larger total and per capita expenditures on police and firefighter functions? (3) Have nonoperating capital outlays suffered? (4) Have nonessential functional categories suffered because of relatively high expenditures in essential areas—the essential areas being areas where unionization is most notably the strongest? These questions are the basis for research hypotheses that account for both budget expansion and/or budget reallocation as possible responses to increases in the cost of police and firefighter personnel inputs and recognize the special nature of the demand for police and firefighter services. The research also makes provision for analyzing the relationship between collective bargaining and indices of fiscal capacity, i.e., ability to pay, and fiscal effort, i.e., willingness to pay.

All cities with a population of 50,000+ (except New York City) are

---

<sup>\*</sup> This dissertation was completed at the New York State School of Industrial and Labor Relations, Cornell University.

examined in the study. This includes 189 cities covered by collective bargaining legislation and 100 not covered. The city finance data are from the Bureau of the Census's *City Government Finance* series. The sociodemographic and economic data are from various published sources including the *County and City Data Book*, and the wage data are from *The Municipal Yearbook*. While the analysis is primarily cross-sectional, the data exist for 1967 and 1975, and the results are compared between the years.

The initial empirical work includes extensive correlation and preliminary regression analysis designed to ferret out which control variables traditionally included in expenditure determination studies should be included in the collective bargaining impact model. Multiple regression analysis is then used to test the major hypotheses. The dependent variables in the various equations include per capita total expenditures, per capita expenditures in each functional category found in municipal budgets, and various indices of fiscal strain. The collective bargaining variable entered into each equation is a dummy variable representing the presence or absence of collective bargaining legislation. The same equations are used in the arbitration analysis, with the dummy variable representing the presence or absence of compulsory interest arbitration.

While reduced-form equations are developed to evaluate the direct impact of collective bargaining legislation in a manner consistent with traditional expenditure determination methodologies, the final model attempts to account for the process through which collective bargaining affects expenditures. Thus, a model is developed accounting for the impact of collective bargaining on the wage determination process and the subsequent impact of wage pressures on expenditures. The specification of this two-stage model is dependent upon the integration of wage determination and expenditure determination theory. The estimate of the impact of collective bargaining legislation is then the product of the regression coefficient for the wage level in the expenditure equation and the regression coefficient for collective bargaining in the wage equation. An attempt is also made to account for the possibility that collective bargaining legislation is endogenous.

The regression analyses indicate:

1. Collective bargaining legislation is associated with 2-9 percent higher wages for police and firefighters.
2. Collective bargaining legislation is associated with 1-10 percent higher per capita total expenditures and 4-8 percent higher revenues.
3. Collective bargaining legislation is associated with 3-9 percent higher per capita police and firefighter expenditures.

4. Collective bargaining legislation is significantly associated with lower per capita expenditures for sanitation, sewerage, water supply and other utilities, and general control. The estimates of the relationship between collective bargaining legislation and capital outlays are insignificant.

5. Preliminary estimates of the arbitration model indicate that arbitration is negatively associated with wage levels and insignificantly associated with expenditure levels. The high standard errors for many of these estimates limit the findings.



# Estimates of Occupational Injury Risk and Compensating Wage Differentials\*

ALAN E. DILLINGHAM  
*Illinois State University*

The economic analysis of occupational safety has been regenerated by the occupational safety and health legislation enacted in the past few years. The legislation was designed to reduce the frequency and severity of industrial injuries by mandating compliance with a comprehensive set of safety standards. Since occupational safety is an economic good whose production consumes scarce resources, it can be argued that the observed level of occupational safety is an outcome determined by the forces of supply and demand. In an effort to evaluate the impact of safety legislation like the Occupational Safety and Health Act of 1970 (OSHA), economists have sought evidence of a functioning safety market by testing two general kinds of hypotheses: (a) safety levels are influenced by relative accident and safety costs, and (b) workers are paid compensating wage differentials for hazardous employment. Data limitations have hampered all of these studies.

In this study a comprehensive and detailed set of risk measures is constructed, and then employed to (a) examine the occupational distribution of injury risk, (b) test new hypotheses concerning the functioning of the safety market, and (c) estimate compensating wage differentials for bearing injury risk.

The set of risk measures is based on New York state data and is derived from two independent sources: the 1970 Census of Population and 1970 accident cases compensated by the New York Workmen's Compensation Board. The Census provides exposure data which, when combined with the injury data, permits the construction of injury frequency rates. The advantage of this indirect approach is that a relatively detailed set of rates can be computed. The injury risk measures are specific to industry, occupation, age, sex, and injury type. Consequently, the distribution of injury risk by various combinations of these criteria can be revealed. Some of the most important conclusions derived from

---

\* This dissertation was completed at the New York State School of Industrial and Labor Relations, Cornell University.

the analysis of these risk distributions are: (1) while the female injury rates are significantly lower than those of males, the difference is primarily due to differences in occupational distribution; (2) the injury rate for younger workers is very high relative to that of older workers; (3) blue-collar work, and especially unskilled labor, is by far the most dangerous kind of work.

The distribution of injury risk by occupation is analyzed using multiple regression techniques. Independent variables included measures of labor cost and worker characteristics. In a variety of specifications employed with several different samples, average earnings levels consistently had a significantly negative effect on risk level. Another factor that apparently is very important in determining occupation risk level is the technological constraint on safety production.

Compensating wage premiums for injury risk are estimated using human capital earnings functions augmented by risk variables. Significantly positive wage premiums were obtained only in the case of fatal injury risk, and only for blue-collar workers. The relative premium implied by the average risk and earnings levels is about 1 percent. The average risk premium for nonwhites is significantly greater than that for whites. The estimated risk premiums can be used to infer estimates of the implied value of life. Based on the regression estimates and sample characteristics, the value of life estimates average about \$250,000 in 1975 dollars. This point estimate is consistent with several estimates derived in other studies.

An assessment of the implications of this study for government safety regulation efforts includes an illustrative calculation of the social benefits to be derived from increased occupational safety. The estimated benefits are large, but finite; and they probably lie within a range that includes the social costs incurred as a result of OSHA.

# Employee Grievances: Incidence and Patterns of Resolution\*

JEFFREY GANDZ  
*University of Western Ontario*

This dissertation reports on a study of grievance rates and patterns of grievance resolution in a nonrandom sample of 118 bargaining units under the jurisdiction of either the Ontario Labour Relations Act or the Canada Labour Code, both of which stipulate mandatory, binding arbitration for grievances arising under the collective agreement. The sample included bargaining units from 51 corporate entities, 28 trade unions, in industries as diverse as petrochemicals, automobile assembly and parts manufacture, food processing, mining, and steel fabrication.

The purpose of the study was to (1) investigate the variation between plants and between industries in (a) grievance rates, (b) grievance-resolution patterns, and (c) use of arbitration; (2) test hypothesized relationships between grievance rates, patterns of grievance resolution, and the use of arbitration, and a number of organizational-level variables presented in a tentative model based on prior theoretical work and previous empirical studies cited in the literature; (3) develop the implications of this study for managerial practice, public policy, and further research in the field of industrial conflict resolution.

A tentative model of grievance initiation and resolution was developed from a review of both the industrial relations and conflict literatures and a series of preliminary and exploratory interviews with union and management personnel, labor and management lawyers, arbitrators, and bureaucrats. In this model, a number of organizational-level variables were identified as influencing both the generation and mode of resolution of grievances, including the size of the bargaining unit; the dominant technology; workforce characteristics such as seniority, age, and skill levels; union political instability; the reward system; prior grievance-resolution experience; employee-supervisor relationships; and a number of aspects of union-management relationships.

Data from the main sample were gathered in personal interviews, self-administered questionnaires, and analysis of company records and

---

\* This dissertation was completed at York University, Toronto.

documents. Hypothesized relationships were tested with a number of bivariate and multivariate procedures.

Among the conclusions reached in this study were the following:

1. Industrywide patterns of grievance rates or grievance resolution do not exist, and rationales for different grievance, resolution, and arbitration rates lie in local employee-supervisor and union-management relationships.

2. The political instability of the local union organization influences both the generation and resolution of disciplinary, but not nondisciplinary, grievances. Political instability is associated with larger bargaining units.

3. Both disciplinary and nondisciplinary grievance rates are higher in organizations with low-skill, low-seniority employees and in which employee-supervisory relationships are poor, the union is perceived by management to be harmful to the organization, union-management consultation is poor, and union-management relationships are conflictful rather than accommodative or cooperative.

4. The practice of conceding to grievances during grievance negotiations, particularly when they are "horse-traded," appears to encourage more grievance generation. Furthermore, success at arbitration appears to encourage the union to take more cases to arbitration.

5. Users of arbitration, compared with nonusers, are the larger units, more unstable in terms of union politics, with poorer employee-supervisor and union-management relationships, and higher disciplinary grievance rates.

6. Disciplinary, but not nondisciplinary, grievance rates are lower in process industries than in industries with batch or unit technology. This reflects the lack of worker responsibility for product quantity or quality in process industries as well as the unique problems in such industries caused by three-shift, continuous operations.

7. Nondisciplinary grievance rates tend to be higher in organizations in which there are incentive plans such as piecework or productivity bonuses than in those in which employees are on straight time.

The study concludes with a number of implications for managerial practice, public policy, and future research. Managers are urged to develop shorter grievance procedures that enable rapid escalation of the issue to a decision-making level, to be more sensitive to the political dynamics within the union local, to refrain from taking cases they know to be without merit, to stop "horse-trading" grievances prior to contract renegotiation, and to consider disciplinary actions carefully before taking

them rather than conceding to grievances during negotiations. A number of specific programs for improving union-management relationships are also discussed.

The dangers of substantially increased numbers of cases going to arbitration, and the subversion of the arbitration process for internal union political gain, are pointed out to the policy-maker who is under pressure in some jurisdictions to make arbitration a subsidized process. Other means of resolving cost-related inequities in the system are proposed.

Finally, it is recommended that future researchers in this field focus on the individual grievance as the unit of analysis with a view to determining (a) why certain conflicts result in grievances while others result in no overt conflict or other forms of conflict manifestation, and (b) why some grievances are settled or withdrawn by the union whereas others are processed to arbitration.

# Labor Market Segmentation in New England: Empirical and Case Studies\*

ROBERT NEIL HORN  
*James Madison University*

This dissertation focuses on factors which may contribute to labor market segmentation in New England. Segmentation or dual labor market theorists divide the labor market into primary and secondary sectors claiming the nature of occupations within the separate markets differ with respect to the organization of work, remuneration, locus of control, and room for promotional opportunity. Employment conditions in the secondary labor market are characterized by low pay, high turnover, minimal skill requirements, arbitrary managerial control, and little or no room for in-firm upward mobility. Primary market conditions, on the other hand, are characterized by higher pay, greater employment stability, and the existence of internal labor markets. A basic hypothesis of dual labor market theory is that the sector in which a worker begins employment is the sector in which he will remain throughout his entire working career. A strict interpretation of the dualist hypothesis holds that there is no intersectoral mobility, while a less strict interpretation is that secondary workers may gain temporary primary slots during periods of high aggregate demand for labor.

The above hypotheses are tested in two ways. First, using data from the 1970 Census Public Use Sample, I construct a set of econometric models which analyze (a) the process of wage determination in the primary and secondary labor market, (b) the conditional probability of primary market employment, and (c) the likelihood of upward (secondary to primary) mobility. The results of these models were supportive of dual market theory in that earnings in the primary market were found to be dependent upon a worker's stock of human capital, while earnings in the secondary market were dependent only upon the amount of time a person worked. Furthermore, graduation from high school, participation in vocational training programs, and employment history in the primary market all significantly increased the likelihood of a worker's current occupation being in the primary labor market.

---

\* This dissertation was completed at the University of New Hampshire.

However, the extent of secondary to primary mobility forced me to abandon the strict interpretation of the dualist hypothesis in favor of the less strict interpretation.

The second part of the thesis consists of a case study of the structure of the labor market in Manchester, New Hampshire, the state's largest and most industrial city. By means of open-ended interviews with production workers and managerial personnel in the footwear, textile, and electronics industries, the existence of labor market duality in Manchester is directly examined. Employee and management responses are also used to determine the structure of internal labor markets which, according to dual theory, provide institutionally determined avenues of upward mobility, seniority clauses, and pay scales for workers in primary occupations.

The results of the case study suggest that segmentation is a relatively new occurrence in the Manchester labor market. I argue this is attributable to the fact that Manchester has a long history of being a mill town and that it is difficult to see segmentation in a labor market that is not characterized by a diverse occupational and industrial structure. However, the influx of electronics companies appears to have contributed to the segmentation process in that there seemed to be a separate labor market for electronics workers, but a common labor market for shoe and textile workers.

The dissertation also includes an extensive review of the recent literature on labor market segmentation. Particular emphasis is placed on employment conditions in secondary markets and the contributions of radical economists to the study of labor markets. In a separate chapter, several earlier empirical studies of labor market duality are reviewed and critiqued.

## DISCUSSION

DAVID LEWIN

*Columbia University*

Inferring the state of graduate education in industrial relations from two-and-one-half page abstracts of four recent doctoral dissertations completed at one Canadian and two northeastern universities is at best a presumptuous and at worst a foolish task. But this audience knows the dangers of generalizing from small samples, and so, having been forewarned, I shall proceed, all the while being able to lay responsibility for my charge today at the feet of Professors Block and Roomkin, chairpersons of this session.

The dissertations themselves are notably different from one another, though two deal with labor-management relations issues and two with labor market issues. Baderschneider uses her empirical work to build a two-stage model of municipal expenditure determination incorporating the impacts of collective bargaining legislation on wages and wages on expenditures. I judge this attempt at theory-building and also the integration of the collective bargaining and municipal expenditure literature to be the key contributions of the dissertation. Baderschneider's regression estimates of relatively modest bargaining wage impacts are in accord with other evidence on this subject, while the estimate of a negative association between arbitration and wage levels is less so.<sup>1</sup>

The finding that bargaining redistributes resources to protective service functions away from others is especially provocative and contains potentially important policy implications. Note that the expenditure determination model is not tested against the post-1974-75 recession experience, and that fringe benefits are only partially taken into account. Additionally, some may question the use of collective bargaining legislation rather than unionism or a written labor agreement as the key industrial relations (independent) variable.

---

<sup>1</sup> See, for example, David Lewin, "Public Sector Labor Relations: A Review Essay," *Labor History* 18 (Winter 1977), pp. 133-44; James L. Stern et al., *Final-Offer Arbitration: The Effects on Public Safety Employee Bargaining* (Lexington, Mass.: D. C. Heath and Co., 1975); and David Lewin, Peter Feuille, and Thomas A. Kochan, *Public Sector Labor Relations: Analysis and Readings* (Glenridge, N.J.: Thomas Horton and Daughters, 1977), Ch. 5, pp. 219-37.



Gandz's study of employee grievances and their resolution in a sample of 118 Ontario (Canada) bargaining units also involved the construction of an explanatory model based upon preliminary research and a literature review. His data, however, come from primary sources, and, according to the dissertation abstract, seem to have illuminated certain hypotheses about the incidence and handling of grievances rather than providing a test of the larger model. His findings of a lack of industrywide grievance patterns and uses of arbitration are of particular interest; one wonders whether the same is true of white-collar workers in the Canadian service sector. The political instability of the union and the size of the organizational unit seem especially important to Gandz's other findings, and I would like to know more about the methods he used to control for the independent effects of these variables. Gandz's study is one that aspiring industrial relations scholars might like to replicate on the American scene, where much of our knowledge of this subject is dated.

Turning to the labor market dissertations, Dillingham used 1970 Census and New York Workmen's Compensation Board data to study a component of the industrial safety market, specifically occupational safety. Employing human capital theory and multiple regression analysis, Dillingham's research yielded several interesting findings with related policy implications, including that variations in work injury rates by sex but not age are largely a function of differences in occupational distribution. Though occupational earnings levels were in general inversely related to injury risk levels, compensating wage differentials were present only for blue-collar workers risking fatal injuries. This finding casts some doubt on competitive wage theory, though the chain of causality in this analysis requires further elaboration. Observe that Dillingham's data base did not permit an examination of the occupational safety market in the post-OSHA period, and that, like Gandz, he examined only one state's (province's) experience.

Horn's dissertation is notable for its reliance on two distinct methodologies to explore labor market segmentation, namely, econometric analysis of 1970 Census data and a case study of New Hampshire's largest city. Thus, his is the only one of the four dissertations to make use of primary and secondary data sources. Moreover, the rationale for doing so—that econometric model-building and testing dominate the labor market literature—is quite appealing. Graduate students should explore with Horn the feasibility of combining these approaches to study other problems, particularly in light of the discussion comments at last year's Dissertation Roundtable supporting the wider use of insti-

tutional and case-study methodologies in industrial relations.<sup>2</sup> For my part, I'd like to know more about the extent to which Horn's findings support or weaken the dual labor market theory, and if he tested other, more elaborate versions of that theory. Incidentally, though it is not well known, the dual labor market theory emerged in part out of the field experience and case observations of its originators (e.g. Michael J. Piore). Thus, Horn has come full circle, methodologically speaking.

As a group, then, these dissertations appear to be competent, craftsmanlike pieces of work that meet some of my preferred criteria for quality dissertations. These include the selection of important problems; well-thought-out and manageable research designs; heavy but not exclusive use of secondary data; strong reliance on modern quantitative methods; interesting and valuable findings, in some instances with policy implications; and, surprisingly perhaps, a clear interest in model building and theory verification. I say surprising because industrial relations research is not notable for its theoretical orientation or contributions—and one can argue that it shouldn't be.<sup>3</sup> Yet here are examples of newly minted PhDs whose dissertation research seeks (in the cases of Dillingham and Horn) to extend existing theory, and (in the cases of Baderschneider and Gandz) to develop the building blocks of what may be new theories. That speaks well for the current state of industrial relations graduate training, or at least of the individual and institutional sponsors of these dissertations.

You will note that I have now almost completely violated the rule about generalizing from small samples. More to the point on this issue, though, I would caution the writers—and readers—of these dissertations to keep in mind their sectoral, occupational, geographical, and data limitations, lest their findings be too broadly generalized. I issue this caveat because the danger of such overgeneralization is heightened when research is framed by a well-received theory or an elegant behavioral model. To recognize this is not to gainsay attempts at theory-testing and model-building, commendable examples of which we have before us. Rather, it is to recognize the limits of even very well-conceived research, especially where carried out within a cross-sectional study design.

How strongly grounded are these dissertations in the literature of industrial relations? Dillingham and Horn draw from the labor economics literature, Gandz from labor relations and industrial sociology, Baderschneider from collective bargaining and municipal finance. Since all of

---

<sup>2</sup> See "Discussion" comments by Professors Milton Derber and Walter A. Fogel, at the "Dissertation Round Table," *Proceedings of the 30th Annual Winter Meeting* (Madison, Wis.: Industrial Relations Research Association, 1978), pp. 335–42.

<sup>3</sup> See Fogel, especially p. 341.

these literatures can properly be regarded as within the realm of *contemporary* industrial relations, my response to this question is "quite strongly grounded." Recognize, though, that the industrial relations literature includes material from virtually all the major social sciences, so that a researcher can hardly fail to be grounded in at least one or another of the field's contributing disciplines. What strikes me about these dissertations is that their authors have drawn analytical frameworks, concepts, and methodologies from the respective literatures which are particularly relevant to the study of their chosen problems.

Finally, what do these dissertations tell us about the direction that research in industrial relations is taking? On this point I admit to some discomfort, though not about the dissertations per se. Certainly one is pleased to see, both this year and last, competent, even insightful, dissertations on labor markets and labor relations. But consider that Professors Block and Roomkin tell the discussants (Professor Parnes and I) that "unfortunately we received no submissions in the personnel-organizational behavior area." Why is this so? Why more generally does the IRRA not seem centrally to attract the interests of personnel-organizational behavior researchers, many of whom are instead presenting papers to the American Psychological Association, The Academy of Management, The American Society for Public Administration, and The Society For Professionals in Dispute Resolution, among others?<sup>4</sup> Is not personnel-organizational behavior fully as much a component of Industrial relations as labor markets, labor relations, and labor law? Is not the academic labor market for personnel-organizational behavior researchers buoyant, if not booming? Have not many of the nation's recent regulatory policies been aimed directly at the management and utilization of human resources in organizations? And do not researchers in those specialties have much to learn from (and maybe much to teach) collective bargaining researchers about the resolution of both inter- and intra-organizational conflicts? My answers to all of these questions are yes, and so I believe that the IRRA should more clearly recognize and more strongly support systematic research into the interface between "OB" and "IR." Otherwise, industrial relations may come to be regarded strictly as a subset of applied economics, and the IRRA viewed merely as an appendage of the American Economic Association. In my judgment, a broader set of intellectual companions and a wider market of ideas are more in keeping with the research traditions of industrial relations.

---

<sup>4</sup> See, for example, the papers presented at the Personnel-Human Resources Division of *The Academy of Management, 38th Annual Meeting, Final Program*, San Francisco, August 1978. Note especially the symposium, "The Collective Bargaining Process: A Behavioral Perspective," described on p. 36.

## DISCUSSION

HERBERT S. PARNES  
*The Ohio State University*

As I understand it, my assignment is to pass critical judgment on the four dissertations that have just been reviewed and to derive from them generalizations about the direction in which industrial relations research is moving. It is clearly impossible to evaluate a dissertation on the basis of a two-page abstract. Moreover, it would be the height of folly to generalize on the basis of a sample of four, especially when one knows that it was *designed* to be nonrepresentative. If Professors Block and Roomkin have done a good job in selecting the winning entries, an evaluation of recent trends in dissertation research based on this sample would surely be unduly sanguine.

Having persuaded at least myself that my assigned mission was impossible, I propose to do the following: (1) to make some more or less random observations about each of the four dissertations; (2) to indicate what I think a good dissertation should be; and (3) to express certain reservations about recent trends in labor market and industrial relations research.

To begin with, I am favorably impressed with the selection of topics represented by our sample of dissertations. Each deals with an issue that is at least potentially important from both a theoretical and a policy perspective, although these connections are not always made explicit in the brief abstracts. The Horn dissertation attempts to answer some significant questions about how labor markets operate. Whether the neo-classical model or the dual labor market model is more representative of reality is clearly an important question from a theoretical point of view, but also has much to do with the choice of appropriate interventions to minimize inequities in labor market rewards. The problem in this case lies in knowing what kinds of evidence to examine and how to interpret whatever evidence is adduced. As I interpret most of the studies I have seen, some blending of the two polar theoretical positions is required if the real world is to be described properly. Professor Horn's abstract does not summarize his conclusions. Whatever they are, they are doubtless strengthened by the eclectic approach he has taken;

in my view, there is no substitute for talking with workers and employers if one really wants to know how labor markets operate.

Professor Dillingham's paper relates to interesting questions in wage theory as well as to policy issues in human resource conservation. While I do not know this literature, the questions seem to me to involve intriguing methodological issues. For example, to what extent are findings conditioned by the character of the occupational and industrial classification systems used? In other words, how homogeneous are, say, two-digit industry codes and three-digit occupation codes from the standpoint of injury risk? Dillingham's statement that "average earnings levels consistently had a significantly negative effect on risk level" puzzles me. Theory would suggest that the direction of causation should run from injury risk to compensation level, rather than vice versa. Of course, followers of Adam Smith would expect the sign to be different from that which Dillingham finds, but that result does not surprise me. If I interpret the abstract correctly, the theoretically predicted relationship with wage levels *does* occur in the case of fatal injury risk. I should be interested in Dillingham's reconciliation of these two ostensibly contradictory findings.

Dr. Baderschneider's dissertation deals with issues in industrial relations and public finance. It is not immediately clear to me why her principal explanatory variable is the presence or absence of collective bargaining *legislation* rather than the presence or absence of collective *bargaining*. There are cities in which police and firemen are covered by negotiated agreements despite the absence of legislation. If legislation is to be the principal independent variable, I wonder what the possibilities are of categorizing the legislation in order to examine the relative effects of different types of laws.

The research by Dr. Gandz addresses interesting questions in industrial relations, although it isn't clear to me how some of his findings are to be interpreted. I am not certain, for example, what variables are used to describe "grievance resolution patterns." Also, his statement that he has used both bivariate and multivariate methods of analysis raises the question in my mind whether the relationships described in his third conclusion represent independent effects of each of the factors or whether these findings emerged in a series of bivariate relationships. I would expect poor employee-supervisor relationships, perception of the union by management as harmful, poor union-management consultation, and "conflictful" union-management relations to be highly intercorrelated.

Let me now turn to a brief characterization of what I think a good

dissertation in labor economics or industrial relations should be. I make no pretense of speaking for anyone but myself. While I am reasonably sure that some of my criteria would be almost universally accepted, I am equally certain that others would not be.

1. There should be a clear statement of a research question or a hypothesis amenable to an answer or a test through the application of the scientific method, broadly defined.
2. The answer to the question should make a difference to someone in addition to other PhDs. That is, it should be useful in increasing the confidence with which some kinds of decisions are made by individuals acting for themselves or as agents for private or public bodies.
3. The question should be addressed (or the hypothesis tested) on the basis of an adequate research design and with appropriate methods of analysis.
4. The statement of findings should be consistent with the evidence and should be stated with whatever qualifications prudent respect for scientific method requires.
5. The implications for private and public policy should be made explicit and elaborated. Since policy prescription is always a blending of values and analysis, the value judgments underlying the policy recommendations should be made explicit.
6. The dissertation should be written as clearly as possible and with some grace, with the principal findings and their significance presented so as to be intelligible to an educated layman.

In the light of these prescriptions, let me now identify a few problems that I perceive in some of the research that is currently done in labor economics and industrial relations. Let me emphasize that I am not referring to the dissertations under consideration here; I have not seen enough of any of them to know whether they are guilty of the faults I shall mention. Moreover, I am not making a *general* lament for recent trends in labor market and industrial relations research. As a matter of fact, I believe that during the past two or two-and-a-half decades there has been a remarkable advance in the degree of sophistication and in the general quality of this research, in terms of conceptual frameworks, methods of analysis, and sources of data. Yet, these improvements have been accompanied by several weaknesses of which there are sufficient examples to arouse my concern.

First, in the interest of making them amenable to mathematical formulation and manipulation, theoretical models have sometimes become

so rarefied as to lose all relation to reality. Some of the work that has been done in the realm of search theory seems to me to be illustrative. I echo the plea of Robert Gordon who, in his presidential address to the American Economic Association, urged that the profession seek "relevance with as much rigor as possible," rather than "rigor regardless of relevance." If there is any branch of economics in which an intimate familiarity with institutions is a prerequisite to sound research, certainly it is labor economics. In my view, no one is qualified to write about the economic effects of unions without a thorough grounding in the character of unionism as an economic, political, and social institution. No one is qualified to write about job search—or any other aspect of the operation of labor markets—without an intimate understanding of such institutions as the public employment service and private employment agencies or without a perception of the rich variety of conditions, practices, and behavior that prevails in the world of work.

Second, I worry about what I perceive as an inclination by some to play econometric games. One aspect of this is a tendency toward what might be called methodological overkill. Some research appears to have resulted from a method's having sought a subject, rather than the reverse. Another aspect of statistical game playing is the tendency to make continuous respecifications of one's model as the computer output comes in, until one is finally pleased with the regression results. Surely this violates basic canons of scientific method. Finally, there is the tendency to attach to regression coefficients much greater precision than is warranted. Anyone who has seen coefficients dance around as minor changes are made in the specification of the model must surely have qualms about using any one of them for precise quantitative estimates.

Third, I deplore the tendency, which has become almost universal, for dissertations and published research generally to be written in terms that cannot possibly be intelligible to anyone but another specialist. Since the results of research in our field cannot be expected to have practical consequences unless they are comprehended by policy-makers, this tendency seriously inhibits the usefulness of the effort. It may be that the interests of scientific purity require a technical jargon and/or arcane methods. If this is so, a summary chapter should at least translate the findings into language intelligible to the layman.

Needless to say, I have not attempted to present a complete catalog of characteristics that can mar a dissertation or other research project. There is, after all, an infinite variety of ways to do bad research. I simply assert that to the extent that otherwise respectable projects avoid the tendencies described above, research on labor markets and industrial relations will be both more influential and more socially useful.

## VIII. EMERGING ISSUES IN EMPLOYMENT POLICY

---

### How Much Fiscal Substitution Is There in PSE?\*

MICHAEL E. BORUS  
*The Ohio State University*

DANIEL S. HAMERMESH  
*Michigan State University*

“Substitution? We do it. Of course we do it.”  
Charles Atkins who heads Boston’s  
agency for administering CETA  
money as reported in the *Wall Street  
Journal*, June 30, 1978.

#### Introduction

In recent years the Public Service Employment (PSE) program has been expanded considerably by the addition of Title VI to CETA and the more than doubling of slots in the Economic Stimulus package. Likewise, the debate over the extent of fiscal substitution involved with public service employment—that is, the extent to which government and other regular non-PSE employment is reduced as the number of PSE slots increases—has widened to the point that PSE substitution probably should not be listed as an emerging problem. Rather, like the caterpillar-butterfly in the world of nature, the PSE substitution question seems to reemerge continually in a new form in the world of employment policy.

The discussion began when the Council of Economic Advisers, in

---

\* The authors’ work in this area was originally sponsored by the National Commission for Manpower Policy. The views expressed here do not necessarily reflect those of the Commission. Author’s address: Center for Human Resource Research, Ohio State University 1375 Perry St., Suite 585, Columbus, Ohio 43201.



the 1975 *Economic Report of the President*, implied that three econometric studies appearing in 1974 indicated that public service employment had limited job-creation abilities and was a less appropriate tool for federal countercyclical policy than alternatives that would be less inflationary. The debate then became political with the proponents of PSE arguing that the studies had either improperly estimated the extent of fiscal substitution or that even with total fiscal substitution, PSE was no worse than the alternative policy proposal for a tax cut. The opponents of PSE countered that PSE, because of fiscal substitution, was a sham that created few new jobs and prevented necessary stimulation of the private sector. In the course of the debate, both sides chose not to consider the nonemployment-related goals of PSE and concentrated the discussion on the substitution effect.

When Congress extended Title VI of CETA with the Emergency Jobs Programs Extension Act of 1976, they also expressed concern about fiscal substitution. This concern took several forms: Congress required that any additional PSE hiring over a base level in each prime sponsor be on "projects"—specific public service activities which could be completed within a year and which would not have been undertaken were PSE funds unavailable. They also restricted eligibility for the majority of persons to be hired in the future for PSE, targeting on the long-term unemployed, low-income individuals, and AFDC recipients. The Congress also instructed the National Commission for Manpower Policy to study the issue of fiscal substitution. An interim report from the Commission was sent to Congress in March 1978.

In this paper we propose to review some of the studies which have attempted to estimate the extent of fiscal substitution. We can divide these into two groups: the econometric studies and the informed-observer study. We have reported on the former at length elsewhere;<sup>1</sup> therefore, here we will only summarize those findings. We will then review the work by Richard Nathan and his associates at the Brookings Institution, the major informed-observer study conducted on PSE substitution. We conclude that each of the studies has serious shortcomings. Finally, we will discuss some of the implications of these estimates for future employment policy.

---

<sup>1</sup> Michael E. Borus and Daniel S. Hamermesh, "Study of the Net Employment Effects of Public Service Employment—Econometric Analyses," *Job Creation Through Public Service Employment*, Volume III, Commissioned Papers, Report No. 6 (Washington: National Commission for Manpower Policy, 1978), pp. 89–149; and Michael E. Borus and Daniel S. Hamermesh, "Estimating Fiscal Substitution by Public Service Employment Programs," *Journal of Human Resources* 13 (Fall 1978), pp. 561–65.

### Review of Studies Estimating the Extent of Fiscal Substitution

Alan Fechter argued that state and local governments will spend only 10 to 40 percent of PSE funds for additional employment in the long run.<sup>2</sup> Fechter's estimates were based on several assumptions that seriously influenced his conclusions. Foremost among these is the assumption that the PSE programs are untied, lump-sum transfers, when in fact they are designed to be categorical and restricted. To the extent that the maintenance-of-effort provisions in CETA have been enforced and the PSE slots filled by unemployed or underemployed individuals, Fechter should have classified the program as a closed-end categorical grant which has displacement effects of only 10 to 35 cents per grant dollar. Further, Fechter used the empirical work of other authors who did not actually study PSE, but rather the long-run behavior of spending resulting from the receipt of various types of grants or the long-run employment effects of changes in wages and community income. For these reasons we conclude that Fechter's work represents an educated guess about fiscal substitution based on a set of restrictive assumptions and an idealized version of a PSE program.

In our opinion, the 1977 version of the work by George Johnson and James Tomola is a well-thought-out, carefully conducted study.<sup>3</sup> They concluded that six quarters after the funding of PSE slots, state and local governments will have reduced their employment by an equal amount so that there is 100 percent substitution. We have found, however, that minor changes in their model specification lead to substantial changes in their findings. Among these we found that when we removed the restriction of the model requiring a relatively smooth lag relationship, the effects of PSE bounced erratically. We also introduced a nonlinear term for community income to see if the so-called taxpayers revolt would influence the predicted substitution effects of PSE. We found that the change in the model improved its predictive ability and led to lower substitution effects than Johnson and Tomola found. Finally, we removed their constraint which required that fiscal substitution be the same when PSE slots were increasing as it was when PSE slots declined. Although

---

<sup>2</sup> Alan E. Fechter, *Public Employment Programs* (Washington: American Enterprise Institute for Public Policy Research, 1975); and Joint Economic Committee, *Studies in Public Welfare*, Paper No. 19, Public Employment and Wage Subsidies, "Public Employment Programs: An Evaluative Study," by Alan E. Fechter, A Volume of Studies Prepared for the Use of the Subcommittee on Fiscal Policy, 93rd Congress, 2nd Session (Washington: U.S. Government Printing Office, December 30, 1974), pp. 93-123.

<sup>3</sup> George E. Johnson and James D. Tomola, "The Fiscal Substitution Effect of Alternative Approaches to Public Service Employment Policy," *Journal of Human Resources* 12 (Winter 1977), pp. 3-26.

we found that the model was significantly improved in a statistical sense, the results were startling and implausible; when the number of PSE slots expands, there is almost no fiscal substitution, while when slots are removed, the state and local governments add many more employees than the number of slots lost.

Our reanalysis of the Johnson and Tomola data was not meant to find a perfect model; rather, it was to demonstrate the sensitivity of their econometric model to changes in specifications. We found a range of estimates of average net job creation of between -142 and 44 jobs for each 100 PSE slots, six quarters after funding. This broad range of estimates is not surprising. The Johnson and Tomola estimates of fiscal substitution are imprecise, allowing both substantial job-creation and fiscal-substitution effects within normally accepted confidence intervals. Moreover, the high correlation among the variables, since they are all growing steadily over time, means that adding new variables can produce large changes in the estimated effects of variables previously included in the model.

The National Planning Association (NPA), using cross-sectional data, estimated that approximately one year after the introduction of PSE, there is substitution of approximately 46 jobs for each 100 PSE slots.<sup>4</sup> They found a wide range of substitution, from -11 to 83, depending on the kind of governmental unit involved. The NPA study has many flaws, the most serious of which is the failure to identify the factors influencing local government employment to isolate changes in the environment other than PSE that might alter the government employment in the areas under study and the control sites. Such factors as different impacts of the 1971 recession, different changes in the size of school-age population, and different receipt of state and federal grants could have accounted for the observed differences between the areas examined. The many errors and problems embedded in the NPA estimate are hidden by the specificity of their 46 percent fiscal-substitution figure. As the NPA report itself states, "Finally the major problem throughout the study was the lack of appropriate control groups. . . . These omissions make suspect most of the results presented in this report."<sup>5</sup>

The informed-observer technique places trained observers in PSE grantee communities to monitor the implementation of the program. The most comprehensive and recent study of this type is that conducted for

---

<sup>4</sup> National Planning Association, *An Evaluation of the Economic Impact Project of the Public Employment Program*, Final Report MEL 74-07 to the Manpower Administration, U.S. Department of Labor, four volumes, May 22, 1974, processed.

<sup>5</sup> *Ibid.*, p. 9.

the National Commission for Manpower Policy by the Brookings Institution under the direction of Richard P. Nathan.<sup>6</sup> This study made observations in 42 jurisdictions, monitored by 26 research associates, covering approximately 20,000 PSE participants. Nathan and his associates estimated that as of July 15, 1977, in only 18 percent of the positions was there displacement, i.e., "the use of PSE participants to fill positions and provide services that would otherwise have been provided with other revenue."<sup>7</sup> Nathan and associates, however, concluded that 31 percent of the slots were devoted to program maintenance which was defined as "cases in which PSE employees were used to maintain existing services that would have been curtailed in the absence of PSE funding."<sup>8</sup> "If the associate determined, on the basis of interviews and financial and employment data, that the fiscal pressure on a jurisdiction was so severe as of the observation date that it would have had to cut existing service levels (and many cities were in this position), then using PSE employees to maintain these services was not *at that point in time*, displacement. Alternatively, if the associate determined that a jurisdiction had used PSE funds to maintain services that could have been provided with other revenue, this was a case of displacement of the potential hire variety."<sup>9</sup> As would be expected, the proportion of slots characterized as program maintenance increased along with the field associates' characterization of degree of fiscal pressure on the government unit. In areas characterized as having extreme fiscal pressure, 60 percent of the slots were judged to be used for program maintenance.

There are several problems with the informed-observer approach which need to be considered when evaluating the Brookings report. First, the observers are constrained in part by what they are told and the data which are made available to them. Part of the duties of the observers is to survey the responsible administrative, fiscal, and legislative officials to gain their perceptions. They also examine official reports, budgets, personnel records, and manpower allocations in order to judge the accuracy and veracity of the responses by community officials. The informed observers bring their own expertise and training to bear on the question of fiscal substitution, and it is hoped that their knowledge of the communities they are observing will allow them to paint an accurate picture of a community situation. They typically must rely on the good

---

<sup>6</sup> Richard P. Nathan et al., "Monitoring the Public Service Employment Program," *Job Creation Through Public Service Employment*, Volume II, Report No. 6 (Washington: National Commission for Manpower Policy, 1978).

<sup>7</sup> *Ibid.*, p. 19.

<sup>8</sup> *Ibid.*, p. 19.

<sup>9</sup> *Ibid.*, p. 23.

will and honesty of their respondents to secure information, however, and although the observer may be able to judge the quality of the data provided, if government officials are violating maintenance-of-effort provisions, they may very well try to hide this and be unresponsive to the requests of the observer. This problem was noted in the Brookings report.<sup>10</sup>

The second problem is that the observers have no control site from which to estimate what would have happened in the absence of PSE. They must rely on their own expertise to decide what local areas would have done were there no PSE funds. This becomes extremely important when deciding whether to categorize a situation as program maintenance or displacement. For instance, there seems to be implicit in the Brookings definition of program maintenance the assumption that the local areas could not or would not increase taxes where there were severe fiscal pressures. Such an assumption is, of course, dependent on the values of the observer. It is not clear to us just how much of the program-maintenance category might be included in the displacement category by other informed observers. The assignment process must be highly individualized and, because of the lack of control sites, will be subject to criticism. Some might argue that displacement should include all of the jobs assigned to program maintenance, raising the total substitution to 49 percent of the PSE employment considered by the Brookings study.

The Brookings study also had problems identifying displacement where a program was new or involved an expansion of services. If one is concerned with the total employment effects of PSE, one must consider whether the new or expanded government services merely replace employment that was formerly in the private sector. The Brookings associates were able to count as displacement instances where a city started to provide services formerly handled by contracting the function to private companies, but could not differentiate less obvious situations such as when the city may open an immunization clinic to perform services formerly provided by private physicians. Likewise, it was difficult to determine if the PSE slots allocated to community-based organizations caused displacement. There will be no greater employment if a community-based organization provides the immunizations rather than a public health clinic or private physicians. Furthermore, Nathan and his associates examined only the question of displacement of public employment. They did not consider that the nongovernmental sector might be-

---

<sup>10</sup> *Ibid.*, p. 22.

gin to provide a particular service if, in the absence of funds, the locality no longer did. For instance, if the city were to stop collecting our garbage, many of us would hire private trash collectors to take it away.<sup>11</sup>

Finally, in informed-observer studies there are problems making comparisons across governments. The Brookings report basically added up the slots reported by their research associates in the field. It is not clear that the data were comparable across the sites or that the standards applied by all of the associates were the same. It seems to us to be very difficult to aggregate what amounts to a limited number of individual case studies, no matter how well carried out, in order to arrive at a national picture.

There has been a wide range of estimates of the extent of fiscal substitution for PSE. We have, in this paper, shown that both the low estimates of 18 percent substitution and the high estimates of 100 percent after approximately six quarters, as well as the estimates in between, are based on data or analyses which can be faulted.

### **Implications and Conclusions**

To date, fiscal substitution has been studied primarily in terms of the reduction in job-creation effects of public service employment. If the substitution is as complete and as fast as Johnson and Tomola predict, then by the beginning of September 1979 the present PSE program would have no direct employment effects on the economy, i.e., all 750,000 slots would represent employment which would have occurred out of state and local funds in the absence of PSE. If, on the other hand, the Brookings estimate is assumed to continue, only 135,000 of the jobs would have otherwise existed. The importance of these numbers, however, can be overemphasized since the economic stimulation resulting from PSE will depend on how the funds released by fiscal substitution are spent as well as on the direct employment effects of PSE. Most of the literature has assumed that fiscal substitution implies that PSE grant money has been used for tax reduction. If true, this use is probably as stimulatory to aggregate employment as would be a cut in federal income taxes. There are, though, other uses for funds freed by the substitution of PSE for non-PSE state and local government jobs. These have different and varying implications for the amount of aggregate employment stimulation, and they appear to have escaped the attention of many researchers of the fiscal-substitution issue. They include using the funds to increase transfer payments, such as welfare, to local citizens; to retire debt (or reduce borrowing); to build fund balances; and to increase ex-

---

<sup>11</sup> The same criticisms can be leveled at the econometric studies.

penditures on items other than direct government employment. Generally, we conclude that the first will create approximately the same amount of employment as a federal tax cut, the second and third will have little if any stimulative impact, and the last is likely to have more employment impact than a federal tax cut and possibly more impact than an increase in federal expenditures.

There is a final aspect of fiscal substitution which we hope will become much more important in the next several years. As the level of unemployment hopefully decreases, there will be less need for funding of public service employment as a countercyclical job-creation device. If, however, there has been substantial fiscal substitution by state and local governments, reduced funding of PSE slots would force these governments to reverse the process of fiscal substitution and to increase taxes, increase debt, reduce transfer payments, draw down fund balances, or decrease expenditures on items other than direct government employment. All except the reduction of idle fund balances will be difficult for the state and local governments to accomplish. In this period when the phrase "taxpayer revolt" seems to be the byword, raising taxes or increasing debt will be very difficult for local politicians to undertake. If taxes are fixed and the substitution has provided regular public services, cutting back on such things as police, fire, and sanitation services will also be politically difficult. Furthermore, PSE slots which have been devoted to providing services which would not otherwise have been provided by the community and thus did not involve fiscal substitution when they were originally designed may become desired by the community once the services have been performed (this is a public-sector version of Say's Law), and these functions too may be hard to give up. It seems likely, therefore, that where there has been fiscal substitution, much of any reduction in federal PSE slots will be taken from expenditures for transfer payments and nonemployment-related government expenditures, e.g., capital projects.

Most likely, however, state and local government officials will lobby as hard as possible and, in our opinion, successfully, for either maintaining the Public Service Employment program indefinitely and/or turning it into a general revenue-sharing program. In the latter case, fiscal substitution will become totally institutionalized, and the PSE program will become a permanent means for substituting revenues raised by federal taxes for those raised by states and localities.<sup>12</sup>

---

<sup>12</sup> Given the recent evidence that the property tax—a major component of state and local finance and the apparent object of the taxpayer revolt—is relatively progressive, it is unclear that the substitution will have the distributional impact that most of the proponents of PSE would desire. Henry Aaron, "New View of Property Tax Incidence," *American Economic Review* 64 (May 1974), pp. 212–21.

# Labor Force Projections to 1990: Three Possible Paths

PAUL O. FLAIM  
HOWARD N. FULLERTON, JR.  
*Bureau of Labor Statistics*

It is the custom of the BLS to update and revise its labor force projections every two or three years, and this year it was decided to make three alternative sets of projections rather than just one as has generally been the case. Each set is based on differing assumptions about the extent to which the various population groups are likely to participate in the world of work in the years to come.

As Table 1 indicates, labor force growth under each of the three assumptions is expected to be much lower between 1985 and 1990 than between 1977 and 1985. One reason for this is that the increase in participation among some groups is expected to taper off. Another important reason is that the population of working age will be increasing at a much slower pace as we move into the 1980s.

## **Population Trends**

In making labor force projections, the BLS has generally relied upon the population projections prepared by the Bureau of the Census, and this procedure was followed once again in making the most current projection. For the period covered by this round of labor force projections, which take us only to 1990, the population estimates are not subject to a great element of uncertainty. After all, even the persons who will be only 16 years of age in 1990 are already four years old and can thus be counted with reasonable accuracy.

There are, of course, some minor problems even in projecting a population that can be counted, as important assumptions have to be made about the future course of mortality rates and of the net migration trends. It should further be noted that the Bureau of the Census uses the decennial census counts as the starting points for its projections, and it has long been known that these counts are deficient for some

---

Authors' address: Bureau of Labor Statistics, U.S. Department of Labor, 3826 GAO Bldg., 441 G Street, N.W., Washington, D.C. 20212.



TABLE 1  
Actual and Projected Civilian Labor Force and Civilian Labor Force Participation Rates Based on Three Different Growth Paths

Growth paths	Civilian Labor Force							Civilian Labor Force Participation Rates (percent)			
	Levels in Millions				Annual Percent Change <sup>a</sup>			Actual		Projected	
	Actual		Projected		1970 to 1977	1977 to 1985	1985 to 1990	1970	1977	1985	1990
	1970	1977	1985	1990							
Total											
High-growth path	82.7	97.4	117.0	125.6		2.3	1.4			67.7	69.7
Intermediate-growth path			113.0	119.4	2.3	1.9	1.1	60.4	62.3	65.3	66.2
Low-growth path			108.9	113.5		1.4	.8			63.0	63.0
Men											
High-growth path	51.2	57.4	65.0	68.2		1.6	1.0			79.4	80.0
Intermediate-growth path			63.0	65.1	1.7	1.2	.7	79.7	77.7	77.0	76.4
Low-growth path			61.2	62.5		.8	.4			74.7	73.3
Women											
High-growth path	31.5	40.0	52.0	57.4		3.3	2.0			57.1	60.4
Intermediate-growth path			49.9	54.3	3.4	2.8	1.7	43.3	48.4	54.8	57.1
Low-growth path			47.7	51.0		2.2	1.3			52.4	53.8

<sup>a</sup> Computed on a compounded basis.

groups.<sup>1</sup> However, even after taking due account of these shortfalls, the basic trends in the size and configuration of the American population can be charted with some assurance from now to 1990.

Perhaps the most important feature of the population dynamics for the 1980s will be the sharp decline in the number of youths 16-24, which is an inevitable consequence of the drop in the birth rate during the 1960s. Reflecting this development, the civilian noninstitutional population 16 years of age and over, which should grow by 26.8 million or 19.6 percent from 1970 to 1980, is projected to grow by only 16.4 million or 10.0 percent from 1980 to 1990.

The population trends for the major age-sex-race groups are shown in Table 2. The "net changes" columns in this table show most dramatically how the past growth of the teenage ranks will be reversed between now and 1985 and how, with some obvious delay, this process will also affect the ranks of the 20- to 24-year-olds. There will clearly be many fewer young persons in the late 1980s than is the case today.

Another important demographic development is that, while the teenage ranks will become thinner, the ranks of the population in the central age groups will be swollen by the further aging of the many millions of persons who were born in the post-World War II baby boom. The sharp drop in the youth population combined with the crowding of the baby boom cohorts into middle age cannot but have a large impact on the growth and configuration of the American labor force.

Labor force growth, however, is not only a function of population growth but also of the trends in labor force participation among the various population groups, and the projections of these trends is fraught with much more uncertainty than the projection of population trends. It was essentially in order to deal with this great element of uncertainties that it was decided to make three different sets of projections rather than a single one.

### **The Three Basic Paths**

While yielding significantly different results in terms of the overall labor force levels for 1985 and 1990, the three sets of projections still have a considerable degree of commonality between them. All three are based on assumptions of (1) further rises in the labor force participation rates of teenagers, both male and female; (2) considerable further gains in labor force activity among women in the central age groups; and (3) further declines in the participation rates of older

---

<sup>1</sup> U.S. Department of Commerce, U.S. Bureau of the Census, "Estimates of Coverage of Population by Sex, Race, and Age," Report PHC (E-4).

workers, both males and females (see Table 3). With regard to these three groups, and particularly with regard to whites in these groups, the three sets of projections point in the same general directions and differ only in terms of the expected rate of change.

The group for which the three sets of projections differ most radically in terms of direction (or sign) are black men. For this group, the low-growth projections follow the declining path which has been evident in recent years, whereas the high-growth projections trace the steep, upward sloping path that these rates would have to follow if they are to reach the high-growth rate for white males by the year 2000.

It should thus be emphasized that for some black groups the high-growth projections would entail a sharp departure from the trends in participation exhibited over the past two decades. While there are yet few signs that such turnaround is about to take place, although there has been an upturn for some age groups in the last couple of years, such projections should still be useful, at least in estimating what has been accomplished and what remains to be done in order to have blacks sharing equally in the economic progress of the nation.

There is also a considerable degree of commonality between the three sets of projections in terms of the most basic changes in the age configuration of the labor force. Because of the important changes in the population structure which are common to all three sets of projections, they all show a large decline in the size of the youth labor force and a big increase in the labor force accounted for by persons 25 to 54 years of age. (These changes in the size and configuration of the labor force are shown in absolute terms in Table 4 and in percent terms in Table 5.) But let us now look at the basic difference between the three sets of projections and the assumptions which underlie them.

Under the *intermediate-growth* assumptions, the civilian labor force would reach 113.0 million by 1985 and 119.4 million by 1990. Contributing to this growth would be the expansion of the population of working age and a rise in the civilian labor force participation rate from 62.3 percent in 1977 to 66.2 percent by 1990.

Under this scenario, the female share of the labor force would reach 45 percent by 1990, up from 41 percent in 1977. Another important development, inherent to this as well as the other two scenarios, is the large growth in the proportion of the labor force in the central age groups. Reflecting primarily the sharp decline in the youth population and the anticipated continuation of the decline—albeit at a reduced pace—in labor force participation among older workers, the proportion of the work force accounted for by persons 25 to 54 would expand from

TABLE 2  
Actual and Projected Civilian Noninstitutional Population by Age, Sex, and Race<sup>a</sup>  
(numbers in thousands)

Race, Sex, and Age	Levels				Net Changes			Annual Percent Changes		
	Actual		Projected		1970	1977	1985	1970	1977	1985
	1970	1977	1985	1990	to 1970	to 1985	to 1990	to 1977	to 1985	to 1990
Total										
Both sexes 16 years and over	136,995	156,426	172,935	180,236	19,431	16,509	7,301	1.89	1.25	.83
Men, 16 years and over	64,261	73,963	81,851	85,265	9,702	7,888	3,414	2.01	1.27	.82
16 to 19 years	7,142	8,167	6,874	6,477	1,025	-1,293	-397	1.92	-2.15	-1.19
20 to 24 years	6,851	9,196	9,446	8,180	2,345	250	-1,266	4.21	.34	-2.88
25 to 54 years	33,592	37,885	44,714	49,240	4,293	6,829	4,526	1.72	2.07	1.93
55 years and over	16,677	18,714	20,817	21,368	2,037	2,103	551	1.65	1.33	1.52
Women, 16 years and over	72,734	82,462	91,084	94,971	9,728	8,622	3,887	1.79	1.24	.84
16 to 19 years	7,371	8,303	7,016	6,596	932	-1,287	-420	1.70	-2.11	-1.23
20 to 24 years	8,453	9,863	10,082	8,813	1,410	219	-1,269	2.20	.27	-2.69
25 to 54 years	36,354	40,574	47,363	52,067	4,220	6,789	4,704	1.57	1.93	1.89
55 years and over	20,556	23,717	26,623	27,495	3,161	2,906	872	2.04	1.44	.64
White										
Both sexes, 16 years and over	122,112	137,595	150,057	155,001	15,483	12,462	4,944	1.71	1.08	.65
Men	57,488	65,478	71,525	73,875	7,990	6,047	2,350	1.86	1.10	.65
Women	64,624	72,117	78,532	81,126	7,493	6,415	2,594	1.57	1.07	.65
Black and other										
Both sexes, 16 years and over	14,883	18,831	22,836	25,171	3,948	4,005	2,335	3.36	2.41	1.95
Men	6,773	8,486	10,293	11,339	1,713	1,807	1,046	3.22	2.41	1.94
Women	8,110	10,345	12,543	13,832	2,235	2,198	1,289	3.48	2.41	1.96

<sup>a</sup> Computed on a compounded basis.

TABLE 3  
Actual and Projected Civilian Labor Force Participation Rates by Age, Sex, and Race  
(numbers in percent)

Age, Sex, and Race	Actual		Projected					
	1970	1977	Low Growth		Intermediate Growth		High Growth	
			1985	1990	1985	1990	1985	1990
Total								
Both sexes, 16 years and over	60.4	62.3	63.0	63.0	65.3	66.2	67.7	69.7
Men, 16 years and over	79.7	77.7	74.7	73.3	77.0	76.4	79.4	80.0
16 to 19 years	56.1	61.0	61.5	61.9	63.6	64.8	66.8	70.8
20 to 24 years	83.3	85.7	83.7	82.4	85.7	85.0	87.8	89.1
25 to 54 years	95.8	94.2	92.2	91.1	93.5	93.1	95.1	95.6
55 years and over	55.7	47.5	37.5	32.2	41.9	38.0	46.1	43.5
Women, 16 years and over	43.3	48.4	52.4	53.8	54.8	57.1	57.1	60.4
16 to 19 years	44.0	51.4	55.4	56.8	59.7	62.8	63.5	68.9
20 to 24 years	57.7	66.5	73.7	75.2	76.8	80.4	79.9	85.2
25 to 54 years	50.1	58.4	65.9	69.0	68.5	72.4	70.9	76.1
55 years and over	25.3	22.9	19.5	17.2	21.0	19.3	22.1	20.7
White								
Both sexes, 16 years and over	60.2	62.6	63.5	63.7	65.9	66.9	67.9	69.8
Men	80.0	78.5	75.7	74.3	77.9	77.4	79.9	80.2
Women	42.6	48.1	52.4	53.9	54.9	57.4	57.1	60.4
Black and other								
Both sexes, 16 years and over	61.8	60.0	59.6	58.9	61.7	62.0	65.9	68.9
Men	76.5	71.0	68.2	66.6	70.5	69.9	76.5	79.2
Women	49.5	50.9	52.6	52.7	54.4	55.5	57.2	60.5

TABLE 4  
Actual and Projected Civilian Labor Force Levels by Age, Sex, and Race  
(numbers in thousands)

Age, Sex, and Race	Actual		Projected					
	1970	1977	Low Growth		Intermediate Growth		High Growth	
			1985	1990	1985	1990	1985	1990
Total								
Both sexes, 16 years and over	82,715	97,401	108,900	113,521	112,953	119,366	117,005	125,603
Men, 16 years and over	51,195	57,449	61,169	62,472	63,007	65,115	65,013	68,220
16 to 19 years	4,006	4,985	4,225	4,007	4,374	4,199	4,589	4,587
20 to 24 years	5,709	7,877	7,909	6,737	8,091	6,957	8,293	7,292
25 to 54 years	32,193	35,698	41,219	44,844	41,824	45,845	42,533	47,056
55 years and over	9,288	8,888	7,816	6,884	8,718	8,114	9,598	9,285
Women, 16 years and over	31,520	39,952	47,731	51,049	49,946	54,251	51,992	57,383
16 to 19 years	3,241	4,267	3,887	3,749	4,192	4,139	4,457	4,546
20 to 24 years	4,874	6,556	7,428	6,626	7,742	7,086	8,053	7,508
25 to 54 years	18,196	23,692	31,220	35,942	32,432	37,713	33,596	39,630
55 years and over	5,209	5,432	5,196	4,732	5,580	5,313	5,886	5,699
White								
Both sexes, 16 years and over	73,518	86,107	95,285	98,686	98,876	103,751	101,951	108,253
Men	46,013	51,421	54,147	54,921	55,733	57,185	57,137	59,234
Women	27,505	34,686	41,138	43,765	43,123	46,566	44,814	49,019
Black and others								
Both sexes, 16 years and over	9,197	11,294	13,618	14,836	14,079	15,615	15,058	17,350
Men	5,182	6,028	7,022	7,550	7,256	7,930	7,879	8,986
Women	4,015	5,266	6,596	7,286	6,823	7,685	7,179	8,364

TABLE 5  
Actual and Projected Annual Rate of Change in Labor Force Levels, by Age, Sex, and Race<sup>a</sup>  
(numbers in percent)

Age, Sex, and Race	Actual 1970 to 1977	Projected					
		Low Growth		Intermediate Growth		High Growth	
		1977 to 1985	1985 to 1990	1977 to 1985	1985 to 1990	1977 to 1985	1985 to 1990
Total							
Both sexes, 16 years and over	2.33	1.39	.83	1.85	1.10	2.29	1.42
Men, 16 years and over	1.65	.78	.42	1.15	.66	1.55	.96
16 to 19 years	3.12	-2.07	-1.06	-1.63	-.82	-1.03	-.01
20 to 24 years	4.60	.05	-3.21	.34	-3.02	.64	-2.57
25 to 54 years	1.48	1.80	1.69	1.98	1.84	2.19	2.02
55 years and over	-.63	-1.61	-2.54	-.24	-1.44	.96	-.66
Women, 16 years and over	3.39	2.22	1.34	2.79	1.65	3.29	1.97
16 to 19 years	3.93	-1.17	-.72	-.22	-.25	.54	.40
20 to 24 years	4.24	1.56	-2.29	2.08	-1.77	2.57	-1.40
25 to 54 years	3.77	3.45	2.82	3.93	3.02	4.37	3.30
55 years and over	.60	-.56	-1.87	.34	-.98	1.00	-.65
White							
Both sexes, 16 years and over	2.26	1.27	.70	1.73	.96	2.11	1.20
Men	1.59	.65	.28	1.01	.51	1.32	.72
Women	3.31	2.13	1.24	2.72	1.54	3.20	1.79
Black and other							
Both sexes, 16 years and over	2.93	2.34	1.71	2.76	2.07	3.60	2.83
Men	2.16	1.91	1.45	2.32	1.78	3.35	2.63
Women	3.87	2.81	1.99	3.24	2.37	3.87	3.06

<sup>a</sup> Computed on a compounded basis.

61 to 70 percent over the 1977-90 period. The growing labor force role of persons 25 to 54, who have considerable work experience and are generally very productive, should help to sustain the economic growth of the nation.

Under the *high-growth* scenario, the civilian labor force would reach 117.0 million by 1985 and 125.6 million by 1990. Most of the growth underlying these assumptions would be supplied by women, whose civilian labor force participation rate would rise to 57.1 percent by 1985 and to 60.4 percent by 1990.

Under this growth path, the proportion of the labor force accounted for by women would grow slightly faster than under the intermediate growth assumption, from 41 percent in 1977 to 46 percent in 1990. These projections would also entail a very significant expansion in the proportion of the labor force accounted for by blacks. Should the path toward convergence of the participation rates of blacks and whites be followed, there would be an increase in the "black and other" share of the civilian labor force from 11.6 percent in 1977 to 13.8 percent by 1990.

Under the *low-growth* scenario, the civilian labor force is projected to grow only to 108.9 million by 1985 and to 113.5 million by 1990. As shown in Table 1, this would imply an annual rate of growth of 1.4 percent (compounded) for the 1977-85 period and .8 percent for the 1985-90 period, down from a growth rate of 2.3 percent for the 1970-77 period.

It was assumed for the purpose of this scenario that, beginning in 1980, the fertility rate would move toward the Series 1 path in the Bureau of the Census projections, which would imply that each woman would have an average of 2.7 children compared with the 1.8 average of recent years.<sup>2</sup> Principally because of this constraint, but also because the labor force rates for women outside the childbearing group would be assumed to rise at a lesser pace than under either of the other two scenarios, the overall civilian labor force participation rate for women 16 years and over would rise to only 53.8 percent by 1990 from 48.4 percent in 1977.

While there are not yet any signs that the hypothesized rebound in the fertility rate, which is crucial to these participation assumptions, is about to take place, there are some demographers who believe that it will. Richard Easterlin, for example, believes that the decline in the

---

<sup>2</sup> U.S. Department of Commerce, Bureau of the Census, "Projections of the Population of the United States: 1977 to 2050," *Current Population Reports*, Series P-25, No. 704, July 1977.



youth proportion of the population during the early 1980s will be accompanied by exactly such a phenomenon.<sup>3</sup>

Even under this scenario, however, the proportion of the labor force accounted for by women would expand significantly—from 41 percent in 1977 to 45 percent in 1990. There would again be a substantial rise in the proportion of the labor force accounted for by persons 25 to 54, as this is a development stemming essentially from population dynamics that are the same under each of the three scenarios.

### **Socioeconomic Implications**

Inherent in the labor force growth paths traced by three sets of projections and in the population trends which underlie them are some important implications for the social and economic development of our nation during the 1980s. There should, for example, be some improvement in the employment situation of youths; the labor force should, in general, be more mature and thus somewhat more productive; and the ratio of nonworkers to workers in the total population would narrow in at least two of the scenarios, a development that should lead to further improvements in general standard of living.

The upcoming decline in the youth population and labor force should lessen the competition for jobs among youths and narrow the relative gap between their jobless rates and those for older workers. This gap was much smaller before the youth population began to increase rapidly during the mid 1960s, and its subsequent widening has been directly linked by some economists to the "crowding" effect caused by the entry of even larger numbers of youths into the job market.<sup>4</sup> Of course, the sharp reduction in the number of youths should also have a negative impact on college enrollments and on the production and marketing of those goods and services which are traditionally aimed at the youth market, and this may well create some disemployment.

It should also be noted that the decline in the youth proportion of the population will not be nearly as pronounced for blacks as for whites. The black population has historically had a much higher birth rate than the white population and thus a larger component of young persons. This will continue to be the case. Although the birth rate has also been

---

<sup>3</sup> See Richard A. Easterlin, Michael L. Wachter, and Susan M. Wachter, "Demographic Influences on Economic Stability: The United States Experience," *Population and Development Review* (March 1978).

<sup>4</sup> Michael L. Wachter, "The Demographic Impact on Unemployment: Past Experience and Outlook for the Future," in *Demographic Trends and Full Employment*, Special Report No. 12 of the National Commission for Manpower Policy, December 1976.

slackening among blacks, the number of black youths is still projected to rise slightly during the 1980s. Since black youths have traditionally had very high unemployment rates, the increase of the black projection of the youth population will tend to keep the overall youth jobless rate high. It can be hypothesized, however, that even black youths will benefit substantially from the reduced competition for jobs among youths in general.

While the number of youths in the labor force will drop, the number of workers age 25–54 will expand considerably reflecting the gradual aging of those born during the post-World War II baby boom. The implications of this development are that the labor force will in general be more mature, composed of persons with considerable work experience, and, supposedly, very productive. In terms of potential output, this development should tend to at least partly offset the effects of the numerical decline in labor force growth during the 1980s. But it should also be worth noting again that under all three sets of projections there would be an increase in the female proportions of the labor force and that this has also considerable implications in terms of potential output. The consequences of this development as far as output is concerned will depend heavily on the extent to which women—particularly those with children—will be able to work on a full-time basis.

Another important implication of these projections is that persons 55 and over, and particularly those over 65, will continue to show an increased preference for leisure over work. The three sets of projections differ in this respect only in terms of how much lower the participation rates of older persons may go. Under the high-labor-force-growth assumptions, these rates would decline very little while in the low-growth scenario they would continue to drift downward as they have over the past decade. The rationale for these assumptions is that while the recent changes in mandatory retirement regulations might be expected to slow down the decline in participation among the 65–69 age group, they are not likely to bring about a sudden upturn in any of the rates for older workers. With the general tendency toward earlier retirement expected to continue, the proportion of older persons who are outside the labor force is thus projected to be larger in 1990 than it is now.

Despite this projected development, the so-called “economic dependency ratio,” that is, the ratio of nonworkers to workers in the entire population, including children, should narrow considerably during the 1980s. As shown below, this ratio stood at 117.8 in 1977, meaning that there were 117.8 nonworkers for every 100 workers in the population. Assuming that the birth rate will not increase much from current levels,

the dependency ratio would decline considerably both under the high- and the intermediate-labor-force-growth scenarios. As shown below only under the low-labor-force-growth scenario, which is predicated on a sharp rise in the birth rate and very small increase in the overall labor force participation rate, would the "economic dependency ratio" remain at current levels.

		Economic dependency ratio			
		1977	1985	1990	
High labor force growth	}	117.8	{	85.0	
Intermediate labor force growth				92.2	94.5
Low labor force growth				99.0	120.3
				115.2	

The implications of the high- and intermediate-growth scenarios with regard to the dependency ratio is that each worker would have fewer nonworkers to feed, cloth, and house and that this should help our nation to further improve the standard of living of its people. And even assuming very low rates of labor force growth and a sharp rebound of the birth rate, there would still not be a significant widening of this important ratio during the 1980s. The ratio is, of course, expected to widen considerably after the year 2000, when the post-World War II babies, who are now entering the central age groups, will begin to retire. But that is a development far beyond the scope of these projections.

### Summary and Conclusions

Labor force growth should slow down during the 1980s, largely because the working age population will be expanding much more slowly than during the 1970s. The youth labor force should actually decline considerably, reflecting the protracted decline in the birth rate during the 1960s and early 1970s. Concomitant with this development there should be a significant increase in the proportion of the work force age 25-54.

The precise extent to which these developments will affect the rise and configuration of the labor force depends on the assumptions which are made about the future course of the labor force participation rates of the various population groups. For each population group, we projected the participation rates according to three different paths. These alternatives rates were then applied to the population estimates, with the results being aggregated into a high-growth scenario, an inter-

mediate-growth scenario, and a low-growth scenario. The resulting labor force levels for 1990 were, respectively, 125.6 million, 119.4 million, and 113.5 million. There is, of course, nothing sacred about these numbers. Each represents nothing more than the labor force levels that would be reached if the alternative assumptions which were made about the labor force trends for the many population groups were to come true *or* if, alternatively, the overprojections for a group or set of groups were to be offset precisely by underprojections for another group or set of groups. The probability that the actual labor force trends will exactly follow either of the three scenarios may not be very high. The three sets of projections should, nevertheless, shed some useful light for planners and policy makers on the possible paths of future labor force growth.

# The New Youth Strategies: A Shift in Employment and Training Policy?\*

GREGORY K. WURZBURG

*National Council on Employment Policy*

Youth unemployment is a serious crisis. More than half the persons unemployed in July were under 25 years of age. Their jobless rate was more than three times that of workers over 24. The differentials between white and nonwhite youths were especially alarming. The unemployment rate for nonwhite youth was three times the rate for white youth, while the participation rates ranged from 10–20 percent lower, depending on the subgroup.

If left unattended, the problems of youth unemployment will perpetuate current inequities and sow seeds for future social unrest. Spells of unemployment for young would-be workers—school leavers, especially—frequently lead to continuing labor market difficulties as youths grow older. The large and increasing differentials among white and nonwhite youth employment patterns prove that there are still racial inequalities in today's labor markets; the differentials between white and nonwhite youth also imply that the inequalities in adult labor markets will not decrease as today's youth matures.<sup>1</sup>

Social scientists identify two critical determinants of youth employment experience: access and competitive standing. The lack of access to labor market information and job opportunities—both functions of inexperience—leaves young adults ill-equipped to make sound judgments about career choices, to plan career development activities, or to engage in knowledgeable search activities. Once young would-be workers gain access to labor markets, they are also at a competitive disadvantage relative to older workers. Many lack the skills or the educational background that employers are seeking. Others lack even the most basic work histories. The youths encountering the most difficulty frequently

---

\* Sar Levitan provided helpful commentary on earlier drafts of this paper; the author assumes responsibility for the views expressed. Author's address: National Council on Employment Policy, 2000 K Street, N.W., Suite 454, Washington, D.C. 20006.

<sup>1</sup> Arvil Van Adams and Garth Mangum, *The Lingering Crisis of Youth Unemployment* (Kalamazoo: Upjohn Institute, 1978).

have never completed high school; but others with diplomas are victims of school systems that warehouse them, leaving them street-wise, but functionally illiterate and totally unprepared to work. Lacking the qualifications to compete effectively with older, more experienced workers, teenagers have also faced stiff competition from other unskilled new labor force entrants and from their own numbers. Surges in female labor force participation rates and increases in the number of undocumented aliens have increased the competition for entry-level slots. The growth in the number of teenagers contributes enormously to the problems. Although that pressure is abating with the peak in the white teenage population already passed, the minority teenage population will continue to grow into the 1980s. To the extent that minority youth continue to be concentrated in declining central cities, the competition for a dwindling number of jobs there will not abate.<sup>2</sup>

### **Matching Policy to the Problem**

The youth employment crisis springs from weaknesses in the health of the economy and shortcomings in the way our labor markets function for inexperienced entrants. The real focus for policy-makers trying to alleviate youth employment problems, however, has been increasingly on the role that schools take in preparing young people for work. The increasing difficulty young people have encountered over the last few years in moving from school to work has been a source of growing concern to national policy-makers responsible for framing employment and training policy. It was not until the acute minority youth unemployment problem could no longer be ignored, however, that action was taken.

In late 1976 and early 1977, while labor markets in general continued to recover ground lost in the 1974-75 recession, labor force participation rates for minority youth were edging up only slightly and their unemployment rates were rising to unprecedented levels.<sup>3</sup> Congress and the Carter Administration responded with the Youth Employment and Demonstration Projects Act (YEDPA), that became law in August 1977. Hoping to address some of the root causes of youth unemployment, the sponsors of YEDPA laid out a broad range of programs. Together with previously existing programs, the federal government has fashioned a strategy that provides a continuum of services to treat a range of problems. The Young Adult Conservation Corps (YACC) is geared to meet the problem of temporary joblessness by providing up to a year of work

---

<sup>2</sup> *Ibid.*

<sup>3</sup> U.S. Department of Labor, *Employment and Training Report of the President* (Washington: U.S. Government Printing Office, 1978).

to jobless 16–24-year-olds. The Youth Community Conservation and Improvement Projects (YCCIP) are also geared to providing jobs to unemployed youths, but concentrate on 16–19-year-old out-of-schoolers from economically disadvantaged backgrounds. The Youth Employment and Training Program (YETP), targeted by income, is principally for in-school youth. It provides opportunities for work experience, but also puts a strong emphasis on developing reliable labor market information and channeling it to students through vocational exploration activities and more sophisticated career guidance counseling. The Youth Incentive Entitlement Pilot Project (YIEPP), an experimental venture, tests on a limited basis the effect that a guaranteed job has on keeping economically disadvantaged youths in school. At the far end of the spectrum is the Job Corps, providing intensive counseling, training, and supportive services to the hardest core unemployed. Although YEDPA did not specifically change Job Corps, the YEDPA sponsors, trying to establish a comprehensive youth policy, beefed up the Corps, providing a mandate and the resources for doubling the number of Job Corps sites and enrollees.

The services provided through Job Corps and the various components of YEDPA reflect national employment and training policies that seem to be responsive to many of the factors underlying youth unemployment by providing a broad range of services. But breadth of service alone is no criterion for establishing expectations about the impact of this policy. This is because the combined resources of Job Corps and YEDPA are simply not nearly sufficient to penetrate effectively the universe of need. For example, an estimated 30 million youth are eligible for the fewer than 25,000 jobs provided by YACC. Approximately 3 million youth are in need of the jobs and services provided by YETP; fewer than 1 in 10 can be served.

Almost by force of logic, the sheer scale of the youth employment problem requires federal policy-makers to deploy YEDPA and Job Corps as one component in a larger federal/state/local policy. The hope is that if this approach succeeds in broadening the institutional base of the response, it will succeed in increasing the local resources available to combat youth unemployment.

In fact, the scale of adult unemployment, underemployment, and other labor market problems has also always far exceeded the scale of the federal response under the Comprehensive Employment and Training Act (CETA) and Wagner-Peyser, for example. A much larger resource allocation and institutional base have always been needed there, too. Yet despite exhortations from national policy-makers to link na-

tionally supported programs with state and locally supported activities and resources, such complementarity has never been achieved. Since CETA was enacted, the federal/state-local partnership for curing employment ills has been confined to state and local officials mouthing federal policy out of state and local mouthpieces.

In what could be a significant departure from the historical pattern, YEDPA is showing signs of being successful in leveraging federal youth resources for employment and training into a larger programmatic response dominated by states and local jurisdictions. Although this strategy invites responses from a multitude of local governmental agencies and constituent groups such as unions and private employers, one of the most important points of involvement will be with local schools. YEDPA's potential for buying change in local education patterns is noteworthy.

### **Broadening the Institutional Base**

Many observers feel that the most effective response to youth employment problems can only be one that builds on extensive involvement of local education agencies (LEAs). Schools have institutional advantages. They are locally controlled. In terms of resources, they are enormous, spending roughly \$40 on youth for every \$1 spent in CETA programs. Schools have staff, facilities, and programs in place that, with only marginal changes, can be adapted to complementing the focus of federal employment and training programs for youth.

Education institutions have even more important advantages from a programmatic perspective. Elementary and secondary schools dominate the early lives of young people. Schools are intuitively much better adapted to fill the need for long-term remediation for youths lacking basic reading, writing, and math competencies. They are also the logical base of action for policies trying to prevent illiteracy in the future. Schools represent the one major institution that can virtually guarantee contact with the persons who later are the names and faces of the youth employment crisis. Finally, as institutions devoted to education, schools are seen as having an obligation to prepare young persons to be self-sufficient in later life.<sup>4, 5</sup>

The architects of YEDPA went beyond earlier CETA strategies for expanding institutional bases. In designing an employment and training program for youth, they capitalized on the logic of including schools and

---

<sup>4</sup> Kenneth Hoyt, "YEDPA and Career Education" (Washington: U.S. Office of Education, May 1978), mimeo.

<sup>5</sup> Garth Mangum, *Employability, Employment and Income* (Salt Lake City: Olympus Publishing Co., 1976).



built into the legislation provisions to stimulate linkages. The most important provision sets aside 22 percent of each local sponsor's YETP allocation to be administered under the authority of an agreement negotiated with local education agencies. Another important provision strongly encourages local sponsors to negotiate agreements with local schools under which the schools award academic credit for work experience gained under YETP and YCCIP.

Assessments of the implementation of the new youth programs indicate so far that, indeed, local CETA sponsors and local schools are showing signs of moving in the direction of creating a genuine partnership. Although there is much more potential than there are hard achievements in building a broad institutional base, there has been substantial progress in less than a year. Virtually all prime sponsors have at least gone through the motions of negotiating CETA-LEA agreements. Some are no more than pro forma, nonfinancial pacts. Others mark the next step in what has been a continuing rapport between local educators and the manpower establishment. In some areas, schools are administering 100 percent of the local sponsor's youth allocation.

The services under the agreements vary, from isolated work-experience projects to programs for reenrolling dropouts in alternative schools, to extensive and elaborate vocational-exploration and career-counseling initiatives. Sometimes the services that schools have already provided are being expanded to accommodate young CETA clients. But in other instances, entirely new services are being instituted, with schools augmenting resources so that services can be extended to more than just CETA-eligible youths.

What is important in the pattern so far is the dialogue between CETA sponsors and local schools and the emerging presence of employment and training-related activities in local schools. Although there is not universal acclaim among local educators for all aspects of YEDPA, it is encouraging that employment and training services for youth are becoming less and less clearly identified as CETA activities. The implication is that those services are becoming more enmeshed in a much larger institutional base that has access to much richer resources.

To the extent we are witnessing schools providing more comprehensive services that include preparation for the world of work, YEDPA has contributed in a positive way, but it is not the sole agent for change. Federal policies supporting vocational education, compensatory education, and career education have also been pushing schools in the same direction.

YEDPA, however, does seem to be unique in the way it is pulling

together separate institutions. In some respects, the CETA system has served as a safety net for persons who have failed in—or have been failed by—the traditional education system. But CETA alone has been nothing more than a stopgap measure, ill-equipped to compensate for an individual's years of inadequate education. There has been no policy tool for providing more permanent prevention, or remediation where it is too late for prevention. The effect of YEDPA may be twofold: first, to introduce and reinforce the role of local schools in preparing youths for careers; second, to keep youths who cannot succeed in a traditional school setting from losing touch with alternative services that may be more effective in preparing them for working.

### **No Bed of Roses**

The potential for change in the role of local schools, the results so far, and the hopes of some policy-makers for dramatic change, should not disguise the fact that long-lasting change is not likely to come easily. The educational establishment is long-lived, large, powerful, and firmly embedded in state and local structures. The enormity of the implications for even small changes in that structure creates a conservative mindset, resistant to restructuring. Among education administrators, advocates for radical change are rare.

Against that backdrop, it is not surprising that past employment and training policy has been conducted largely outside the sphere of influence of the educational establishment; it was necessary for survival.

Events, however, especially the growing proportions of the crisis of youth unemployment, have encouraged policy-makers to consider employment and training policy and education policy as possible adjuncts. Events have also weakened some of the traditional strengths of the educational establishment, increasing the likelihood of YEDPA being able to buy change. Declining enrollments have put education administrators in a posture of retrenchment. Evidence of declining school achievement and illiteracy among high school graduates has put administrators and teachers alike on the defensive. It is not surprising that policy-makers assumed a nexus between the apparent decline in school performance and the simultaneous deterioration in labor market experiences for young adults. In formulating the new youth programs, educators were more willing than in the past to try something new in the hope that it would fortify their position. Manpower policy-makers readily agreed, because they have historically urged a more responsible role for schools.

YEDPA is in place and some cooperation is developing; however, some warnings are necessary. YEDPA marks some new complementary

roles for schools; that means relearning, and that will take time. YEDPA is forcing schools to provide services to groups of students that schools have ignored before. This means overcoming the effects of institutional biases in curriculum development and personal prejudices. In some areas, new employment and training activities are redundant, compensating for past failures; the presence of these activities serves as a mute reminder of those past failures. This is bound to stimulate some defensiveness; it also means relearning and time.

### **A New Philosophy**

Federal employment and training programs acting alone can never do enough to solve all the employment difficulties of all Americans, or even just the difficulties of those who are economically hardpressed. As a first condition, there must be a healthy economy with growing opportunities for employment. Lacking that, the federal government can hardly do more than provide opportunity for countercyclical public service employment, and provide transfer payments to ease the economic privation for those who are jobless.

Even under conditions of relative prosperity, however, there are limits on what the federal government should do by itself. CETA is not adapted to curing the fundamental causes of structural job-market problems, nor is it adapted to providing extensive stopgap cures. As a matter of economic necessity, there is a need for coupling federal employment and training measures with state and local resources. As a matter of programmatic necessity, there is a need for complementing the provisional cures provided by CETA with more permanent cures. As a matter of federal philosophy, there seems to be a moral imperative for state and local interests to help form a partnership with federal interests so that a more comprehensive educational establishment can be created.

YEDPA bears careful watching. It may offer some clues to how such an ambitious partnership could be forged.

## DISCUSSION

ROBERT F. COOK

*The Brookings Institution*

### **Wurzburg Paper**

Conventional wisdom suggests that the effects of early employment experience are washed out by age 24–26 when more recent experiences become more important. Mr. Wurzburg calls attention to more recent information that suggests that for nonwhite males and high school dropouts, this adverse experience affects later employment experience as well. This, he suggests, is due to inferior education, concentration in urban areas, use of less efficient formal labor market channels, and competition with whites and women. I would add to this two factors that are correlated with urban concentration—higher urban wage levels may: (1) increase the competition for available jobs, and (2) change the composition of available jobs in a manner that would adversely affect teenagers.

The conventional wisdom further holds that the mechanism for minimizing the effects of being a high school dropout or of having an uneven early labor market experience is experience and a job history. The factors mentioned suggest that, for this group, the accumulation of experience will be nonexistent or inferior to that of other workers. If this mechanism breaks down, then what was a transitional problem becomes translated into a structural problem. Consequently, the view of youth employment programs as simply a way of providing income and keeping youth off the streets until they are 24 is not sufficient. It will work only if it provides the work history and experience that will allow them to compete at age 24.

Mr. Wurzburg notes that: (1) the resources of the youth employment program are small relative to the universe of need; and (2) the only way to amass enough resources is if educational institutions steer more resources to disadvantaged youth. Mr. Wurzburg's comments to the contrary, to a certain extent I think this is a case of hoping for "To Sir With Love." Though CETA is developing its own bureaucracy, it has been in place for a shorter period of time and is probably more adaptable. I think an analogy is appropriate here. It has been suggested that CETA represents a contract with local sponsors, exchanging money for desired services. I would hope that the money for local education agencies is

not “put on the stump” by sponsors but rather is used to “buy change.” Failing that, I know where I would start looking for the additional resources.

### **Flaim and Fullerton Paper**

I am pleased to see a range of scenarios rather than a single projection as well as an evaluation of past projections.

While the actual labor force projections are themselves interesting, even more interesting are the discussions of the assumptions underlying those projections and the interrelations of their effects. This is particularly the case because, as Mr. Fullerton pointed out, the majority of the growth in the labor force will come from changes in labor force participation rates rather than growth in the population. For example, the participation rates for black women are higher than those for white women. However, the rate for white women is rising faster and, unless there is a rise in the fertility rate, will cross that of black women within the period. Yet only under the high growth assumption does the participation rate for black men increase. Whether the decline in the black male participation rate has had an effect on the increase in the rate for females is open to question. If it does, then the participation rate for black women may increase even faster.

A couple of observations about the implications of these projections are in order. As noted above, only under the high growth assumption does the decline in the participation rate of black males reverse itself. This suggests a deteriorating position for this group. Borrowing a point from Mr. Wurzburg's paper, he notes that the black teenage population will peak after that of whites, several years into the 1980s, which suggests a continuing black teenage unemployment problem.

Much is made of the aging of the current teenage population and the effects of this maturation on productivity, unemployment, and the reduction in the competition for jobs among the next cohort of teenagers. I am not so confident of this scenario. As I wander about, I have noticed a substantial number of young people in their early twenties who appear to be underemployed. Many of them are in jobs that might otherwise be held by teenagers. Unless a way is found to move these people into other jobs, the competition for jobs among the next, smaller cohort of teenagers may not be reduced as much as is suggested here.

### **Borus and Hammermesh Paper**

Many of the comments regarding the use of the Brookings monitoring methodology to assess displacement are dealt with in a paper that Lane

Rawlins and I presented at the American Statistical Association meetings earlier this month. Consequently, I will confine my remarks to some general observations about the various studies.

One observation is that the various estimates have been made for different programs and sets of economic conditions. The NPA and early Johnson and Tomola estimates were for the PEP program of 1971-73. The latest Johnson and Tomola estimates and the reestimates by Wiseman and Borus and Hamermesh are for the PEP and prestimulus CETA program through the fourth quarter of 1975. The Brookings estimates are for the buildup phase of the stimulus program in July 1977 with its emphasis on projects and the use of nonprofit organizations as employers. It has been argued, and this is supported by the Brookings results, that these periods are sufficiently different as to be regarded as distinctly different programs. In fact, PSE from the time of the stimulus allocation, May 1977, is different from earlier programs in three respects that may lower displacement. First, a large portion of PSE funds must now be spent on project employment. Second, there is growing use of nonprofits. Third, the size of the program has approximately doubled, and there appears to be more federal attention to maintenance-of-effort regulations.

A second observation is that the time perspectives differ. The econometric estimates are calculated per 100 positions after one year or as a six- or eight-quarter lag following the introduction of the positions. The Brookings estimates are as of a point in time for PSE positions that have been in place for varying lengths of time. In July 1977, the level of enrollment nationally stood at 438,000. Of these, 65 percent (the sustainment level of 286,000) had been in place for a year or more; 6 percent had been added between October and the introduction of the stimulus funding in May and therefore, had been in place an average of two quarters; and 29 percent (128,000 positions) had been added between May and July 1977, and therefore had been in place less than one quarter. Taking the first, second, and sixth quarterly point estimates of displacement from the Borus and Hamermesh model V (which includes summer youth from the PSE enrollment) and weighting according to the rough composition of the duration of positions in place in July 1977 yields a rough point in time estimate of displacement of 52 percent. While not the same as the Brookings estimate, it is in roughly comparable form and addresses the question of the extent of displacement in the program.

Third, Borus and Hamermesh correctly point out that any study of displacement requires that one answer the "what if" question: What would employment be in the absence of PSE? They note that the prob-

lem facing the monitoring study associate is particularly difficult when it involves decisions about raising taxes or estimating the normal rate of growth of services. We have thought about this methodological issue more than any other, and deal with it extensively in Chapter 3 of our report to the National Commission for Manpower Policy and in the paper mentioned earlier. However, it is also the case that, given the effects of changes in the assumptions underlying time-series models, it appears at least as difficult to develop precise estimates of the effects of introducing 100,000 new positions into a PSE program that is marginal to a state and local government employment level of 12 million growing at a rate of 500,000 jobs a year.

Finally, it is clear that one of the things that causes local governments to resist using CETA-PSE funds to substitute for funds from other sources is *uncertainty*. If, as Borus and Hamermesh suggest, and I agree, PSE became completely institutionalized, the extent of displacement would certainly rise. However, to date, and particularly now, this is not what I or anyone would forecast; uncertainty is a hallmark of the program.

Given the topic of this session, I think the more interesting questions are presented in the conclusions. The best way to answer the "what if" question would be to cut off the funding and watch what happens, though this experiment is unlikely to occur. Further, I think the prospect of services provided with PSE creating their own demand is very real. It is one thing to say that since the unemployment rate has dropped, X hundred thousand PSE positions can be cut. It is quite another thing to cut out emergency medical services in Cleveland or hot meals for the elderly in Baltimore.

# IX. STRATEGIES AND PROBLEMS IN UNION ORGANIZING

(Memorial Session in Honor of Joel Seidman)

---

## Unions in the Traditional Sectors: The Mid-Life Passage of the Labor Movement\*

MYRON ROOMKIN  
HERVEY A. JURIS  
*Northwestern University*

If the modern era in industrial unionism began with the Wagner Act, the labor movement is over 40. Individuals turning 40 are said to evaluate their life goals and potential against their achievements, usually with depressing results.<sup>1</sup> Anthropomorphically, the modern labor movement at 40, especially in the so-called traditional sectors of railroads, construction, manufacturing, and mining, must face the same reality. The purpose of this paper is to document and discuss the status and near-term prospects of the manufacturing and construction sectors as they traverse this "Mid-Life Passage." Mining and railroads also have long been heavily unionized; but the product market position of these sectors, their centrality to economic activity, and the relative influence of unions in these two sectors began eroding many years ago. The actual or even potential erosion of union strength or influence is a relatively recent phenomenon in the manufacturing and construction sectors, the focus of our discussion.

---

\* This paper benefits greatly from the papers presented to, and the ensuing discussion at, a conference, "Manufacturing Unionism in the 1980s," hereinafter cited as *Conference*, convened by the authors and supported by A. T. Kearney, Inc. Where appropriate, specific authors are cited. We draw most heavily on the paper by Albert Rees. Authors' address: Graduate School of Management, Northwestern University Evanston, Ill. 60201.

<sup>1</sup> We have obviously borrowed the concept of life passage from the popular *Pas-sages, Predictable Crises in Adult Life*, by Gail Sheehy.



### Membership Statistics

For all of their limitations, the data on union membership unambiguously document an ebb in the percent of the workforce affiliated with construction and manufacturing unions. As Table 1 shows, 1976 manufacturing union membership as a percent of total employment and of

TABLE 1  
Reported Union Membership and Employment in  
Manufacturing, 1956-76

Year	(1) Union Members (thousands)	(2) Total Employment (thousands)	(3) Production Workers (thousands)	(4) (1) as % of (2)	(5) (1) as % of (3)
1956	8,839	17,243	13,436	51.3	65.8
1958	8,359	15,945	11,997	52.4	69.7
1960	8,591	16,696	12,586	51.5	68.3
1962	8,050	16,853	12,488	47.8	64.5
1964	8,342	17,274	12,781	48.3	65.3
1966	8,769	19,214	14,297	45.6	61.3
1968	9,218	19,781	14,514	46.6	63.5
1970	9,173	19,349	14,020	47.4	65.4
1972	8,920	19,090	13,957	46.7	63.9
1974	9,144	20,016	14,607	45.7	62.6
1976	8,413	18,956	13,625	44.6	62.1

Sources: BLS *Bulletin* 186:3, Tables 39 and 41 and *Handbook of Labor Statistics, 1975*, as presented in Albert Rees, "The Size of Union Membership in Manufacturing in the 1980s," *Conference*.

production worker employment (commonly called the union penetration rate) were at their lowest point over the 20-year period for which data are available (with the exception of 1966 for production workers). Even allowing for the fact that 1974 and 1976 were recession years, the decline in penetration is still evident. A similar trend, but at a less impressive rate of decay, is found in construction as documented in Table 2.

Much of this decline has been traced to product market or labor market shifts among organized businesses: companies have folded; plants have closed and either relocated abroad or shifted to the less organized South and West. Sometimes these organized firms have simply lost business to nonunion firms. This is especially true in the construction industry where the rise of nonunion firms in contract construction is widely known anecdotally, but has yet to be documented.

Declining membership has also been due to interindustry shifts in employment. Where manufacturing employment has grown it has been in newer high-technology industries not as easily organized as the older, heavy manufacturing industries. Particularly, we are referring to prod-

TABLE 2  
Reported Union Membership and Employment in  
Contract Construction, 1956-74

Year	(1) Union Members (thousands)	(2) Total Employment (thousands)	(3) Production Workers (thousands)	(4) (1) as % of (2)	(5) (1) as % of (3)
1956	2,123	2,999	2,613	70.8	81.2
1958	2,324	2,778	2,384	83.7	97.5
1960	2,271	2,885	2,459	78.7	92.4
1962	2,417	2,902	2,462	83.3	98.2
1964	2,323	3,050	2,597	76.2	89.4
1966	—	3,275	2,784	—	—
1968	2,541	3,306	2,786	76.9	91.2
1970	2,576	3,536	2,951	72.8	87.3
1972	2,752	3,831	3,166	71.8	86.9
1974	—	3,985	3,257	—	—

Source: *Handbook of Labor Statistics, 1975.*

ucts such as computers, technical and scientific instruments, and some petrochemical products.

A third factor influencing membership statistics in manufacturing is the change in the occupational mix. Even though employment is growing, it is growing among the less easily organized white-collar segment. Consequently, union security clauses, which historically contributed to growth in union membership as production worker employment expanded, are decreasing in importance. These clauses were probably a major factor in the union growth in Table 1 during the years of the Vietnam war.

Finally, as discussed below, another factor leading to declining membership is the practice of employers'—even organized employers'—operating their new plants without unions. In construction, this has manifested itself in an open-shop movement<sup>2</sup> in which it is alleged that unionized firms have created nonunion firms to compete with themselves—a practice called “double-breasting.”

As the nonunionized segment gained in employment, the labor movement has found it increasingly difficult to organize the unorganized, even in these bedrock sectors. Table 3 shows that the union victory rate in manufacturing and construction representation elections has, with mild fluctuations, moved steadily downward since 1956. The decline in construction seems to have been steeper than in manufacturing. Table 3 also shows that for the period FY 1964 to FY 1976, the average unit size of union representation victories is smaller than that of all elections

<sup>2</sup> See Herbert R. Northrup and Howard G. Foster, *Open Shop Construction* (Philadelphia: Industrial Research Unit, University of Pennsylvania, 1975).

TABLE 3  
Victory Rate and Unit Size in Manufacturing and Construction Industry Closed Representation Elections  
Fiscal Years 1956-76

Fiscal Year	% of All Closed Elections		Union Victory Rate <sup>a</sup>			Estimated Unit Size <sup>b</sup> in Manufacturing		Estimated Unit Size <sup>b</sup> in Construction	
	Mfg.	Const.	All	Mfg.	Const.	All Elections	Union Victories	All Elections	Union Victories
				%	%				
1956	69.9	0.1	65.3%	66.6%	82.6%	114.8	—	106.8	—
1957	69.4	1.2	62.2	61.4	69.1	108.9	—	51.3	—
1958	69.4	1.6	60.8	68.5	59.5	96.2	—	39.6	—
1959	64.1	2.1	62.8	63.0	86.6	94.9	—	77.2	—
1960	61.8	1.9	58.6	58.5	72.1	94.5	—	51.3	—
1961	58.8	2.4	56.1	57.0	63.4	81.7	—	31.0	—
1962	59.7	1.8	58.5	58.3	70.4	93.3	—	39.2	—
1963	58.2	1.9	78.4	57.0	54.6	72.8	—	47.1	—
1964	59.4	2.3	57.1	55.9	68.2	94.8	85.0	32.7	29.2
1965	58.5	2.7	60.2	61.0	67.3	95.3	96.8	47.9	46.7
1966	57.6	2.7	60.8	59.2	78.9	95.7	89.3	36.6	37.7
1967	55.1	2.7	59.0	57.3	67.7	108.4	95.7	33.0	32.1
1968	53.6	2.4	57.2	55.8	61.6	100.4	89.7	57.9	59.6
1969	55.5	2.4	54.6	53.1	51.6	106.4	99.5	34.2	34.3
1970	54.6	2.7	55.2	54.2	57.7	97.6	85.1	27.0	28.2
1971	51.7	2.2	53.2	51.7	65.4	90.7	73.6	36.2	35.7
1972	49.7	2.6	53.6	52.4	68.6	89.6	84.4	37.5	34.5
1973	49.5	2.3	51.1	49.5	54.5	79.8	65.2	34.3	41.3
1974	48.1	3.0	50.0	47.9	51.0	88.9	64.7	22.0	19.2
1975	43.6	2.4	48.2	46.2	46.9	91.0	61.4	36.3	27.1
1976	43.7	2.6	48.1	45.9	47.8	71.4	50.9	42.8	24.9

Source: NLRB, *Annual Reports for Fiscal Years 1956-1976*.

<sup>a</sup> The victory rate is 100 times the number of closed elections won divided by the number of closed elections conducted.

<sup>b</sup> Estimated unit size is the average number of voters eligible to vote in the election.

held in these industries. Even though the unit size as conventionally calculated is not a perfect proxy for new organizing (i.e., certifications and craft severance elections are included), it is patently clear that shrinking union membership in these sectors is strongly associated with failure at the polls, especially in the larger units.<sup>3</sup>

### The Sources of Decline

#### QUANTITATIVE

Despite 20 years of research, the causes of membership decline are still hotly debated between the followers of the saturationist school first advocated by Daniel Bell<sup>4</sup> and the proponents of the historical school as enunciated by Irving Bernstein.<sup>5</sup> Saturationists believe that membership is a predictable function of known structural qualities in the economy; the historical school emphasizes the unpredictable character of union organizing. Reviewing the recent econometric literature, we find the following broad support for the saturationist position:

1. Union membership grows in periods of rising prices.
2. Unionization increases as employment levels increase.
3. Unionization increases as the unemployment rate increases.
4. Political climate may contribute to the growth of unions.
5. Some structural qualities of work and workers influence the propensity to organize.
6. It is not clear that public policy factors make a separate contribution to union growth or decline.

Equation (1), a standardized OLS regression equation, is offered as a further test of the determinants of union growth and as an opportunity to better explore the role of public policy. The dependent variable ( $\%WON_t$ ) is the percentage of union representation elections won by the union at  $t$ .<sup>6</sup> The independent economic variables are:<sup>7</sup>  $IND_{t-1}$ —the

<sup>3</sup>In this paper we do not deal with the decertifications of units primarily because they appear most prevalent among very small units of employees—i.e., 50 workers or less. See the discussion presented in William E. Fulmer, "When Employees Want to Oust Their Union," *Harvard Business Review* 56 (March-April 1978), pp. 163–70.

<sup>4</sup>Daniel Bell, "The Next American Labor Movement," *Fortune* (April 1953), 120ff.

<sup>5</sup>Irving Bernstein, "The Growth of American Unions," *American Economic Review* 44 (June 1954), pp. 301–18.

<sup>6</sup>A full exploration of this line of analysis would follow the caveat of Julius G. Getman, Stephen Goldberg, and Jeanne B. Herman in *Union Representation Elections: Law and Reality* (New York: Russell Sage Foundation, 1976) by distinguishing among three dependent variables—the signing of authorization cards, the percentage of union victories and the strength of the union win.

<sup>7</sup>Lagged values are used to offset the potential of simultaneity bias.

percentage change in the index of industrial production in  $t-1$ ,  $AVW_{t-1}$ —the percentage change in real average hourly wages in  $t-1$ , adjusted for interindustry employment shifts;  $U_{t-1}$ —the unemployment rate in  $t-1$ ;  $P_{t-1}$ —the percentage change in the consumer price index in  $t-1$ ; and  $T$ —trend. The following are considered policy factors:  $PTY_t$ —a dummy variable coded 1 if the NLRB was politically dominated by Democratic appointees, 0 otherwise;  $LG$ —a dummy variable coded 1 if after the Landrum-Griffin Act (1959), 0 otherwise;  $AFL$ —a dummy variable coded 1 if after the AFL-CIO merger, 0 otherwise;  $RR$ —a dummy variable if after the 1961 order giving regions of the NLRB authority over elections, 0 otherwise; and  $DAYS$ —the median number of days between the filing of an election petition and the conduct of an election. Data are for all elections by quarter, 1952-II to 1972-II.

$$\begin{aligned}
 (1) \quad \%WON_t = & -0.07IND_{t-1} + 0.15AVW_{t-1} - 0.03U_{t-1} \\
 & (1.54) \quad (3.27)** \\
 & + 0.12P_{t-1} + 0.30T - 0.21PTY_{t-1} - 0.18LG \\
 & (2.25)* \quad (2.38)* \quad (-3.07)** \quad (-2.03)* \\
 & - 0.10AFL - 1.08RR - 0.29DAYS_{t-1} \\
 & (-1.39) \quad (-6.93)** \quad (-2.09)* \\
 \bar{R}^2 = & 0.737 \quad D.W. = 1.80 \\
 & (t\text{-statistics in parentheses})
 \end{aligned}$$

Equation (1) documents the role of policy factors in influencing election outcomes.<sup>8</sup> The Landrum-Griffin Act, which made changes in the recognitional picketing rights of unions and focused public attention on administrative problems of unions, seems to have reduced the union success rate.<sup>9</sup> Periods in which the Board's majority is Democratic have a lower victory rate than periods in which Republican appointees control the Board. This counterintuitive finding probably stems from the fact that unions do more organizing under Democratic regimes,<sup>10</sup> thereby

<sup>8</sup> While industrial production is not statistically significant in Equation (1), this variable was found to be a statistically significant predictor (at the .05 level) of the number of elections held, as one would expect from the saturationist hypothesis.

<sup>9</sup> The authors are aware that even though a trend variable is included, one cannot totally isolate all of the qualitative factors that covary with the Landrum-Griffin variable over the years since 1959. This standard caveat aside, we are willing to interpret this variable as a measure of public policy.

<sup>10</sup> Again, we are aware that there are factors which are correlated with Democratic regimes—rising employment, falling unemployment, rising wages, etc.; and that these, rather than the existence of the Democratic Party in the White House, may account for the increased organizing activity.

tackling units proportionately more difficult to organize. The negative coefficient on *DAYS*, i.e., delay, shows us why the labor movement was so desirous of speedier elections under the labor law reform bill.<sup>11</sup> Only a part of election delay is attributable to NLRB administrative processes; the rest comes from the parties themselves. Clearly employers prefer lengthy campaigns which place a burden on the union to hold together a majority.

#### QUALITATIVE FACTORS

Econometric evidence is consistent with the "saturationist hypothesis," that is, that union win rates are influenced by identifiable (i.e., quantitative or structural) parameters and that lower win rates stem from the existence of unfavorable structural conditions. These studies do not, however, explain all of the recent interperiod variance in organizing. Qualitative factors must also be considered.

First, there has been increased management resistance to unionization in manufacturing and construction. Partially we may be witnessing the more visible resistance of the most antiunion employers now the focus of organizing campaigns in already heavily unionized sectors.<sup>12</sup> This wave of resistance is consistent with the long-standing preference and ideology of American business to operate nonunion. In this regard, the bitter debate over labor law reform showed how little consensus we enjoy among labor and management on national labor policies. Management, for all the positive aspects of collective bargaining over the last 40 years and all the discussion of accommodation, still prefers philosophically to operate nonunion. They believe that they are entrepreneurs, and as the risk-takers they want to retain control of the business.

Over these 40 years management has also become more sophisticated in understanding why workers organize and more aggressive within the framework of the law in getting their side of the story across to the employees.<sup>13</sup> While it is true that in the past management has known why workers organize and has made attempts to eliminate the causes

---

<sup>11</sup> For a discussion of the impact of delay on election outcomes, see Richard Prosten "The Size of Union Membership: A Discussion," *Conference*, and his paper delivered at this session.

<sup>12</sup> While there have been several, well-publicized episodes of companies systematically violating the laws of organizing, most of the new resistance to unions involves the vigorous exercise of employer rights.

<sup>13</sup> While Getman, Goldberg, and Herman note that in their sample of elections, management and union electioneering had no appreciable effect on the outcome, we are still impressed with the existence of firms which specialize in working with management during election campaigns and boast a win rate significantly higher than the average for management in contested elections.

of labor unrest, these were usually ad hoc approaches. Today many managements continually monitor performance of first-line supervisors, wage levels in the community, and worker feelings in order to maintain a level of grievances below the critical mass necessary for the union to achieve a victory.<sup>14</sup> Management knows what research has only recently documented, "a high relative wage lowers the probability that a worker will vote in favor of the union."<sup>15</sup>

Second, the changing nature of the workforce has slowed down union organizing. Women, the better educated, and younger workers have long been more difficult to organize.<sup>16</sup>

Third, the rapid expansion in job rights through legislation has made it more difficult to organize workers. Simply put, the historical fear of the AFL against government involvement in employee relations was correct: public policy gives employees a free ride in areas where the union was the sole provider of benefits. Furthermore, this expansion in such programs as Equal Opportunity, Occupational Safety and Health, and pension plan security (ERISA), has contributed to employer resistance in two ways. Regulatory programs contribute to operating costs and curtail managerial discretion, underscoring the desirability of remaining nonunion and increasing the level of management sophistication in personnel practices, possibly alerting the small employer to this function for the first time.

### Reversing the Trend?

Notwithstanding all the econometric evidence to the contrary, the historical school may yet prove a valid explanation of long-term developments in union membership. In the tradition of the historical school, Milton Derber<sup>17</sup> points up that trade union membership has always

---

<sup>14</sup> "Major Differences Seen Between Employee Attitudes Toward White Collar and Blue Collar Organizing," *White Collar Reporter*, No. 1032 (January 28, 1977), p. A1.

<sup>15</sup> Henry S. Farber and Daniel H. Saks. "Why Workers Want Unions: The Role of Relative Wages and Job Characteristics," unpublished manuscript, March 1978, as cited in Albert Rees, "The Size of Union Membership in Manufacturing in the 1980s," *Conference*.

<sup>16</sup> Statistical cross-sectional evidence for these assertions are found in William J. Moore and Robert J. Newman, "On the Prospect for American Trade Union Growth: A Cross-Section Analysis," *The Review of Economics and Statistics* 57 (November 1975) pp. 435-45; Ruth Kornhauser, "Some Social Determinants and Consequences of Union Membership," *Labor History* 2 (Winter 1961), pp. 30-61; and James G. Scoville, "Influences on Unionization in the U.S. in 1966," *Industrial Relations* 10 (October 1971), pp. 354-61. Much of the research with respect to women and organizing is dated. There is no reason to believe that women who have the same attachment to the labor force as men will not react to unions in the same way as men. In fact no sex differential in membership propensities was found by Scoville when he controlled for labor force attachment.

<sup>17</sup> Milton Derber, "The Size of Union Membership: A Discussion," in *Conference*.

sputted upward in economically or socially atypical periods: depression, war, or hyperinflation.<sup>18</sup> By their nature, such events are highly unpredictable, as are such noncatastrophic developments capable of increasing union size as the growth of a new labor-intensive industry.

Should unionism in manufacturing reverse its downward decline, it will have to do so by organizing the white-collar and young professional workers, two groups representing a growing share of total manufacturing employment. In appealing to these workers, unions may be aided by two economic developments. First, there will be a labor market glut of highly educated persons age 25–44 over the next few years, reaching 50 percent of the labor force by 1990. The consequences, as Weber<sup>19</sup> has noted, will be more competition for available jobs and promotions, slower career growth, lower rates of increase in wages, and increased wage pressure from those 18 to 25. Second, we believe that employers have come to treat white-collar workers as variable costs. Whereas in earlier recessions, white-collar workers were inventoried and blue-collar workers laid off, more recent experience suggests that white-collar workers are no longer buffered from the vicissitudes of the business cycle. Taken together, these two forces could create the classic concerns of job insecurity and job consciousness among white-collar workers.

Some people believe that organizing would increase were the old-guard labor leaders replaced by a new breed. We disagree. Even in the 1920s, the failure of the labor movement to attract mass-production workers was due to the inherent nonappeal of the AFL to such workers, not a lack of organizing effort. The fact is union leaders follow membership preferences more than they shape them.<sup>20</sup> By implication, in construction, because of the localized labor market and potential for job competition, rank-and-file unrest will be more likely to push leaders into aggressive organizing than in manufacturing where the rank and file are less likely to immediately see the connection between an unorganized jurisdiction and unemployment.

It has also been suggested that the goals of labor might change to

---

<sup>18</sup> We would point out that the decline in union membership persisted during the past period of hyperinflation probably because wage increases are passed through to other sectors.

<sup>19</sup> Arnold R. Weber, "Casual Approach to Labor Supply May Haunt Business," *Wall Street Journal*, January 30, 1978, p. 12.

<sup>20</sup> Richard N. Block, in a working paper entitled "A Theory of the Supply of Union Representation and the Allocation of Union Resources" (February 1978) postulates that as union penetration increases, the incentive to put limited resources into organizing decreases but the incentive to place such funds into internal administrative processes increases. For a thoughtful analysis of the possible emergence of the so-called "new" breed of union leader, see Jack Barbash, "The Union as an Evolving Organization," in *Conference*.



meet the “new” needs of today’s worker. Lodge and Henderson have presented the most elaborate statement of this new ideology in their report for the Trilateral Commission.<sup>21</sup> We, however, believe with Dunlop<sup>22</sup> and others that, despite a few notable and experimental approaches to industrial relations, the goals of the worker will remain very much what they have always been—economic welfare and job security.<sup>23</sup>

### Implications

Since bargaining power is still strongly related to union penetration, and since union penetration is declining, we expect to see significant changes in the industrial relations systems in manufacturing and construction. Construction unions, for example, have been quite receptive to open as well as disguised wage reductions and productivity improvement programs. Manufacturing unions—if steel and automobiles are any indication—are moving toward the isolation of the internal labor market from outside forces, a process management seems willing to accept as long as newer plants can be made more productive. In short, the power relationship of labor and management in manufacturing and construction is finding a new level. We as observers should not lose perspective as this process works itself out.

The major point we would make is that the growth of unions is not a right chiseled in stone. The union as an institution evolved because individual workers needed a counterbalance to real and perceived mistreatment at the hands of management in the employment relationship. To the extent that management has cleaned up its act or workers perceive that management is behaving differently, workers may feel there is no need for this kind of protection. In a democratic society, unions are necessary, but they are not necessary to any given employment relationship unless the employees deem them necessary. Thus, we ought to be concerned that nothing in public policy undermines the potential for workers to form unions, if so motivated. Moreover, we should keep firmly in mind that what we are discussing here are the traditional sectors in which unions once thrived. For the trade union movement as a whole, looking across all sectors of the economy, the picture is not as

---

<sup>21</sup> George C. Lodge and Karen Henderson, “Changing Relationships Among Labor, Business and Government in the United States,” a working paper prepared for the Trilateral Commission, October 1, 1977.

<sup>22</sup> John T. Dunlop, “Past and Future Tendencies in American Labor Organizations,” *Daedalus* 107 (Winter 1978), pp. 79–96.

<sup>23</sup> George Strauss provides a detailed discussion of this point in “The Implications of the Quality of Work-Life Experiments and Similar Initiatives for Manufacturing Labor Relations,” in *Conference*.

gloomy. There are enough managers in the public sector and in the hospital and health services sector who are sufficiently less sophisticated than some of their manufacturing and construction counterparts to provide work for organizers far into the future.

In summary, if as amateur community social workers we could put the manufacturing and construction unions on the couch, we would say, "Face reality; adjust to your new environment and cope!"<sup>24</sup>

---

<sup>24</sup> Michael J. Piore in "Unions and Politics," *Conference*, takes our prescription to COPE quite literally, by suggesting that the future effectiveness of manufacturing unions lies in European-style political action.

# Management Comes Out Swinging

A. H. RASKIN  
*National News Council*

It always gives me a comforting sense of stability to come to sessions of the IRRA and renew communion with the timeless wisdom of such patron saints of labor analysis as John R. Commons and Selig Perlman. Even the congenital irreverence of the irrepressible chairman of this panel, Arnie Weber, cannot dissipate the spirit of rationality and order that pervades the work of this association. The disturbing thing to me is how little of that same spirit seems to be animating the general practice of labor-management relations these days.

Just after World War II, when the antagonisms bottled up for four years as a result of organized labor's wartime no-strike pledge were erupting in a rash of strikes that pushed the lost-time ratio up to its all-time peak of 1.6 percent, the National Planning Association decided it would be a good idea to explore how much peace there was on the industrial front and what made for peace. The fruit of that exploration was a series of monographs that were brought together and published under the general title of "Causes of Industrial Peace." Edited by Clinton S. Golden, a scholarly refugee from the United Steelworkers of America, the studies sought to distill from the case histories of companies and unions with long records of harmonious collective bargaining common elements that might point the way to peace and prosperity in the broad sweep of industrial relations.

The essential finding was that the interests of management, labor, and the consuming public were best served where both parties in bargaining felt strong and secure enough to negotiate responsibly with one another. The moral the series attempted to underscore for employers was that they would be doing their businesses a favor by giving unions a degree of acceptance and security that would enable them to address themselves in mature fashion to the solution of mutual problems and not feel the necessity for feeding raw meat to their rank and file as a way of insuring the union's own survival.

Professor Charles A. Myers of MIT, in setting forth the conclusions

---

Author's address: 136 E. 64 Street, New York, N.Y. 10021.

reached by the study committee on the attitudes and approaches most conducive to cordial, constructive relations, listed this one first: "There is full acceptance by management of the collective bargaining process and of unionism as an institution. The company considers a strong union an asset to management."

It would be an exaggeration to suggest that this maxim won universal acceptance in industry in the three decades after its promulgation, but it is incontestable that many large companies, including some of the giants, did move a long way toward the kind of union acceptance the National Planning Association had endorsed as mutually beneficial. Bitter disagreements continued to arise over how much was too much in contract negotiations, especially when unions reached out in new directions or their demands encroached too drastically on management's turf. But the converts in Big Business rarely allowed such biennial or triennial unpleasantness to interfere with the development of closer working relationships in dealing with day-to-day problems.

From industry's standpoint, the enhancement of union security, coupled with the increasing centralization of power that industry-wide and company-wide bargaining brought to the big internationals, carried some discernible advantages. The unions operated as a primary force for stabilization, both in equalizing basic labor costs within each major industry and in maintaining uninterrupted production for the life of the contract.

The unions fostered rank-and-file respect for the grievance machinery; impartial arbitration became the final step in the process almost everywhere, and quickie strikes of the kind that had once been almost weekly occurrences in many plants because of employee irritation turned into rarities in most strongly unionized fields. Where local militants, acting with or without the endorsement of local leadership, staged wildcats, the international would usually work at least as hard as management to crack down on those defying contractual procedure.

The unions as they grew in strength performed another great service for management, though it would be fatuous to pretend this was any calculated part of their game plan. By pushing up wages and overlarding them with an ever-richer icing of fringe benefits and payments for not working, labor ranked alongside overseas trade competitors and substitute product industries at home as a force prodding United States employers to modernize their productive facilities and become more efficient.

From the unions' standpoint, the climate of cordiality also was fruitful. Management became the principal recruiting agent for a labor move-

ment that had run out of steam in direct organizing. The 1950s and 1960s marked a period of growth in employment for many unionized industries, partly through their own expansion and partly through their branching out into conglomerates that swallowed up unrelated or tributary units, many of them nonunion. The operation of union shop contracts automatically delivered over tens of thousands of new employees in unionized enterprises. The boss, in effect, signed them up as union members, then collected their dues, the ultimate in pushbutton unionism. The process of enrollment was less routinized in newly acquired nonunion plants, but the barriers to union penetration tended to be much lower and more readily surmounted than they had been before.

A panoply of joint endeavors was launched to stimulate productivity and work out accommodations to the problems of technological changes and intensified competition for world markets. The Armour Automation Committee, under the skillful monitorship of Clark Kerr and George P. Shultz, was a pioneer in pointing the way to effective cooperation between labor and management in facilitating the conversion of an industry to revolutionary new production processes and distribution patterns without heedless sacrifice of its workers in the sausage-grinder of change. The steel industry's early steps in the same direction, the Human Relations Committee and the Kaiser Long-Range Committee, can hardly be called conspicuous successes. But their underlying theme has survived in the current Experimental Negotiating Agreement, the most forward-looking move yet made in any basic industry to substitute rationality for the countdown hysteria of conventional crisis bargaining.

Across the sweep of the economy there has been a steady growth in the range of labor-management committees set up to deal with distinctive problems relating to particular industries, such as trucking, railroads, shipping, coal, and supermarkets. The same joint approach was applied to broader problems affecting the economic survival of troubled states and cities, notably in the union heartland of the Northeast and Middle West. The most spectacular success of this trend toward togetherness in tackling problems outside the parochial has been the Labor-Management Group, originally set up by the peripatetic John T. Dunlop when he was Secretary of Labor in 1975.

Its membership consisted of George Meany, Lane Kirkland, and the presidents of six of the country's biggest unions, plus the chief executive officers of eight multibillion-dollar corporations, including General Motors, General Electric, Mobil, United States Steel, and Citicorp. At the start it functioned as an advisory committee to President Ford on such matters as taxes and energy policy, but when Dunlop quit the

Cabinet in protest against a Ford double-cross on a promise to sign the situs-picketing bill, the committee continued in existence as a private dining club and think-tank. It operated solely on the basis of consensus and stayed away from issues directly related to labor-management relations. Members on both sides praised the group as an excellent instrument for promoting better understanding even though a program of detailed recommendations for containing the skyrocketing cost of hospital and health care was just about the only issue on which the moguls of labor and industry could work out a full meeting of minds in the past two years.

Not everything in all this buddy-buddyism was necessarily deserving of cheers. Many observers feared that in the administered-price industries, a "you scratch my back, I'll scratch yours" philosophy was being institutionalized in a manner that victimized the public. Each big pay increase brought an even bigger price increase regardless of the general state of the economy. When foreign steel, autos, and electronic products began flooding in at lower prices, unions and employers formed a united front at the White House and on Capitol Hill to erect walls against them. Where the parties at interest felt jobs or profits were at stake, the story was often the same on governmental orders for environmental protection or on minority pressure for loosening the iron bonds of seniority.

Not the least of the worries about the spawning in the mass production industries of a cartelism akin to that which has existed for a half-century in many branches of construction and trucking were those stirred by abundant signs that the labor movement was sliding downhill in membership and in its hold on the interests and enthusiasm of its members. Smug in its conviction that Samuel Gompers had said it all when he summed up unionism's goals in the single word, "more," the high command of labor ignored all the danger flags and cozied up to its new-found partners in industry.

The bitter battle in Congress over labor law reform has shattered the love affair. Douglas A. Fraser of the United Auto Workers has resigned from the Labor-Management Group, accusing industry of waging a "one-sided class war" against unions. Meany and the rest of the labor members have made clear that they share his sentiment and intend to let the panel wither away, though they have promised Dunlop they will take another look after Election Day. Meany compares the head of Big Business to the German and Italian tycoons who helped bring Hitler and Mussolini to power. Kirkland calls them Jekylls and Hydes masking behind a veneer of civility their lust to bring back the master-servant

relationship. Thomas R. Donahue, Meany's executive assistant, wraps the whole thing in a tidy package: "It still is, as it always has been, 'them' versus 'us'. . . . We're the workers who want a bigger share of what they have, and they don't want to give it up."

Is it really all that simple? Should we fasten our seatbelts and prepare for another round of class struggle reminiscent of the clashes that accompanied the birth of mass production unions in the 1930s when industry's private armies of goons and labor spies, backed by the police and National Guard, sought to repel the CIO challenges? My own belief is that the answer is "no," but I am not totally reassured by my reasons for thinking so.

The first thing to remember is that the labor law reform fight was a case of overkill on both sides. The bill that emerged from the preliminary collective bargaining between the AFL-CIO, the Carter Administration, and the Democratic leadership had been stripped of practically all the items that would radically tip the power balance toward labor, such as repeal of state right-to-work laws or automatic certification by card count without elections. What was left never had the importance with which labor invested it; much less did it contain the degree of menace industry universally ascribed to it. Now that the measure is dead, my guess is that the National Labor Relations Board under the able leadership of Jack Fanning will find ways administratively to speed up and strengthen its procedures to an extent that will accomplish many of the bill's ostensible purposes. Even the J. P. Stevens mess, which provided most of the impetus for the bill, seems to be moving in a direction that offers promise for an ultimate triumph of the rule of law and a climate in which Stevens employees can make a free choice for or against unionization and genuine collective bargaining.

I hold no brief for the rabid exaggerations management used when it closed ranks and made whole fleets of corporate jets available to ferry spokesmen for small business to Washington to implore senators to rescue them from the slaver's jaws of Big Labor. Nor is there ever adequate excuse for suffocating a bill through the endless hot air of filibuster. But there is a puzzling naivete in the disconsolate tone of labor's old pros over the failure of even one of the fatcats who had been sweet-talking them for months inside the Dunlap committee to say a single word in defense of unionism while the tide of vilification was pouring out of the professional mouthpieces for the NAM, the U.S. Chamber of Commerce, and the Business Roundtable. After all, solidarity is an old labor battlecry, and it should have been little surprise that industry

would embrace it after the hawks of Big Business outvoted the moderates. That killed any chance that the Business Roundtable would stand on the sidelines in the fight, as labor had hoped.

Realistically, the evidences of a toughening in management's attitude toward unions were plain long before the predictable massing of its lobbying power to stop labor law reform. In my judgment, it is these evidences that provide basis for alarm far beyond what happened on Capitol Hill. That rebuff for labor was in large measure itself the end product of the accumulation of factors that have made many companies question whether their investment in union goodwill still pays dividends. Many have concluded that they would be wiser to concentrate on open-shop alternatives as a surer way to keep their businesses healthy in a period of chronic stagflation and savage trade rivalry.

Those employers who have been acting on the old National Planning Association concept that a strong union is a plus for the company are finding too little validation for that thesis in their operating experience. Rather, they are swinging to a belief that the price is too high in lost flexibility and the yield too slight in curbs on absenteeism and slack job performance. Indeed, the most popular slogan in management today is that it is a reflection on the employer when his workers choose a union. If the boss is astute enough, the thinking now goes, his employees can be convinced that there is nothing a union can do for them that the boss is not already doing better.

This is a philosophy that a few highly profitable companies like International Business Machines have been implementing successfully for many years. A crackerbarrel restatement of the same general approach got great currency in the 1950s through the preachments of Lemuel R. Boulware, the ebullient vice president in charge of industrial relations for General Electric. He evolved the Olympian transmogrification of management into an all-wise arbiter dictating contract terms that balanced all the equities with perfect justice for employees, shareholders, and consumers. The sharp edges of that "take it or leave it" formula have been rounded off by the vastly more sophisticated practitioners who have moved onto the GE scene since Lem's retirement. The degree of rapprochement is reflected in the fact that the company's current chairman, Reginald H. Jones, was co-head with Meany of the Labor-Management Group.

But if that fact tells us something about the changed scene, it tells us a good deal less than we need to know. The further fact is that a sophisticated new breed of managers in all sections of industry is taking the measure of a sagging labor movement and concluding that the way



is open for an approach that smacks of Tom Girdler and Ernest Weir even more than it does of Lem Boulware, except that it leaves out the guns and tear gas. Part of that conviction stems from the shift of industry and population to the nonunion fastnesses of the Sunbelt, but even more stems from labor's stubborn refusal to recast its programs in ways that appeal to a younger, better-educated workforce in a period of revolutionary change in lifestyles and aspirations.

Construction, once a union monopoly in many key areas, is now more than half nonunion, and the biggest unionized contractors are going "double-breasted" through establishment of subsidiaries that will build massive petrochemical or utility companies on a nonunion basis where clients prefer. The United Mine Workers, which provided the inspiration and much of the cash for organization of steel and autos under the majestic rule of John L. Lewis, has become a leaderless mob on its way to powerlessness as its control over the nation's coal supply dwindles to less than 50 percent.

Steel, which went further toward strike-free collaboration than any other major industry in the last decade, is now travelling in the opposite direction. The high cost of each new contract and the tension created by factionalism within the United Steelworkers have made the companies skeptical of the worth of the Experimental Negotiating Agreement as a bulwark against the inroads of foreign steel. The pact barely survived a 1977 strike in the iron ore mines that lasted longer than the 116-day industry-wide strike of 1959, the spiritual granddaddy of the ENA. In last winter's tumultuous coal strike, the representatives of the steel industry were the hardest of the hard-liners on the industry side. When rambunctious UMW rank-and-filers turned the negotiations into a shambles, one key steel executive said: "We are to blame for this situation. We didn't train this union properly." The final accord might never have been reached if doves among the coal operators had not locked the steel representatives out of the climactic talks.

In the newspaper industry, the increasing dominance of publicly owned communications conglomerates and the obliteration of function inflicted on the traditional printing crafts by new technology have put the publishers on the warpath, confident that they can put out papers without any of the unions if only they can find someone to deliver them. In Washington and in many other cities, where the drivers are nonunion, this is no problem. In New York, where it still is, the publishers have nevertheless felt bold enough to lay down a gage of battle to the pressmen by unilaterally posting workrules that would cut manning on the presses by 40 to 50 percent. The result has been a city-wide news black-

out, but whatever the immediate outcome, this strike is almost certain to prove the last hurrah of the newspaper unions as any kind of countervailing force anywhere in the nation.

All over the country the demand of employers for give-backs, the steady shrinkage in total union membership, and the spread into the public sector, under insistent taxpayer pressure, of a trend toward scaled-down benefits and slashed personnel betoken hard knocks much more damaging to labor than the hurt feelings it carries away from the fight over labor law reform.

What is the appropriate response for labor? Its rush to dismantle the Labor-Management Group is understandable enough since it had no clear function other than as a forum for civilized discourse. But Meany and his associates are reminded every day that it would be counterproductive to extend the nonfraternization policy to the whole field of labor-management contacts away from collective bargaining.

At the height of his fulminations against industry for its role in throttling the reform bill, Meany himself disregarded the objections of his aides and joined some of the bill's most prominent corporate critics in a congressional briefing on the job-killing effects of textile and apparel imports. In steel, electronic equipment, and a dozen other fields management and labor still march hand in hand to slow the flow of foreign goods. Nor does that exhaust the list of places where unions still feel it necessary, on a constant basis, to make common cause with industry in their approach to governmental agencies and the courts. Typical is the deluge of amicus briefs with which the AFL-CIO and its erstwhile foes among corporate lobbyists have been swamping the Supreme Court in an effort to upset the court of appeals ruling that would put industrial pensions under the same rules of honest representation that govern industrial securities with much less influence on the personal well-being of their holders.

A similar emptiness surrounds threats now widely voiced in labor to mount the barricades through a revival of organizing strikes on the pre-Wagner Act model. No recruiting tactic could be less promising in the present climate of employee apathy and of savvy employer resistance. Indeed, it is plain that few among the field marshals of labor have much appetite for such a battle. Like Willie Lohman in "Death of a Salesman," they like to be liked and the fact that none of their supposed friends in management had a kind thing to say for labor on Capitol Hill has left them with badly bruised egos.

There is more pathos than menace in even the purplest of the reproaches they are directing at management this Labor Day weekend.

Thus, Meany plaintively asks the captains of industry why they are "seeking to destroy a labor movement that has always supported and promoted free enterprise." Lane Kirkland winds up a diatribe against the business community for acting in lockstep to initiate class warfare with a similar lament.

"Unlike employers in many other countries," Meany's heir-apparent observes, "American management has not been under attack by any hostile ideology promoted by labor. . . . Workers and their unions have not clamored for the nationalization of industry or for chairs and votes in the corporate board room. We have not launched hate campaigns or organized filibusters in order to thwart the legislative process and crush legitimate rights and reasonable hopes for fair play where management is concerned."

If class war is anywhere on the American horizon, it remains so far away as to be indiscernible. But the torpor that has settled over the labor movement is not going to be dissipated by militant Labor Day statements. It will be no blessing for the country, much less for American workers, if the revulsion against the Imperial Presidency leads to imperial status for corporate management operating on a global scale without any semblance of countervailing power in either government or labor.

Calls for reviving the old Franklin D. Roosevelt coalition of labor, liberals, blacks, religious groups, youth, women, and the like will lack meaning unless unions start by redefining their own goals along lines that will convince space-age workers that labor has dug itself out of the 19th century. Then labor leaders will have to get off their duffs and do some systematic organizing instead of feeling aggrieved that employers no longer see any plus in delivering over the workers.

My own chief disappointment is that unions remain so resistant to what could be their most constructive contribution to extending industrial democracy and at the same time providing a needed lifeline for the unions themselves. This is not through pointless brandishing of fists, but through joint action with employers to improve the quality of working life by giving the individual worker a voice in determining the conditions of his or her own job. The paramilitary lines of command now general in the workplace are often as hurtful to plant morale as they are demeaning to workers. It is past time for restructuring these lines in ways that recognize a tie between creativity and application, on the one hand, and respect for human dignity, on the other.

I am well aware that all the suspicious unions have felt about such experiments in worker participation as a disguised form of company

unionism will be more acute than ever in labor's present embattled mood. But I remain convinced that such ventures offer much more to both sides than a return either to the conflict of the 1930s or to paternalism on the model of the American Plan of the 1920s.

It is interesting to me that, at the very time Doug Fraser was accusing General Motors of reviving a "Southern strategy" aimed at freezing the UAW out of new plants in the Sunbelt, Volkswagen was telling workers in its newly opened plant at New Stanton, Pa., that it had unionists on its board in Germany and that it welcomed unionization of its operations in this country if that was what the workers wanted. Thus encouraged, the workers voted 50 to 1 in favor of the union. Now GM itself has given fresh assurances of its intent to live up to its neutrality pledge on unionization of its new Southern plants.

Labor's most consequential battles in the 1980s are likely to be fought out in the political arena, another place in which it has at the moment no dependable strategy. But without an enthusiastic membership and a persuasive appeal to the three-quarters of the nonfarm workforce now totally outside its rank, it will keep going nowhere economically, socially, or politically.

# Learning to Live Without the Union

PETER J. PESTILLO  
*The BFGoodrich Company*

Reports of organized labor's death are, as were those of Twain's, greatly exaggerated. Yet reports of its decline as a factor in the development of private-sector personnel policies are accurate, and the reasons are worthy of exploration.

In recent years, unionization in this country has been on the decline, if not in full retreat. In 1956 unions represented 28.4 percent of workers in all industry. Twenty years later that figure had slipped below 25 percent. Only the tremendous growth of unionism in the public sector has kept total union membership up.

Today, the United States is the least organized of the West's industrial democracies, and the trends are adding to the spread. How did this happen, and why has our labor movement been so powerless to reverse this obvious and, for labor, inimical trend?

Simply stated, management is more sophisticated and bolder, labor is fighting old fights badly, employees' values are different, and the times "they are a-changing."

But I mustn't betray my earlier callings as a lapsed lawyer and sometime negotiator—training altogether too often conjoined to the harm of each. Rather than quit with a simple analysis, I want to call on my background in order to add complexity, make a simple argument more elaborate, and conceal bias and interest as logic and fact. In short, let me explain what has happened to unionism in this country and, at the same time, discuss how management has learned to live without the union.

Obviously, I represent no employer but my own, BFGoodrich. Goodrich is, I think, enlightened, responsible, and fully comfortable in maintaining its extensive and improving union relationships. Many employers are not so oriented; they require better counsel than I.

Many of the more unenlightened employers are tagged union busters, and they get considerable publicity. But those employers who use any means to avoid or defeat unions are a sufficiently small minority, not to be a major part of the problem. The trouble for labor comes not from

---

Author's address: The BFGoodrich Co., 500 S. Main Street, Akron, Ohio 44318.

those who hate unions, but from those who have concluded in the most dispassionate of ways that living without a union is a sound business decision.

### **Why Employers Have Changed**

Employers have altered their attitudes toward unions for a lot of reasons, but primarily because today unions just haven't been able to "deliver."

Too many of us in the business community have in the past looked to large unions to insulate us from wage competition. Our assumption was that if a union organized the whole industry, their passion for uniformity would equalize wage rates across that industry.

Well, that hasn't worked for some of us for several reasons. First, diversification put us in more and more businesses where the competitor wasn't organized, or had different unions or even the same union, but lower wage rates. Goodrich found, for example, that we had no business paying tire rates in specialty rubber products operations, and after a while of trying to pay unrealistically high wages, we found we no longer had business in some of those product areas.

Also, the insulation strategy worked, if at all, only against domestic competitors. As the business community has painfully learned, this country's construction industry is about the only one not directly vulnerable to imports.

A second reason why employers have changed their minds about unions is that we have suffered a loss of union leadership. Despite liberal wage treatment, American industry has suffered too many long and needless strikes because "yes" was the courageous answer and the union leader couldn't give it. Recently, we have seen good contracts rejected by the membership because of a lack of nerve and support by union leadership. Too often, union leaders have been too slow to accept changes necessary to keep a business competitive. This has meant that decent plants have had to be closed, and union members have been put out on the street because their leaders chose only to do what was most politically expedient.

I'm not advocating the return of overbearing union bosses, but I, as well, reject the shopworn union thesis that Landrum-Griffin has made it impossible to lead. I recognize that unions are first political institutions—and later economic ones—and that all democracies are notoriously slow to do painful things; but American business doesn't stay competitive by throwing up its hands. The solution now accepted by management to remain competitive is to remain nonunion.

Third, the structure extensive unionization tends to impose on a personnel system with its slavish dedication to a consistency Emerson found "the hobgoblin of little minds" has proved too unwieldy in today's times. We are hampered in our efforts and obligations to our employees and to society to provide truly equal employment opportunity because the better, lighter, or easier jobs must go to the most senior. Moreover, grievance systems in union facilities operate negatively to assure that strict justice is done, while employees now seem more concerned with the flexibility that equity can provide. Also, the structure imposed by a union limits opportunity to provide such devices as job rotation to improve both the workplace and productivity.

It's not surprising that such a rigid structure exists because unions were created to achieve fairness, and they succeeded admirably by forcing consistency. Unions created a meaningful industrial justice system. Yet today, in our best entrepreneurial way, business managers have decided we can run that important justice system better; hence the non-union plant.

Concluding that unions do not necessarily serve the best interests of the business or employees does not, however, explain the growth of nonunion activity, for even good ideas require a certain boldness before execution. It requires a certain nerve for those companies whose names you see in the batting order of big hitters in the bargaining game to try to keep plants unorganized.

It seems anomalous, but I believe the maturity of our bargaining relationships has encouraged this approach. Those of us who have accepted unions and dealt with them honorably know that those relationships are sufficiently stable to tolerate the ostensibly conflicting practice of resisting further organization—or maybe even resisting legislation to make organizing easier. So long as that resistance stays honest, temperate, and clearly within legal limits, it seems to pose no real problems for sound bargaining relationships. Goodrich, for example, does lose elections, and when we do, we negotiate agreements and the union is accorded all the rights to which it is entitled. However, the employees do not become thereby less "ours," and we pay no less attention to the operation.

Despite some recent polemics, I note no real class warfare out on the hustings, and I think the union leaders on the firing line recognize that. Frankly, venting the shrillness in the open spaces of the newspapers and not across bargaining tables probably will serve bargaining well. Besides, there is such a consuming "mutual self-interest" served by bargaining that outside forces do very badly at disrupting it.

But there is a very important additional point. Those of us who have both union and nonunion facilities work just as hard at maintaining good employee relations at the organized plants. At Goodrich, for example, we have expended tremendous effort, and, I believe, made great strides in improving our working relations with our unions, particularly our major one, the United Rubber Workers. We don't make a nonunion tire, and we don't expect to need to do so.

### **The Union Failures**

I have already said that unions are not as successful today in gaining membership as they were years ago. The question is, why? Some argue that unions just don't bother as much with organizing any more and this is why organization is down. Personally, I've seen no real lack of desire and maybe only a modest diminution of zeal as organizers grow more professional and less dedicated. But that doesn't explain the dismal record at the polls of the workplace. Organized labor can't even win half the elections it forces, and when you consider that this record is even worse as units get larger, and that the unions generally don't even petition in the cases where they face certain defeat, the record is woeful. When you consider that decertifications in 1976 were three times the 1962 level and the trend for 1977 seemed upwards of that, you realize that our unions are having a tough time in the workplace.

One reason for this development is that employers are more enlightened and personnel practices and avoidance techniques more sophisticated, but smarter employers are not the only answer. We aren't that smart. The labor movement, while doing a good job of representing those it has, is doing a lousy job of expanding, because it is still fighting the fights of the past, not reacting to the conditions of the present.

Today, labor talks about raising wages and providing job security, and the arguments to counter each are more credible than the claims are bold. Besides, the new workforce doesn't seem wildly concerned about either. Labor talks about class struggles and oppression to people who can't tell Phil Murray from Arthur. And labor is touting consistency and conformity to people concerned about expressing their individuality.

### **The New Workforce**

It's ironic that one of the reasons the market for labor's ideas is so lousy today is that labor did such a good job of selling them in the last generation.

You've heard enough about demographics recently from many



sources, including my friend and former colleague Dr. Weber, to know we now have a younger workforce that doesn't fear the loss of work because it didn't experience the Great Depression. And many of today's younger workers know the wonders of our unemployment insurance system. Moreover, the new worker comes from greater affluence, is better educated, and does easier work for shorter periods. In sum, he hasn't got it as tough. His isn't a class struggle. More likely, his is a struggle for recognition, for independence, for individuality. Unions can't help toward achieving these aims.

But maybe more important are the different beliefs and life styles now emerging. The new workforce grew up at a time when all our institutions were suffering some disrepute. Therefore, respect for authority and tradition was bound to diminish. Organized labor doesn't do much better than business in the opinion polls. In a recent *U.S. News and World Report* study, only 5 percent gave labor a good rating for "honesty, dependability and integrity." The rating for business was 9 percent; a plague on both our houses perhaps, but no incentive for workers to submerge identity and pay dues.

The young worker thinks primarily of himself. We are experiencing the cult of the individual, and labor is taking a beating preaching the comfort of coalition.

A change has occurred with workplace values as well. Compensation is important—in fact, I think more important than polls show, because people like to cite nobler purposes. But compensation is not the single most important workplace consideration any more. And sure, people want job security, but they don't live in fear of losing their job.

Faced with these changing values, no employer is going to stay unorganized long if he doesn't pay competitively or "yo-yos" the force level, but smart employers start from there to do more.

Smart employers recognize the rights of employees as individuals who want to share in some of the workplace decisions affecting their lives. At Goodrich, we tell our managers to treat their people as they want to be treated; it's that simple. Of course we police it, to make sure it's done. We do this in our organized operations as well as nonunion, but the contract inhibits our ability to communicate or deal directly with union-represented employees; and, of course, we have more limited opportunities for job rotation or other experimentation such as changing scheduled hours.

Smart employers recognize that the new workforce is more concerned with leisure time than overtime. Smart employers know that the new workforce has a low level of commitment to the organization; it is

more mobile and self-centered than the workforce of the last generation. Smart employers know that the new workforce isn't just young. These emerging values I've described have been adopted by our older workers as well.

### **The Typical Nonunion Plant**

Faced with an employee group with values and expectations considerably different from the workforce of yesteryear, how does a company maintain a nonunion status?

I'm afraid that the nonunion operation is too often portrayed as being set back on a long private road in the Sunbelt, patrolled by guards with dogs wearing "no solicitation" posters and teeming with workers producing feverishly for the minimum wage. Not so!

True, the Sunbelt has experienced tremendous growth in nonunion facilities, but this nonunion "blight" has also hit the fertile labor fields of New York, Ohio, and the other major industrial states.

In a nonunion facility—regardless of location—wages are more often than not area competitive, or even a little higher. True, national rates are not paid, but national rates never made sense to me. Some people pay a premium in an effort at union avoidance; others do not.

The nonunion plants are usually more modern, but then they are usually newer. There may be some Hawthorne-like effect in this alone but, if so, it is unintentional. However, modern industrial design does improve both the work site and output and, at the same time, contributes to a level of employee satisfaction that often precludes union attempts.

Additionally, in nonunion facilities the whole supervisory force has usually had more training in human relations than in older plants. There is extensive and open communication between all levels of supervision and the workforce. There is, however informal, a functioning system for the resolution of disputes. Frankly, without a conflict-resolution system run by a management willing to admit and correct mistakes, you just don't stay unorganized long.

In a nonunion situation, keeping in touch with the people and solving problems are the keys. For example, at Goodrich, we use some pretty advanced techniques. We have a comprehensive, corporate-wide attitude-survey program, which, I hope, would be the envy of the Harris organization. We're selecting and developing supervision with a view to their ability to manage and lead in the kind of environment we want.

Is it worth it? Yes, no question about it. We're getting the productivity, the utilization of equipment, the cooperation and flexibility we need to meet our business and social commitments competitively. There

is no question that operating nonunion takes more effort and indeed, as I have claimed, more sophistication in order to be successful. And as the nation's workforce grows increasingly resistive of authority and more demanding of personal satisfaction along with compensation from work, the payoff may be even greater.

As an alternative to remaining nonunion, consider the public sector as the most horrible example of what can happen when personnel policies do not match the expectations of today's workforce. Where else can you find more slavish dedication to uniformity of treatment, less reliance on merit and individual evaluation, more labyrinthian regulations governing review of personnel decisions, and less productivity improvement, less initiative, and less allure than in our various civil services? And where else do you find three million unionized employees but in this sector of our economy?

Obviously, it's in the common interest of labor and business to recognize the changing times and alter our operations accordingly. I don't think anybody here wants a weak labor movement in America. In the past, unions have had the power to guide our social conscience and to improve our economy, and we as a nation of diverse individuals have done well as a result.

There is no reason to fear—or hope—for the end of our labor movement in our lifetimes.

After all, organized labor, despite declining membership, is the dominant force in wage decisions in the country, because our large industries are heavily unionized and will likely remain so. Therefore, the notoriety given major contract settlements guarantees a prominent role for labor for some time to come. And it also guarantees that union settlements will continue to influence every part of society—both politically and economically.

Also, there is emerging in the labor movement a new breed of professionals who understand the issues I've recited; and thus I expect our unions to change and improve, thereby guaranteeing that they will be around long into the future.

But even if the new breed of union leaders should fail, there is still hope for labor's future. Americans venerate their institutions. We accorded farmers and railroads political influence for 30 years after their economic power had waned, and finally we bought the railroads and subsidized the farmers when they succumbed to free competition. So maybe if nothing else changes, some future President will see the need to expand the White House offices across the northeast side of Lafayette Park and thus acquire the AFL-CIO. Some of us would then claim it was history reversing itself.

# The Longest Season: Union Organizing in the Last Decade, a/k/a How Come One Team Has to Play with Its Shoelaces Tied Together?

RICHARD PROSTEN

*Industrial Union Department, AFL-CIO*

Much has been written about the difficulty unions have had in gaining membership—private-sector membership in particular—in recent years. But there has been almost no empirical work aimed at establishing causality. We examined virtually every NLRB election concluded during the past 16 years and found that pre-election time-delays are the most likely source of labor's problem. The percentage of elections completed within one month of filing is now 80 percent lower than it was 16 years ago. This trend has been abetted by the virtual extinction of consent elections which, until 1965, were the most frequently used NLRB election procedure. When these factors are combined with the demonstrably lower win-rate experienced by unions when elections are delayed, the apparently inevitable effect is a diminution of union membership.

In putting this paper together, I concluded that the legislation which came to be known as labor law reform was not only justifiable, but represented some sort of cosmic justice. Originally, we'd not planned to say anything about labor law reform, but examination of more than 130,000 individual union representation elections decided between 1962 and 1977 led to an inescapable conclusion: Although the rules and regulations governing representation elections have changed only modestly in recent years, it is clear that one side has managed a de facto gutting of the guarantees promised to workers by the National Labor Relations Act.

Traditional measures of union organizing success are almost exclusively empirical: the percentage of employee petitions that result in union election victories, the percentage of a given workforce represented by collective bargaining agents, and so on. By many of these measures,

---

Author's address: Industrial Union Department, AFL-CIO, 815 16 Street, N.W., Washington, D.C. 20006.

unions would appear to be faltering. But measures, like sports records, are not always what they seem. Roger Maris holds the major league record for most home runs in one season. But the record books all have asterisks calling attention to the differences in the length of Maris's record-breaking season and that played by the prior record-holder, Babe Ruth. We need an awful lot of asterisks if we are to approach fairness in evaluating the recent organizing record of unions.

This paper emphasizes organizing experiences in areas of traditional union strength, and the manufacturing sector in particular. Union organizing in manufacturing has not, of late, set any track records.

Theories about the slowed pace of unionization—at least in those industries subject to the National Labor Relations Act—are almost infinite. Their number usually is equal to the number of people participating in the discussion—multiplied by the number of hours they discuss the topic. Before taxing your good humor with details of those 130,000 elections I brandished a moment ago, I must note an item that rates at least a couple of asterisks—the vast change in industrial mix over the past two decades.

The single biggest obstacle to any significant union growth within the industrial workforce is the disappearance of the species known as manufacturing. Production workers, with each passing increment of time, represent a smaller and smaller portion of the nonagricultural workforce.

In 1950, 45 million U.S. workers were classed as nonagricultural employees. Twenty-eight percent of them were production workers. In 1976, only 17 percent of this country's 79 million nonagricultural employees were production workers. In absolute terms, the number of production workers has pretty much stayed the same—fluctuating up and down somewhat cyclically, but not reaching much more than 14 million or much less than 12.5 million between 1950 and 1976. In short, since mid-century our civilian labor force has increased by more than 50 percent, nonagricultural employment has risen by more than 75 percent, and manufacturing employment has been stagnant. That prototype CIO member—the worker on the production line—is becoming an endangered species—a snail darter, if you will, without a benefactor.

We will leave it to some other panel to answer the question of why the nation that we told our school kids was the leader of world industry is less so each year. I must single out our propensity to export jobs—manufacturing jobs in particular—as the primary factor in the erosion of our industrial base. Last month the government reported some trade figures that, I suspect, shocked only those who had chosen

a Rip Van Winkle sleep on matters relating to trade: The U.S. now is running an annual deficit rate of close to \$11 billion on trade in manufactured goods alone. The traditional surpluses have been dwindling for some time, and last year's relatively paltry \$3 billion trade surplus in manufactures may, in retrospect, look like a vintage-year performance.

Traditionally, two-thirds of this country's exports have been of manufactured goods of almost all descriptions. Today, only aircraft and automotive goods account for any significant part of the manufactures we export—and even those situations are shaky.

Whatever the reason, manufacturing is not the significant source of employment it once was. The decline of the sector is reflected in the NLRB's Annual Reports, which indicate that the number of elections in manufacturing has been decreasing, in both absolute and relative terms, since the 1950s. Using only what the Board identifies as "RC" cases (almost always an election in an unorganized unit), we find that the total number of cases increased from 8,206 in 1950 to 11,578 in 1977; at the same time the number of manufacturing RC cases declined from 5,188 in 1950 to a low of 4,137 in 1975 before recovering a bit to 4,976 in 1977. Manufacturing as a percent of total was 63.2 in 1950 and 68.9 in 1955 before beginning a steady decline to 37.5 in 1975; the percentage for 1977 showed a slight increase, to 43.0.<sup>1</sup> Admittedly, the decline in the absolute number of units contested is minimal, but that fact tends to buttress the observation that the manufacturing sector has stagnated. To risk belaboring the obvious, it's impossible to organize into unions those people who are not employed—at least in the context of American industrial unionism.

At last December's meeting of this Association, Professor Everett M. Kassalow, then of the University of Wisconsin, noted:

The general resistance of U.S. employers to unionizing efforts simply has no serious counterpart in Western Europe today. The existence of growing numbers of specialized law firms whose trademark is keeping unions out of an employer's plant (or destroying them if they come in) is something which is simply unknown outside of America, in most other democratic industrialized countries." (*Proceedings*, p. 120)

The National Association of Manufacturers' formation of a Council on Union-Free Environment came as a shock to this observer—but only for the candor involved. American business appears clearly unhappy

---

<sup>1</sup> A table detailing the totals and percentages over the 16-year period is available from the author upon request.

about the continued existence of a labor movement that generally endorses capitalism—a courtesy unlikely to be extended to these or other companies operating in other Western countries. Imagine the howling if the labor movement created a Council to Abolish Free Enterprise. Few in this room could ever have seriously believed that business, deep in its heart, has ever really welcomed unions. The NAM's apparent declaration of war only brings their activities out of the closet.

Business has grasped the wisdom of our national axiom that justice delayed is justice denied, combined it with Woody Guthrie's observation that "some men'll rob you with a pistol and some with a fountain pen," and fashioned an approach to defeating unions that is largely invisible, making it more aesthetic than armies of goons and Pinkertons—and a lot more effective. In essence, the strategy is to do whatever is necessary to generate as much delay as possible. Delayed hearings, delayed meetings, delayed elections, appeals, appeals of appeals, stalled negotiations, and the like are not news. In this paper, we attempt to specify the growth of these delays, their genesis, and their effects.

The National Labor Relations Act provides that once a union satisfies certain statutory requirements—and they are hardly frivolous—the stage is set for a representation election. Five possible formats for such elections exist. If the parties agree to conduct the election as a "consent" election, balloting occurs reasonably quickly and the regional director settles any issues that may arise in the course of the campaign or the actual election. Other formats for representation elections almost always take longer to reach the balloting stage and, as business has discovered, such delay in and of itself is likely to undermine the union.

There are many ways to drag out the election process. Detailed inspection of the elections referred to in this paper suggests that the most pervasive source of increased delay is an apparently purposeful shift in election format in recent years. If management does not consent to a consent election, another type must be utilized. Management has not been consenting.

Analysis shows that each month of delay between the filing of an election petition and the actual conduct of the election increases an employer's potential for thwarting the organizational hopes of its employees. The average drop-off in union victories is 2.5 percent per month through the first six months of delay.<sup>2</sup> More than 95 percent of the elections are

---

<sup>2</sup> Based on all (130,701) NLRB elections administratively closed between January 1, 1962, and December 31, 1977, for which data were available; 1,130 election records (less than 1 percent of those analyzed) had insufficient data to be included in a table for the six-month period (available from the author upon request).

concluded within the initial six-month period, and no month beyond that period accounts for as much as 1.0 percent of total elections. Keep in mind that these are *pre*-election delays. Postelection proceedings, which must be disposed of before the certification of the results of the election and the onset of actual bargaining, are a separate matter—and tend to exert their own chilling effect on the potential for unionization.

Almost every aspect of an NLRB election now takes much longer than ever before. This is not because the Board is slothful, nor is it attributable to any specific actions of the Board or the courts or changes in the law itself.<sup>3</sup> I do not wish to be unfair to lawyers, but *corporate* labor lawyers feel that when the union knocks on the door, the interests of their business clients hinge on maintaining the status quo (no union) for as long as possible.

During the 16 years of activity we've been examining, 75 percent of all consent elections were completed by the end of the month next following the filing of a petition. Ninety-five percent of all consent elections were completed within three months or less. By comparison, nonconsent elections were only 41 percent complete by the end of the month following the filing, and only 68 percent complete within three calendar months.

In 1962, 46.1 percent of all NLRB elections were conducted as consent elections. In 1977, only 8.6 percent of NLRB representation elections were conducted under consent conditions. Either labor or management has to claim the dubious credit for this trend, and if it's labor, then I'm Lemuel Boulware.

Stipulated elections almost always take longer to complete than do consents. They require the NLRB to decide election-related questions at the national level. Stipulated elections accounted for more than 73 percent of elections closed in 1977. In 1962 they accounted for less than 27 percent of the total. Figure 1 graphs the above and also shows the relative stability of the election format possibilities that are utilized less frequently; the three of them, taken together, accounted for less than 20 percent of the elections held in 1977.

We have been discussing what happens when elections take place within three months or less. The figures are more startling when we examine the completion rates for one and two months. In the early 1960s, more than 10 percent of all NLRB elections were completed

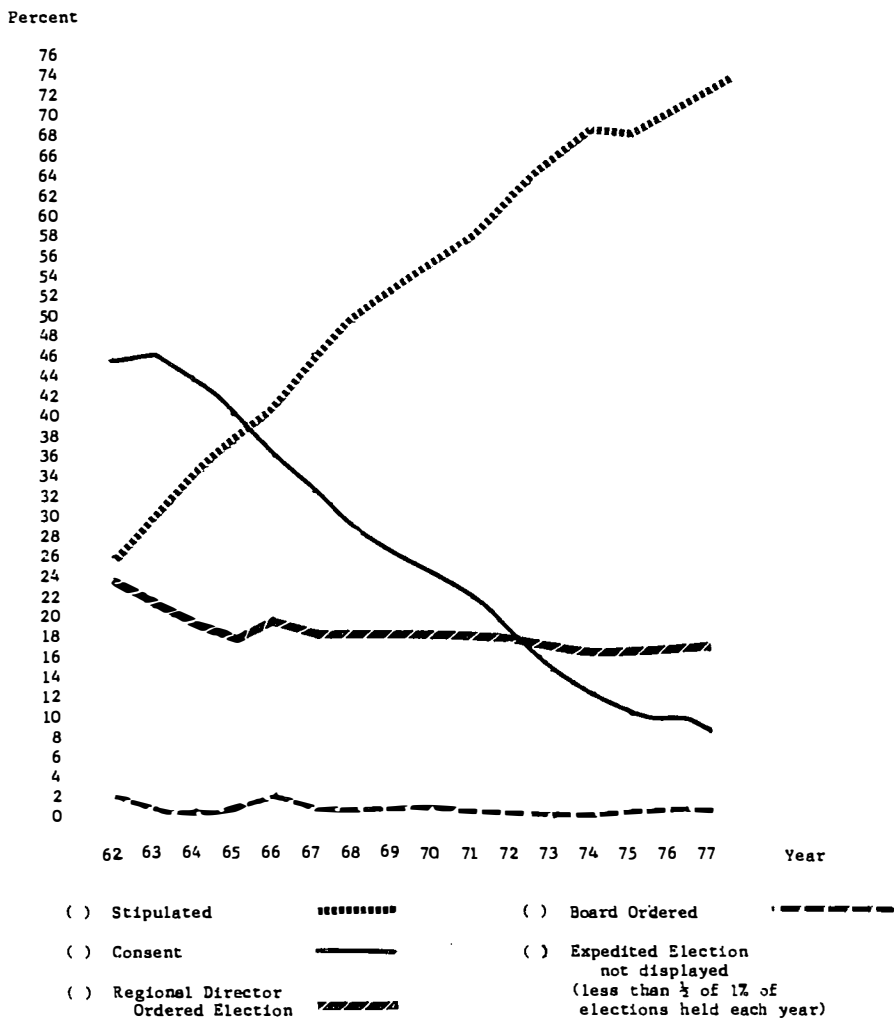
---

<sup>3</sup> The *Excelsior* decision, which required that the union be provided with a list of employees before the election, is the possible exception to this statement. Certainly its impact is reflected in the drop from 11.5 to 7.3 percent between 1965 and 1966 in the "same" month completion rate. Subsequent years, however, show no change from the trend we have noted.



within the same month as the filing. By 1977, the figure was down to 2.2 percent. No recent year has shown a rate of 3 percent or more. In the early 1960s, nearly 60 percent of all NLRB elections were completed by the end of the month next following the month in which the representation petition was filed; in the 1970s, this figure has consistently been

Figure 1  
Type of NLRB Election as a Percentage  
of all Elections Closed in each Year



in the 40 percent range. In short, the completion rate for elections is 80 percent lower today than it was 16 years ago at the one-month mark, and 32 percent fewer are completed within two months of the filing.<sup>4</sup>

Inevitably, the systematic undermining of NLRB processes and regulations has altered the outcome of elections. Table 1 shows what has happened during the 1962-77 period. I think you can apply those clarifying asterisks to this table almost randomly. The slope of the decline of election victories mimics the slopes for consent proceedings, time delays, type of election, etc.

TABLE 1  
Results of 16 Years of Elections in Brief  
(Excluding Decertification Elections)

Year	Percentage of Eligible Workers		Percentage of Elections	
	Won by Unions	Won by "No Union"	Won by Unions	Won by "No Union"
1962	53.7%	46.3%	59.0%	41.0%
1963	54.1	45.9	58.3	41.7
1964	57.6	42.4	58.4	41.6
1965	56.6	43.4	61.1	38.9
1966	56.1	43.9	60.8	39.2
1967	57.3	42.7	59.5	40.5
1968	52.3	47.7	56.7	43.3
1969	46.6	53.4	55.7	44.3
1970	48.5	51.5	55.0	45.0
1971	48.7	51.3	54.1	45.9
1972	47.4	52.6	54.6	45.4
1973	39.8	60.2	51.1	48.9
1974	36.1	63.9	49.9	50.1
1975	37.7	62.3	50.5	49.5
1976	37.0	63.0	48.4	51.6
1977	37.8	62.2	48.0	52.0
16-yr. Avg.	48.1	54.9	54.9	45.1

The election, however, is rarely an end in and of itself. If the employees overcome the odds and succeed in getting a bargaining agent certified as their collective representative, there is a 20 percent chance they'll never secure an agreement. An additional 13 percent will enjoy the protections of a contract only briefly.

In 1975, the Industrial Union Department attempted to determine the frequency with which NLRB election victories are converted into collective bargaining contracts and what happened to initial contracts as they expired. We chose to look at elections that were administratively

<sup>4</sup> A table displaying the cumulative percentages of NLRB representation elections conducted within indicated months of original filing, 1962-77, is available from the author upon request.

“closed” in 1970. We felt that the five-year interval between the election and the survey would allow us to determine what portion of those cases where initial contracts were negotiated were successfully renegotiated, as well as the number of victories that were converted into contracts.

Unions won 4,274 elections in 1970. We solicited responses from unions which accounted for 62.1 percent (2,656) of them. The remaining 1,618 victories (37.9 percent) belonged to the Teamsters and other nonaffiliated groups which were unlikely to cooperate. We did, however, receive responses from the ILWU and UAW, both nonaffiliates.

The responses that contained *specific* data suggested the following conclusions:

- 64.5 percent of the units won in NLRB elections in 1970 were brought under contract and were still under contract five years later. These units contained 75.91 percent of the people for whom bargaining rights were won in 1970.
- 22.35 percent of the units (13.64 percent of the workers) won in NLRB elections in 1970 were never brought under contract.
- 13.2 percent of the units (10.4 percent of the workers) were brought under contract for a while, but were no longer under contract at the time of the study.

The 35 percent of the units that were not under contract five years after elections were won included some which succumbed to natural disasters, did not survive retirements by owner-operators, or for some other credible reason the operator was no longer in business.<sup>5</sup> But in most of the situations where there was no contract five years after the election, the absence of an agreement reflected an employer who had exploited the weaknesses of the National Labor Relations Act to frustrate the results of the election. Typically, the employer had dragged the process out long enough to decimate the union's majority.

The effects of pre-election delays tend to linger on after the election in those cases where unions succeed in getting certification. We found that in the cases where no agreement was ever reached, pre-election

---

<sup>5</sup> As with any sample, the one we used was probably less than perfect. Although 1970 was quite typical in terms of percentages of units won and lost, and in terms of levels of activity, it might have been an unusual year in some other respects; the elections we did not hear about may have had histories quite different from the ones we did hear about, and so on. Whatever their problems, we feel these data represent a meaningful indicator of what happens with election victories. As far as we can determine, there have never been any other studies of this sort. A variety of practical considerations have dissuaded us from trying to replicate the study for some other year.

time-delays had been substantially greater than for all elections held in that year.

Decertification elections, once a mere annoyance to unions, are becoming a more common occurrence and, in fact, now are being pushed as a panacea for harried businessmen, who probably never thought they were harried until contacted by one of those expensive union-busting firms.

In 1962, there were 235 decertification elections out of a total of 6,985 NLRB elections—3.4 percent of all Board decisions. In 1977, by contrast, there were 849 decertification elections out of a total of 9,006 elections—9.1 percent of all NLRB decisions.

Although the actual membership losses attributable to decertification are minimal, such elections are a substantial drain on the finances and staff time of the incumbent union. The incredible growth in such activity clearly is not a random occurrence. It is always possible for workers to be displeased with their union, but it is preposterous to assume that it is workers in the smallest shops who feel the need to work without collective bargaining representation. More than 30 percent of decertification elections closed in 1977 involved units with nine people or less, and more than 50 percent of last year's decertification elections took place in units with 19 or fewer members.

A possible reason that so many decertification elections take place in small units is that it is much easier to get the statutorily required 30 percent of a small group to request such an election than it would be to get 30 percent of a group of, say, 500 people. Moreover, a small shop is likely to include members of the immediate family of the owner or operator. Relatives may identify more closely with management than with fellow employees.

Many factors that have contributed to the negative trends in union membership and electoral success elude my powers of quantification. Among them would be changes in the locus of manufacturing from the Frostbelt to the Sunbelt and its traditionally antiunion climate, and the apparent all-out abandonment by management of the era of mutual respect between labor and management that both sides have been proclaiming for years. Remarks pertaining to the latter point by Lane Kirkland and Doug Fraser have received so much publicity that I don't feel compelled to repeat them here. We all know the key phrase—"class warfare." The list of tactics management has been employing to hold down the organization of their employees probably could provide enough material for a week of papers.

An example of just how bad things have become is reflected in the

last agreement between General Motors and the UAW. Part of the agreement was a specific promise by General Motors not to attempt aggressively to defeat the UAW in its organizing efforts at the company's newer plant locations, which are almost exclusively in the South. The letter of agreement reads sort of like those Federal Trade Commission releases that indicate that company X does not admit that it has done anything wrong or misrepresented its product in the past, but simultaneously promises not to do it again.

The contract containing the neutrality language was signed in November 1976. Earlier this year the UAW charged that General Motors was ignoring its promise and was actively opposing the union wherever possible. In the July 1978 issue of *Solidarity*, the UAW's newspaper, the union detailed many situations involving the denial of employment at new plants to experienced General Motors employees. The denial of employment came only after the workers' attitudes toward the UAW were ascertained. Many of these people were originally from the South and were looking forward to returning home. In many cases the people were not very old. In light of the investment in their skills previously underwritten by GM, they would seem to be the perfect new hires—all that experience and no seniority.

Given the evidence, it is not surprising that the House of Representatives and a majority of the Senate agreed that reform was in order. Consider again, if you will, the relationship between pre-election delay and election outcome. Assess the evidence as to how these delays are being engineered. Note that employers are permitted to avoid contracts, even where their employees have voted for a union. Reflect on how employers willing to expend huge sums of money—I guess they'd call it an investment—can make a mockery of the industrial democracy we would like to believe exists in this country.

In conclusion, I think we can safely say that there are an awful lot of asterisks for our union organizing record book. I do not rule out the possibility that there are some groups of employees who, for one reason or another, actively reject the concept of having union representation, nor do I blame each and every loss on management chicanery. Nevertheless, it seems clear to us that unions now are required to operate with—pardon the cliché—their shoelaces tied together. There will not be any dramatic reversals of form in election results until such time as the National Labor Relations Act is changed or some other steps are taken to restore the balance that existed before management figured out that it was all right—and often economically propitious—to thwart the intent of the Act.

## X. WAGE ADJUSTMENT AND THE CONSUMER PRICE INDEX

---

### An Examination of the Revised and Unrevised Consumer Price Indexes After Six Months

W. JOHN LAYNG

*U.S. Bureau of Labor Statistics*

On February 27 of this year, the Bureau of Labor Statistics (BLS) completed an eight-year effort to update and improve the Consumer Price Index (CPI), one of the nation's most important economic statistics. A large number of changes were introduced at that time in the Consumer Price Index program.

The most apparent change in the output of the CPI program resulting from the revision effort, at least in terms of its visibility to the typical user of the index, was the introduction of Consumer Price Indexes for two groups of the U.S. population. A completely new index covering all urban consumers was introduced, and the CPI for the traditional urban wage-earner and clerical-worker population was revised and updated.

The new broader-coverage index includes all civilian households living in urban areas of the country. The rural population, except that which resides inside the boundaries of metropolitan areas, continues to be excluded. The Consumer Price Index for all urban consumers represents professional, managerial, and technical workers, short-term workers, the self-employed, the unemployed, retirees, and others not in the labor force, as well as the wage-earner and clerical-worker population. The new index covers approximately 80 percent of the noninstitutional

---

Author's address: Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

civilian population in the United States in the 1972-73 weight base period for the CPI. The traditional Consumer Price Index for Urban Wage Earners and Clerical Workers covers somewhat less than half of the all-urban index.

In addition to publication of the new and revised Consumer Price Indexes, the BLS continued publication of the unrevised CPI for Urban Wage Earners and Clerical Workers during the January-June 1978 period. The new and revised Consumer Price Indexes were set equal to the level of the unrevised CPI as of December 1977, and all are presented on a 1967 = 100 base.

One of the topics that the public expressed the most interest in prior to and since publication of the new and revised Consumer Price Indexes has been the comparative behavior of the three indexes. Much of the interest stems, of course, from the use of the CPI in wage and other types of escalation.

There are three basic approaches that can be used to compare the three indexes. We could compare the revised and unrevised wage-earner series, the new all-urban and revised wage-earner series, or the new all-urban and unrevised wage-earner series. The revised index is the successor to the unrevised index, in that the population groups represented by each index are the same. Differences in behavior of these two series, therefore, should reflect differences in the behavior of the wage-earner and clerical-worker population between the early 1960s and the early 1970s, as well as differences in the design of the two indexes.

The new and revised indexes represent different, but not mutually exclusive, population groups. Since both indexes are based on the same design, differences in behavior of the two series will be a function of differences in the characteristics of the two population groups in 1972-73. These differences are reflected in the market-basket weights, as well as in the stores and items priced. The third approach, comparing the new to the unrevised, would not only capture the impact of differences in design, but also differences in the behavior of the wage-earner and clerical-worker group between two points in time and differences at a point in time (1972-73) in the behavior of the all-urban and wage-earner population groups.

For purposes of this paper, we will focus almost entirely on the behavior of the revised CPI in relation to the unrevised CPI. It is, in my view, the approach to follow if one is interested in evaluating the impact of the revision program on the CPI. The other comparisons are also of interest, particularly a comparison of the new and revised series. However, it should probably be based on data for a longer period of time.

In comparing the movement in the revised and unrevised CPIs, we expect that all of the many differences in design have played a role. Unfortunately, it is impossible for us to determine the contribution of each. It is clear, however, that the net effect of all the changes in the CPI program has been small during the six-month period from December 1977 to June 1978. Over the entire six-month period, the percent changes are 4.9 percent and 4.8 percent for the revised and unrevised CPIs, respectively. In terms of month-to-month changes in the U.S. All Items indexes, the differences in movement were also quite small (see Table 1). However, it should be remembered that for some uses of the CPI, even small differences between the two indexes can be very important.

TABLE 1  
Consumer Price Index: U.S. All Items  
(not seasonally adjusted)<sup>a</sup>

Month	Index, 1967 = 100		Percent Change from Previous Month	
	Revised <sup>b</sup>	Unrevised <sup>b</sup>	Revised	Unrevised
December	186.1	186.1	NA	NA
January	187.1	186.9	.5	.4
February	188.4	188.3	.7	.7
March	189.7	189.8	.7	.8
April	191.4	191.3	.9	.8
May	193.3	193.2	1.0	1.0
June	195.3	195.1	1.0	1.0

NA—Not Applicable.

<sup>a</sup> Unadjusted percent changes are used for this comparison for several reasons. First, the seasonal factors for the unrevised CPI were not updated to reflect developments during 1977 and, second, the number of components used to derive the U.S. All Items index on a seasonally adjusted basis are different.

<sup>b</sup> Covers Urban Wage Earners and Clerical Workers.

Although the difference in movement between the two indexes at the U.S. All Items level was very small, there were differences in the behavior of the components of the indexes over the six months from December to June. The CPI is presented under two classification schemes. One consists of seven household-budget categories: food and beverages, housing, apparel and upkeep, transportation, medical care, entertainment, and other goods and services. The other consists of three types of product categories: food and beverages, commodities other than food and beverages, and services.

In the household-budget classification structure, the revised CPI increased more over the six-month period than the unrevised for two



groups—food and beverages and housing. For four groups, the increase was smaller, and for one group the increase was the same (see Table 2). On the basis of the commodity-service structure, the revised index increased more than the unrevised for all three groups. For food and beverages, the change for the six months was 8.5 percent compared with 8.1 percent. Other commodities were 3.5 percent vs. 3.1 percent, and services were 4.6 percent compared with 4.2 percent.

TABLE 2  
Consumer Price Index: U.S. Major Groups, Percent Change  
December 1977 to June 1978  
(not seasonally adjusted)

Group	Revised <sup>a</sup>	Unrevised <sup>a</sup>	Revised less Unrevised
All items	4.9	4.8	.1
Food and beverages	8.5	8.1	.4
Housing	4.9	4.2	.7
Apparel and upkeep	1.1	1.1	0
Transportation	4.0	4.4	— .4
Medical care	4.1	4.6	— .5
Entertainment	2.6	3.0	— .4
Other goods and services	2.0	2.6	— .5

<sup>a</sup> Covers Urban Wage Earners and Clerical Workers.

Another way to view these differences in behavior is to look at the contribution to the six-month change in the all-items index for each measure. The contribution to change reflects both the price change for the component as well as its importance in the all-items index. Differences in the contribution to change, therefore, reflect differences in percent changes as well as differences in importance. These calculations are provided in Table 3.

TABLE 3  
Contribution to U.S. All Items Percent Change  
December 1977 to June 1978

Group	Revised	Unrevised	Revised less Unrevised
Food and beverages	35.2	40.6	— 5.4
Housing	40.0	35.6	4.4
Apparel and upkeep	1.2	1.8	— .6
Transportation	16.1	11.0	5.1
Medical care	3.7	6.1	— 2.4
Entertainment	2.0	2.1	— .1
Other goods and services	1.8	2.8	— 1.0
All items	100.0	100.0	0

As can be seen from the table, the contribution to the six-month change in the all-items index made by food and beverages was substantially lower in the revised CPI and, conversely, the contribution of housing and transportation was substantially higher. For the food and beverage category, the larger price change in the revised CPI was more than offset by the lower weight given to the category. For housing, the two factors worked in the same direction. For the transportation group, the smaller price change in the revised CPI was more than offset by the larger weight of transportation in the revised index. Results of calculations for the other four major groups in the household-budget classification scheme are similar but smaller in magnitude.

Examination of the behavior of lower level indexes for the revised and unrevised CPIs has also begun. The basic press release table presenting CPI data contains another 59 price index series in the household-budget classification, 47 of which are mutually exclusive. Although review of differences at this level has not been completed, some interesting information has been developed. Differences in percent changes at this level are clearly larger, but they do not appear to be systematic in the sense that one index is consistently higher or lower than the other. In terms of mutually exclusive series, 24 series changed more in the revised index than in the unrevised over the six-month period and 23 changed less. This distribution, however, was not the same across major groups. For example in the food area, seven indexes changed more in the revised CPI and three changed less. In housing, the split was seven more and five less. In transportation, the distribution shifted to one more and seven less.

Some of the largest differences in behavior between the revised and unrevised CPIs occurred in the food and beverage component of the CPI. For the group as a whole, the revised CPI increased 8.5 percent during the six-month period from December to June compared with an increase of 8.1 percent for the unrevised CPI.

Most of the components of the food and beverage group increased more in the revised CPI than in the unrevised, and the differences in some components were substantial. In the nonalcoholic-beverage component, the difference was the largest—7.5 percentage points. The revised CPI increased 1.8 percent, while the unrevised CPI declined 5.7 percent.

The nonalcoholic beverage component of the revised CPI consists of five subgroups or strata, cola drinks excluding diet cola, carbonated drinks excluding nondietary cola, roasted coffee, freeze dried and instant coffee, and a miscellaneous category comprised of tea and other non-

carbonated fruit-flavored drinks. The unrevised CPI has similar but more narrowly defined categories. They are cola drinks, carbonated drinks, roasted coffee, instant coffee, and tea. Since the categories are similar, it is possible to compare the behavior of each group (see Table 4).

TABLE 4  
Consumer Price Index: Nonalcoholic Beverages and its Components  
Percent Change, December to June 1978 (not seasonally adjusted)

Category	Revised	Unrevised	Revised less Unrevised
Nonalcoholic beverages	1.8	- 5.7	7.5
Cola drinks	5.3	7.0	- 1.7
Other carbonated drinks	5.3	6.5	- 1.2
Roasted coffee	-9.1	-10.5	1.4
Freeze dried and instant coffee	-6.0	- 7.2	1.2
Other noncarbonated beverages	5.9	1.2	4.7

Although there were differences in movement of the components of the two indexes, they were not large enough to account for the difference in the nonalcoholic beverage index. For this reason, the market-basket weights were examined to see if the difference could be due to this factor. A review of the weights underlying the two indexes revealed some substantial differences (see Table 5). Over 70 percent of this unrevised CPI component was accounted for by coffee in the unrevised CPI compared with about 37 percent for the revised. In addition, the importance of cola drinks went from about 10 percent in the unrevised to 38 percent in the revised.

To examine the role of these differences in index weights in explain-

TABLE 5  
Consumer Price Index, Nonalcoholic Beverages:  
Relative Importance of Major Components, December 1977

Component	Revised	Unrevised	Revised less Unrevised
Cola drinks	37.6	9.7	27.9
Other carbonated drinks	18.3	9.5	8.8
Roasted coffee	15.2	56.6	-41.4
Freeze dried and instant coffee	12.0	15.9	- 3.9
Other noncarbonated beverages	16.9	8.3	8.6
Nonalcoholic beverages	100.0	100.0	0

ing the difference in behavior, a special index change was calculated. Price changes for the five components of the nonalcoholic-beverage index from the unrevised CPI were applied to index weights for the revised CPI. This calculation yielded a percent change for the December-June period of 1.6 percent. The change in the revised CPI for non-alcoholic beverages was 1.8 percent. Clearly, virtually all of the difference was due to differences in index weights rather than differences in estimates of price change.

Initially, I suspected that the drop in the market-basket weight for coffee was due to a sharp reduction in consumption as a result of a dramatic increase in coffee prices. In December 1977, the roasted coffee index was 357.5 percent above its 1967 base. The freeze dried and instant coffee index was up 283.2 percent in December.

The dramatic increase in coffee prices occurred after the 1972-73 base period for index weights, and the decrease in the consumption weight for the revised index is apparently a result of a long-term decline in coffee consumption which stretches back to the late 1940s. It is probably true that price increases in the last two years have resulted in further declines in coffee consumption which have not been reflected in the CPI.

In closing, some comment should be made concerning the relationship between the new All Urban CPI and revised and unrevised Urban Wage Earner and Clerical Worker CPIs. I think it is fair to say that the differences between the All Urban and unrevised CPIs, during the six-month overlap period, are very similar to those presented in this paper for the revised and unrevised CPIs. Putting the point another way, the differences in movement between the All Urban and revised CPIs are very small. In fact, over the six-month period, there was no difference at the U.S. All Items level. At the major group level, differences between major groups of the two indexes were only 0.1 percentage points in all cases except one. As more information for these two indexes is generated over time, it will be interesting to see if these differences remain small.

# Collective Bargaining and the CPI: Escalation vs. Catch-Up

VICTOR J. SHEIFER  
*U.S. Bureau of Labor Statistics*

Although there is no universal agreement on a set of appropriate criteria for wage adjustments, there is frequent acceptance of the idea that changes in the cost of living cannot be ignored in determining the size of general wage changes. This acceptance can be seen not only in the actions of private decision-makers but also in public policy.

For example, during the Korean War, Wage Stabilization Board Regulation 8 permitted wage increases to compensate for cost-of-living increases.<sup>1</sup> The guideposts of the Kennedy-Johnson Council of Economic Advisers provided a productivity standard for noninflationary wage increases. Nevertheless, considering the state of the economy, the Council in its 1967 report noted "that the recent rise in living costs makes it unlikely that most collective bargaining settlements in 1967 will fully conform to the trend increase of productivity." It therefore recommended restraint defined as "wage advances which are substantially less than the productivity trend plus the recent rise in consumer prices."<sup>2</sup> The 5.5 percent general pay standard developed during Phase II of the Economic Stabilization Program was consistent with a 2-3 percent annual rate of price increase.<sup>3</sup>

Where collective bargaining exists, anticipated and past changes in the cost of living can be considered when negotiating immediate wage adjustments. In long-term agreements, price changes can also be treated through negotiating scheduled deferred increases, providing wage reopenings, and including cost-of-living escalator clauses. Alternative wage adjustment methods during the contract term, of course, cannot be

Author's address: Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

<sup>1</sup> Milton Derber, "The Wage Stabilization Program in Historical Perspective," *Labor Law Journal* 23 (August 1972), p. 459. World War II wage controls did not include such a tie between wage and price increases.

<sup>2</sup> *Economic Report of the President, January 1967* (Washington: Government Printing Office, 1967), pp. 128-29.

<sup>3</sup> Arnold R. Weber and Daniel J. B. Mitchell, *The Pay Board's Progress: Wage Controls in Phase II* (Washington: Brookings Institution, 1978), p. 46.

evaluated solely by their pay impacts. For example, we should consider their relation to contract duration and the industrial relations stability often associated with less frequent bargaining.<sup>4</sup>

A Bureau of Labor Statistics analysis of 1,570 nongovernmental agreements covering 1,000 workers or more in effect on or after July 1, 1976, found the following frequency of wage adjustment provisions:<sup>5</sup>

	Agreements	Workers covered
All agreements	1,570	6,741,750
Escalator only	41	275,150
Deferred increase only	592	1,695,100
Reopening only	72	333,350
Escalator and deferred increase	518	2,742,000
Escalator and reopening	4	47,600
Deferred increase and reopening	139	497,500
Escalator, deferred increase, and reopening	131	956,300
No reference to wage adjustments	73	194,750

### Escalator Clauses

Since considerable interest has been shown in escalator clauses, this approach is emphasized in the following discussion.<sup>6</sup> Escalators provide a mechanism for periodic automatic adjustments of wage rates based on movements in a specified price index. Despite the interest cost-of-living adjustment (COLA) provisions have aroused, their overall coverage is relatively limited. A rough estimate is that 9 million workers currently have escalator protection, about 10 percent of nonagricultural civilian employment. The overwhelming majority of covered workers are unionized and, typically, are in large bargaining units. At the beginning of 1978, escalators covered 5.8 of the 9.6 million workers (60 percent) under private nonfarm major collective bargaining agreements (those covering 1,000 workers or more).

Escalator increases are significant. The average escalator increase in 1977 was 3.9 percent in major bargaining units where clauses actually produced increases. COLA yields accounted for 21 percent of all in-

<sup>4</sup> See Joseph W. Garbarino, *Wage Policy and Long-Term Contracts* (Washington: Brookings Institution, 1962) and Jack Stieber, "Evaluation of Long-Term Contracts," in *New Dimensions in Collective Bargaining*, eds. Harold W. Davey et al (New York: Harper, 1959), pp. 137-53. In some contracts, cost-of-living changes trigger wage-reopening negotiations. Regarding the role of price changes in the arbitration of wage-reopening disputes, see Irving Bernstein, *Arbitration of Wages* (Berkeley and Los Angeles: University of California Press, 1954), pp. 35-39.

<sup>5</sup> As would be expected, the relative frequency of the provisions vary by contract duration.

<sup>6</sup> Escalator adjustments apply to social security benefits and Federal Civil Service and military pensions. To a limited degree, private pensions have been tied to the cost of living. This analysis, however, is limited to wage-rate escalation.

creases going into effect last year in the major bargaining units. (Escalator increases reported in this paper exclude guaranteed minimum adjustments, which are treated as deferred increases.)

Although such devices had been adopted earlier,<sup>7</sup> escalator clauses gained prominence in 1948 when General Motors and the UAW negotiated what was then a long-term contract (two years) calling for automatic quarterly wage adjustments to offset price changes and stipulated annual pay increases to improve living standards. Since then, COLA provisions have been adopted in a number of industries, their popularity fluctuating over the years with the pace of inflation.

As shown above, escalator clauses rarely provide the sole wage adjustment mechanism during long-term agreements. Such use would at best freeze real wages. Typically, they are combined with deferred wage increases, and this package has been regarded as contributing to a lengthening of contract duration.

Detailed knowledge of escalator clauses and their wage yields is largely limited to the major bargaining units and the balance of this treatment is restricted to this group.<sup>8</sup>

At the beginning of 1978, the average major bargaining unit covered about 4,600 employees; those with COLA provisions covered about 6,800; and those without such clauses about 3,000. Looked at in a different light, COLA provisions were in only 38 percent of the agreements for 1,000–4,999 workers, but in 78 percent of the agreements for 50,000–99,999 workers, and in all contracts affecting 100,000 workers or more.

Closely related is the industrial incidence of COLA provisions. Agreements in only four industries—transportation equipment, communications, motor freight transportation, and primary metals—accounted for 49 percent of all workers in the major units with escalator coverage on January 1, 1978. Similarly, only four unions—the Auto Workers, Communications Workers, Teamsters, and Steelworkers—accounted for 48 percent of the covered workers. Escalator coverage was relatively more common in manufacturing industries, where it covered 70 percent of the workers as against 53 percent in nonmanufacturing.

---

<sup>7</sup> For example, at Sinclair Oil in 1946 and International Shoe in 1947. Earlier illustrations are in Elma B. Carr, *The Use of Cost-of-Living Figures in Wage Adjustments*, BLS Bull. 369 (Washington: U.S. Government Printing Office, 1925). Wage adjustments have not always been tied to changes in the cost of living. In 1865, a sliding scale of wages related pay of workers in iron mills to the manufacturers' scale of prices. Philip Taft, *Organized Labor in American History* (New York: Harper & Row, 1964), p. 37.

<sup>8</sup> Space limitations permit only a brief summary of data that have been compiled for this paper. A detailed set of tables is available upon request.

Significantly, coverage tends to be in pattern-setting industries,<sup>9</sup> economic sectors that can better afford the uncertainty in labor costs introduced by escalator arrangements. On the other hand, COLA provisions are relatively infrequent in construction—affecting only 9 percent of the workers in major bargaining units on January 1, 1978—where pricing patterns are more dependent on future pay rates.

Data for the major bargaining units confirm previous remarks as to the relation of escalators to long-term agreements. As of January 1, 1978, COLA clauses covered only 3 percent of the workers under one-year agreements and 17 percent of those under two-year agreements, but 71 percent of those under three-year pacts.<sup>10</sup>

Escalator clauses almost universally relate wage rates to changes in the BLS Consumer Price Index (CPI). About 90 percent of the workers are under clauses geared to the U.S. city average index, while the remainder—typically in smaller, local units—are affected by individual city indexes. Because of the scope of the bargaining units, the major automobile company contracts use an index derived by combining U.S. and Canadian national indexes.

At the beginning of this year, only 208,000 workers—4 percent of those under major bargaining agreements with COLA—were covered by clauses specifying percentage wage adjustments. The bulk of the escalator clauses provided for uniform cents-per-hour adjustments, thereby tending to compress relative occupational pay differentials. However, hourly deferred adjustments increasing with wage level countered this tendency in many of the contracts. An interesting variant applied to nearly 800,000 workers in units of the American Telephone and Telegraph Company, whose COLA clauses called for adjustments containing both percentage and absolute amounts.

### Escalator Yields

A basic question raised by the foregoing discussion is the degree to which escalator clauses afford protection against inflation. The 1948 GM-UAW escalator provided wage increases of 1 cent for each 1.14 point rise in the CPI. At existing levels of wages and the CPI, this formula yielded pay adjustments proportionate to price changes. In 1959 Garbarino concluded that most of the contracts then in effect “fully compensate for price changes.”<sup>11</sup>

---

<sup>9</sup> Jules Backman, “Wage Escalation and Inflation,” *Industrial and Labor Relations Review* 13 (April 1960), p. 400.

<sup>10</sup> Duration is defined as the span from contract effective date to expiration or re-opening date, if any.

<sup>11</sup> J. W. Garbarino, “The Economic Significance of Automatic Wage Adjustments,” in *New Dimensions . . .*, eds. Davey et al., p. 162.



One could not reach this conclusion today. In the 10-year period 1968–77, the average annual escalator increase—for workers in major bargaining units where clauses resulted in pay increases—ranged from 1.6 percent in 1968 and 1969 to 5.8 percent in 1974. In no year did the increase match the CPI rise. The closest correspondence was in 1971 when escalator increases were 91 percent of price changes; the lowest, 26 percent in 1969. A simple average of the annual yields is 57 percent.

In 1977, when the CPI rose 6.8 percent, escalator increases averaged 3.9 percent, ranging from under 1 percent for 2 percent of the workers under clauses effective through the year to 7 percent or more for less than 1 percent of the workers. Significantly, 27 percent of the workers under these COLA clauses did not receive any increase, primarily because no reviews took place during the year.<sup>12</sup>

Several factors operate to produce this result. Key ones can be treated here only briefly:

1. *Formulas are insufficient to produce full compensation.* The most common formula—1 cent increase for each 0.3 point CPI rise, applying to half the workers under escalator clauses in major contracts—is relatively liberal.<sup>13</sup> (Among covered employees are those in the auto, steel, trucking, and railroad industries.) However, at the April 1978 level of the revised CPI for urban wage earners and clerical workers (191.4) it would produce full compensation with a wage rate of \$6.38 or less. In each of the 10 largest bargaining units with this formula, average straight-time earnings were greater, averaging \$8.44. (Together, the 10 units covered 1,538,000 workers.)

2. *Limits may be placed on the maximum COLA increase.* At the beginning of this year, one-fourth of the workers in major bargaining units with escalators were affected by “caps.” Average annual ceilings on wage increases over the contract term ranged from under 1 percent to 6.1 percent, averaging 2.7 percent. The largest concentration of caps was in the railroad industry, affecting 469,000 workers. Somewhat related are “corridor” provisions of General Electric and Westinghouse contracts precluding adjustments for annual CPI rises between 7 and 9 percent.

3. *Escalator adjustments lag behind price changes.* The significance of the lag, of course, is related to the pace of inflation. In the 1968–77 period, escalator yields were above 60 percent only in the four years with diminished rates of price increase. While the lag effect on wage rates may be important in an individual year, the long-run impact is on

---

<sup>12</sup> Data in this paragraph are limited to COLA clauses effective throughout 1977.

<sup>13</sup> Other common formulas are 1 cent for each 0.4 point rise and 1 cent for each 0.3 percent rise.

aggregate purchasing power. Degree of lag depends largely on frequency of escalator review. As of January 1, 1978, 43 percent of covered workers had annual reviews (including those in trucking, communications, and electrical equipment); 39 percent had quarterly reviews (mainly metalworking); 15 percent semiannual; and the balance monthly, CPI triggered, or other periodicity. From a different perspective, 51 percent of the workers were *not* covered by a review in the first contract year; only 1 percent in the second; and 2 percent in the third. Primarily in Auto Workers contracts, a minor lag is introduced by using a three-month average CPI rather than a single month.

4. *Escalator yields may be diverted, permanently or temporarily, often to finance supplementary benefits.* About 1 million workers are so affected, commonly under Auto Workers contracts.

5. *Escalators may not operate until a significant CPI rise occurs.* For example, contracts of the Clothing and Textile Workers for 100,000 employees yield gains only for CPI advances over 7.5 percent in the second contract year and 6 percent in the third.

In addition, overall costs of escalator clauses are commonly curbed by not immediately including such payments in base rates, thereby possibly isolating benefit obligations from current COLA impacts. Conversely, periodically incorporating all or part of the COLA float into base rates curbs the downward flexibility of escalators, since wage reductions commonly are limited to the size of the float.

One conclusion is inescapable. COLA provisions vary considerably, the degree of protection afforded by a particular clause being an outcome of collective bargaining. Liberality of escalation is part of a settlement package—including other wage and benefit items—that reflects attitudes, skills, and power of the negotiators.

### **Escalator vs. Negotiated Increases**

Anticipated and past price changes can be considered in negotiating immediate and deferred wage adjustments. Hence, total wage-rate changes over the contract term *could* be the same with or without escalation. Remembering that escalator reviews are less frequent in the first contract year, it is notable that 1977 major settlements for longer than 30 months, with and without COLA, showed little difference in first-year negotiated adjustments, but second- and third-year gains were substantially larger in the latter group.

Other things being equal, bargained changes that anticipate price increases produce greater take-home pay; catch-up increases have the

opposite effect. Evidence of both anticipatory and catch-up increases can be cited. The frequent tendency to front-load settlements, i.e., to provide greater increases in the first contract year, is consistent with the idea of negotiating catch-up increases. On the other hand, the larger bargained deferred increases in non-COLA units would appear to anticipate rises in the cost of living.<sup>14</sup> Interestingly, negotiators may be conservative in regard to future price changes; in non-COLA major settlements between 1972 and 1977 there was greater year-to-year variability in average first-year as against deferred increases.

The key issue, of course, is how overall wage gains compare, in timing and amount, in COLA and non-COLA units. Unfortunately, interpretations of such comparisons are hazardous because the two groups differ substantially in respects other than the presence or absence of escalation, and there are wage spillovers from one segment to the other. Findings of existing studies do not appear conclusive. It is not possible to explore the issue here, but one pertinent set of data can be presented.

In major units concluding bargaining in 1977, prior negotiated wage adjustments averaged 5.9 percent annually over the contract term in units with COLA provisions in the expiring and renewed agreements, and 8.3 percent in units without COLA in either contract. Adding COLA yields subsequently received, the total gain in the former group averaged 10.1 percent a year under the expiring contract. One might have expected the non-COLA unions to seek to compensate in 1977 bargaining for this shortfall. However, the new average negotiated adjustments—4.9 percent annually in COLA units and 7.0 percent in non-COLA units—were in almost the same proportion as in the prior bargaining. Whether this result testifies to the wage impact of COLA clauses, is a reflection of conditions peculiar to the time period studied, or stems from differing environments in the two sectors—which could in fact determine the incidence of escalation—is still an open question.<sup>15</sup>

---

<sup>14</sup> See H. M. Douty, *Cost-of-Living Escalator Clauses and Inflation* (Washington: U.S. Council on Wage and Price Stability, 1975), pp. 33–38.

<sup>15</sup> It would be desirable to extend this analysis back over a series of contracts. The computer data base used for the tabulation is limited to information for 1974 and subsequent years.

# Escalators, Inflation, and Macroeconomic Policy\*

DANIEL J. B. MITCHELL  
*Brookings Institution and  
University of California, Los Angeles*

Discussion of the macroeconomic effect of escalators is usually confined to the issue of whether escalators contribute to the wage-price spiral. This discussion, it will be argued, misses an important feature of escalation: its effect on the sensitivity of wages to economic factors *other* than inflation. Specifically, available evidence suggests that escalators do not introduce inflation-responsiveness to wages. Such responsiveness would be found in the absence of escalators. But escalators appear to be associated with a component of the unionized sector which exhibits very limited wage responsiveness to economic slack. This limited responsiveness poses a dilemma for macro policy. But it is unlikely that escalators are the cause of this limited response phenomenon.

## Some Empirical Evidence

These introductory observations suggest a need to examine the sensitivity of wage change behavior to price inflation and business conditions. Estimation of wage equations containing these components has become a commonplace. Yet much of the effort has gone into aggregate wage equations which ignore institutional features of the labor market. Ideally, it would be useful to have separate data series on wage changes which are subject to escalation and wage changes which are not. Unfortunately, no such data are available for any length of time. However, it is possible to separate those adjustments which are more likely to be escalated from those which are not.

Since 1959, the Bureau of Labor Statistics has published data for manufacturing that provide median wage rate changes for production workers in union and nonunion establishments. These changes are broken down into "effective" changes (resulting from all first-year, deferred,

---

\* The views expressed in this paper are the author's and do not necessarily reflect those of other Brookings staff members or the officers and trustees of the Brookings Institution. Research reported in this paper was supported in part by a grant from the Sloan Foundation. Author's address: Brookings Institution, 1775 Massachusetts Ave., N.W., Washington, D.C. 20036.

and escalator adjustments) and first-year changes.<sup>1</sup> A separate tabulation is provided for the "major" union sector (situations covering 1,000 or more workers). From these data, it is possible to obtain directly or estimate wage-change series for six components in manufacturing. These are (1) first-year adjustments in the major union sector, (2) first-year adjustments in the "nonmajor" union sector (situations involving less than 1,000 workers), (3) deferred and escalator adjustments (denoted "deferred" hereafter) in the major sector, (4) deferred adjustments in the nonmajor union sector, (5) nonunion effective wage changes, and (6) effective wage changes for the combined union and nonunion sectors.<sup>2</sup>

Available evidence on escalation suggests that it is most commonly found among the workers in the major union sector as part of the deferred package of their multiyear contracts. Escalation is less commonly found in the nonmajor union sector and is quite uncommon among nonunion workers.<sup>3</sup> Thus, evidence of escalated behavior can be expected in wage-change equations based on component (3).

Table 1 presents the results of six annual regression equations which "explain" percentage change in wage rates for the six components during the period 1960-76. Explanatory variables are the annual rate of change in the consumer price index (with various lags) and the inverse of the unemployment rate. The latter should be taken as an index of business conditions; other indexes could have just as well been used.<sup>4</sup>

Consider first the regression results from equation (6). It is the sort of aggregate equation that has made wage researchers cringe in recent years. Lagged price change shows up as barely significant. The inverted unemployment rate enters with the "right" sign but without statistical significance. Finally, the close-to-unity rho coefficient suggests a "bootstrap" theory of wages. Wages seem to go their merry way with their rate of change largely dependent on previous wage changes.

Not surprisingly, the disaggregated results show a more coherent

---

<sup>1</sup> The data appear in various issues of *Current Wage Developments* and apply to establishments which make general wage adjustments.

<sup>2</sup> The data on wage adjustments are in the forms of medians for the entire period. Means are available only for recent years. To form consistent series, only the median data were used. However, medians were treated as means to derive estimates for the components not explicitly reported, i.e., components (2), (3), and (4) in the text, using employment weights. Because of data unavailability and inconsistency, non-manufacturing estimates could not be included.

<sup>3</sup> See H. M. Douty, *Cost-of-Living Escalator Clauses and Inflation* (Washington: U.S. Council on Wage and Price Stability, 1975), p. 18.

<sup>4</sup> The following other indexes were used with similar results: the manufacturing quit rate, the ratio of real CNP to its logarithmic trend, and the inverted unemployment rate for white males ages 35-44.

TABLE 1  
Manufacturing Annual Wage Adjustment Equations

Dependent Variable: Equation Number:	First-Year Adjustments		Deferred and COLA Adjustments			Union and Nonunion Sectors (6)
	Major Union Sector (1)	Nonmajor Union Sector (2)	Major Union Sector (3)	Nonmajor Union Sector (4)	Nonunion Sector (5)	
Constant	- 1.52	- .22	5.38**	.74	- 1.24	2.40
Price inflation time $t$	—	—	1.01**	.07	—	—
time $t-1$	.88**	.58**	—	—	.58**	.29*
time $t-2$	—	—	.14	.55**	—	—
1/unemployment rate time $t$	19.30**	15.75**	—	—	16.82**	6.87
time $t-2$	—	—	-24.72**	5.25**	—	—
$R^2$	.86	.92	.95	.93	.79	.87
Standard error	1.07	.62	.85	.56	.96	.76
Durbin-Watson	1.96	2.04	2.03	2.10	2.07	2.42
Rho (1)	.14	.66	.25	— .76	.19	.83
Rho (2)	—	—	— .38	— .05	—	—

*Note:* All variables are expressed in percentage points. Derivation of variables is described in fn. 2. The rho coefficients result from first- and second-order autocorrelation corrections. Periods of observation are adjusted for these corrections. Equations (1), (2), (5), and (6) cover 1960-76. Equations (3) and (4) cover 1961-76. Price inflation is measured by the annual percent change in the consumer price index.

\* Significant at 10 percent level. \*\* Significant at 5 percent level or better.

pattern. The nonunion sector (equation (5)) displays significant sensitivity to both lagged price inflation and current unemployment. A very similar picture emerges for the first-year adjustments in the nonmajor union sector. Even the major union sector exhibits much the same results, although the phenomenon among these contracts may reflect a tendency to negotiate one-year contracts when economic circumstances force an adaptation. The key point is that the linking of wage change to price change is not something unique to escalators; it is found even in adjustments where escalators are not used.

The impact of escalation is felt primarily in the second and third years of union contracts. Moreover, as noted earlier, escalators are more prevalent in the major than in the nonmajor union sector. The deferred equations on Table 1 (equations (3) and (4)) reflect this phenomenon. Equation (3) for major union deferred adjustments reveals a sensitivity to current price inflation (year  $t$ )—presumably a direct response through escalators—while the past rate of price change at the time of negotiations (assumed to be year  $t - 2$ ) is not significant. Evidently, the parties rely on their escalators to take account of future inflation and let recent price experience influence only their first-year adjustments. In contrast, deferred adjustments in the nonmajor union sector—where escalators are less common—show a different pattern. Current inflation (year  $t$ ) is not a significant explanatory variable for such adjustments. But the rate of inflation at the time of negotiations (year  $t - 2$ ) is significant. Evidently, the rate of inflation surrounding the original negotiations affects both the first-year and subsequent adjustments where escalators are not used.

Within the deferred component, the presence of escalation has some effect on the timing of wage increases in response to inflation. Where escalators are absent, past inflation continues to be reflected in wage adjustments until contract renegotiation. Where escalators are present, current inflation is reflected in wage changes. The deferred equations indicate that the degree of response to inflation is greater for major deferred adjustments than for nonmajor. However, the price coefficient of equation (3) is biased upwards because the incidence of escalation within the major union sector grew during the period of rapid inflation. A better measure of the response would probably be the 55 percent figure a recent study found to be the average for escalator protection against CPI increases during 1968–75.<sup>5</sup> This estimate is in line with the other disaggregate price coefficients on Table 1.

<sup>5</sup> Information on the actual operation of escalators can be found in Douty; Robert H. Ferguson, *Cost-of-living Adjustments in Union Management Agreements* (Ithaca: New York State School of Industrial and Labor Relations, Cornell University, 1976); Jerome M. Staller and Loren M. Solnick, "Effect of Escalators on Major Contracts

It must be noted that escalators help make long-term contracts attractive. If the escalator option were suddenly to vanish, the parties would react by shortening their average duration of contract. Thus, the difference in behavior shown in equations (3) and (4) exaggerates the actual timing effect. The evidence, taken as a whole, suggests that escalators basically institutionalize what would be done in their absence by the parties. Of course, in particular periods escalators might temporarily add to, or subtract from, the inflation rate.

The coefficients of the inverted unemployment rate suggest a more significant effect associated with the prevalence of escalators. Recall that first-year union and nonunion adjustments show the expected sensitivity to general economic conditions, as proxied by the unemployment rate. Deferred nonmajor union adjustments also show a sensitivity to unemployment, although it is unemployment at the time of negotiations that matters. In the deferred major union sector, the lagged unemployment rate shows up with the "wrong" sign. One interpretation is that the parties in this sector took an "averaging" approach at the time of negotiations. Specifically, if negotiations took place during hard times, the contracts were backloaded a little more or front loaded a little less in response.<sup>6</sup> In any case, equations (1) and (3) suggest net nonresponsiveness of wage change over the life of the contract to business conditions.

The specific value of the unemployment coefficients can be questioned without changing an important institutional fact. Unless contingency clauses relating wages to unemployment or some other similar variable were included in long-term contracts, deferred adjustments—escalated or not—will not respond directly to business conditions. Escalators help make possible long-term contracts, although, of course, there are many multiyear contracts without escalators. In this respect, escalators could contribute to a diminished sensitivity of wage change to such conditions.

Normally, the state of business conditions is the main lever that the authorities have on inflation. It is widely recognized that this lever is not very powerful in the short run. For example, equation (5) for nonunion workers—a minority in manufacturing but a heavy majority for the economy as a whole—suggests that an increase in unemployment

---

Expiring in 1974," *Monthly Labor Review* 97 (July 1974), pp. 27-32; and Nicholas S. Perna, "The Contractual Cost of Living Escalator," *Federal Reserve Bank of New York Monthly Review* 56 (July 1974), pp. 177-82. The 55 percent figure is from Ferguson, p. 45.

<sup>6</sup> However, if—as suggested earlier in the text—the parties adapt to "hard times" by negotiating short contracts, the methodology used to estimate deferred increases could produce negative coefficients.



from 5.5 to 6.5 percent would cut the rate of wage increase by less than one-half of 1 percent. Moreover, the social costs of unemployment are high. But when confronted with increasingly strong public concern about inflation and a lack of other alternatives, policy-makers will pull the lever. If there are institutional arrangements that make wage change less sensitive to demand restraint, it is likely that the authorities will pull the lever harder than would otherwise be required. Escalators do make long-term contracts more attractive to unions. But whether the escalated sector would be more responsive to demand restraint if it switched to shorter, nonescalated contracts is a question the data presented in this paper cannot answer.

### An Anti-escalator Policy?

Even if it could be shown that escalators make wages less sensitive to macro policy, attempts to discourage escalation would inflict economic costs. Note first that unlike some features of labor contracts such as pension and health and welfare programs, escalators and deferred contracts have not generally been specifically encouraged by public policy.<sup>7</sup> Any act to discourage them would therefore involve more than withdrawal of encouragement; it would require a deliberate public action to eliminate an innovation developed by the parties themselves. Moreover, such a program would undoubtedly lead to increased strike involvement.

Strikes involving the renegotiation of expired contracts accounted for 51 percent of total strikes during 1968–75, but 68 percent of total workers involved in such strikes.<sup>8</sup> An interindustry pooled cross-section analysis of strikes resulting from renegotiations for this period suggests that there is a strong linkage between workers' involvement in strikes and workers covered by expiring contracts.<sup>9</sup> Thus, fewer escalators would

<sup>7</sup> Escalators did receive favored treatment under Phase II wage controls, but the episode was too brief to have had a noticeable effect. In addition, inflation expectations appeared to be moderated by the early controls, thus discouraging the expansion of escalators. See Arnold R. Weber and Daniel J. B. Mitchell, *The Pay Board's Progress: Wage Controls in Phase II* (Washington: Brookings Institution, 1978), pp. 368–72. There is some mild encouragement for multiyear contracts (and perhaps indirectly through such contracts to escalators) due to the "contract bar rule" of the National Labor Relations Board. This rule prevents representation elections during contracts up to three years, thus increasing incumbent union security.

<sup>8</sup> Data from various bulletins of the U.S. Bureau of Labor Statistics entitled *Analysis of Work Stoppages*.

<sup>9</sup> Consistent data on major union expirations and reopenings are available by industry beginning in 1968 in various issues of the *Monthly Labor Review*. Data on work stoppages arising from contract renegotiations are available for 27 private, non-farm industries in the bulletins cited in fn. 8. A regression was run in the form:

$$S_{iy} = a + bE_{iy} + \sum c_i I_i E_{iy} + \sum d_y Y_y E_{iy}$$

where S is the number of workers involved in renegotiation and reopening strikes,

lead to shorter contracts, more annual renegotiations, and greater strike activity.

### **A Final Thought**

Escalators are associated with a sector characterized by little responsiveness to unemployment or other indexes of business conditions. But as labor-market researchers have been noting in recent years, that sector is also characterized (on average) by relatively high rates of unionization, high capital intensity, high wages, and high costs of turnover for employers and employees. In such an environment it is difficult to view escalators as causes rather than effects. Thus, it seems unlikely to this observer that the elimination of escalators would change the basic characteristics of the industries in which they are found. Although a social compact between labor, management, and government does not appear to be on the immediate horizon, such a compact must eventually be part of solution for inflation. It seems infinitely preferable to ad hoc tinkering with industrial relations practices.

---

*E* is the number of workers in major expirations, *I* is a dummy for certain industries which seemed consistently to be abnormally or subnormally strike prone, *Y* is a dummy for the year of the strike, *i* denotes industry, and *y* denotes a year. The number of workers under expirations was adjusted slightly to take account of the timing of contracts under the Railway Labor Act. The year dummies were included to take account of any economic, political, or social factors which may have affected strike behavior in particular time periods. In the resulting equation,  $b = .24$  and is highly significant. The adjusted  $R^2$  for the entire equation is .85. If all dummies are omitted,  $b$  rises to .36 and the  $R^2$  falls to .57.

## DISCUSSION

SIDNEY W. SALSBURG  
*Chrysler Corporation*

Given the allotted time, I will avoid noting points of agreement, praise for the work of the presenters, or very specific points of disagreement. With that in mind, let me primarily make general comments relating to matters they raised.

While we all implicitly recognize that in the unionized sector wages are the result of collective bargaining, much of the discussion this morning has centered around escalator provisions, and there has been only limited reference to the one fact that serves to put the escalator in proper perspective—it is a bargained phenomenon, not only in what it does and how, but that it comes into being and exists in the context of other contract provisions. Perhaps it would have been better if that reference were made initially and more strongly.

Furthermore, while we can recognize that rising prices have a decided impact on the course of wage rates, including of course escalated wages, a key element in viewing the relationship between wage and price movements is to recognize what has happened to the compensation package since escalation first took off, 30 years ago. Nondirect wage items represent a very substantial portion of compensation. Many of these items are wage substitutes, attractive to workers for tax reasons, or because, at the beginning at least, they permit bulk purchase of benefits more cheaply, or because at times leisure is viewed as more desirable than money.

Given these elements, the attempt to look at wages alone in response to movements of the price index can only lead to false conclusions—we would never know to what extent a change in wages is a response to price movements or a shift in emphasis between direct wage and other so-called fringe benefit items.

Related to this is the subject of degree of protection that both Mitchell and Sheifer have brought into the discussion. This issue has specific implications. Acceptance of these implications, that (1) the Consumer Price Index (CPI) is a measure of change in the cost-of-living, and (2) escalation is a direct commitment to fully protect living standards, and this solely through the wage rate, raises many problems. Not

the least of these is that the CPI is not a true measure of change in the cost of living. One of the things which does not come across in John Layng's discussion is the delay that takes place in adjusting the CPI to basic demand changes. The substitution effect is extremely important in the maintenance of a level of living.<sup>1</sup> People do shift their demands in response to price movement, and this demand shift which occurs frequently and fairly rapidly is not so quickly reflected in the CPI.

The concept also ignores the drastic change in the composition of the compensation package in the last 30 years as well as the shift in the portion that escalated wages now plays in meeting changing needs or desires.

It also, perhaps wisely, bypasses the very long argument as to what is protected: basic wage rates, the cost-of-living allowance (COLA) which is an add-on to wage rates, etc. It also ignores rises in certain portions of the CPI from which workers in many industries are insulated—for example, the medical care component, because their employers pay for much of their health care.

And, finally, just looking at arithmetic, much is lost when averages are used because in some of the major pace-setting industries the relationship of the COLA to base rates is much higher than the 55 percent mentioned by Mitchell; the wage mentioned by Sheifer appears unduly high.

Professor Mitchell writes that the impact of escalation is felt primarily in the second and third years of union contracts. This, of course, might be, as Vic Sheifer has pointed out, because escalator reviews are less frequent in the first contract year, frequently because larger increases are given in the first year which would obviate a portion of early escalated cost-of-living increases.

The contention by Dan Mitchell that the parties would react to the elimination of escalators by shortening the average duration of their contract is an interesting hypothesis which might be true in some situations, but I doubt there is evidence to support it as a generalization. The construction industry has multiple-year agreements without escalation; rubber had three-year agreements for a long time (until 1976) without an escalator; the steel industry opted out of escalation in the 1960s for three rounds and maintained its three-year agreements.

I would like to make a passing reference to the statement that government has not encouraged the use of escalators. I believe it has, although perhaps not directly. If we look at the controls period of the

---

<sup>1</sup> Long periods of high-level inflation would have an effect on substitutability, labor, costs, and collective bargaining that would alter the tenor of these comments.

early 1970s we would see that wage controls had its own kind of arithmetic—with certain kinds of compensation increases either not counted or discounted. COLA was not counted at its full value; therefore, to the controllers, settlements appeared less and an escalator clause became a way to bypass restrictions.

Moving on, Dan Mitchell gets to the heart of the matter when he says, “Where escalators are present, current inflation is reflected in wage changes.” He then seems to move away from it by concluding that “The evidence . . . suggests that escalators basically institutionalize what would be done in their absence by the parties.” What this bypasses is frequency and timing.

While we may struggle in the attempt to fit the relationship of escalated wages into complex statistical models and equations, a purely institutional analysis of the situation leads to the quite specific conclusion that escalators not only make wages very responsive to changes in the CPI, but further, that this responsiveness for most of the major pattern-setting cost-of-living clauses is very quick. For example, wages in the auto industry will go up 18 cents per hour<sup>2</sup> next week as a consequence of the rise in the CPI during the past three months—rollup will add about another 33 percent<sup>3</sup> of this amount to labor costs (the total approaching a 2 percent increase in contractual labor costs).

To illustrate how quickly an individual price can pass into the wage system—if an import tax or OPEC action were to increase gasoline prices by 10 cents a gallon (for example), an almost immediate increase in the CPI would occur which, within the quarter, would raise the cost-of-living payment in our industry by 4½ cents an hour and our labor costs by about 6 cents an hour.

And, as Lloyd Ullman recently observed while summing up an OECD conference: Even if price increases come first, wage increases generate subsequent price increases.

Looking at collective bargaining and its general economic impact, it is probably the case that escalators have a limited effect during periods of very moderate price rise and a very disruptive effect on both the economy and collective bargaining during periods of substantial price increase.

At higher levels of inflation there will be greater utilization of escalator clauses in agreements. Any increase in utilization of escalator

---

<sup>2</sup> One cent of the 18 cents is temporarily diverted.

<sup>3</sup> The rollup percent is based on the data published by the Council on Wage and Price Stability in its publication, *An Analysis of the Automobile Settlement* (Washington: January 13, 1977), p. 6.

clauses given the recent high levels of COLA payments is inflationary. The amounts of payments are so substantial they go beyond the ability of industry or government to recoup by increased productivity. The ultimate result is an increase in price—product price or taxes, or a reduction in capital investment or public service if the price adjustment is not possible. These will lead to higher costs which ultimately need to be reflected in higher prices and, I am sure somewhere in these meetings someone will have observed, not infrequently in reduced employment.

The arithmetic of inflation contributes to the disruptive effect. A 1 percent increase at a CPI of 120 generated 4 cents in wages (at  $.3 = 1\text{¢}$ ); at the current CPI it would generate 7 cents. A 9 percent average rate of inflation, 1973–76, generated \$1.09 in COLA; 1976–79, it would generate over \$1.50.

The bargaining process itself also works against moderation. Settlements tend to increase vacations, holidays, and other wage-related benefits. This in turn increases the rollup cost of COLA. In addition, as wages rise and the CPI rises, pressures build to change the escalator clause, to provide more money (and, therefore, more costs) for each change in the CPI.

Another serious problem connected with escalation stems from the unpredictability of labor costs. Any firm, industry, or government agency that would be disadvantaged by the inability to know with any degree of accuracy what its labor cost will be in the near future will find its problems compounded. Labor costs under escalation are unpredictable and that unpredictability is permanent.

One of the most serious disadvantages of COLA clauses, insofar as collective bargaining is concerned, arises out of the difficulty unions, particularly the rank and file, have of giving credit for COLA increases during contract negotiations. They tend to look upon COLA as a continuing benefit like any other benefit granted in the past. At our high rate of CPI increase, the amount of an offer, or settlement, taken up by the cost of future COLA will be substantial. In some way this will eat into the package. When the above view of escalation is coupled with its cost, you get a reduction in the ability of the parties to confront other issues, to seek solutions to new problems, and to bargain peacefully.

Finally, it is difficult to examine escalators primarily on an aggregate basis. The impact of escalation is very specific to the firm or industry in which it exists. It influences their costs very quickly: it puts pressure

on prices, and if as a consequence they rise, then COLA rises, and so on it goes—a self-perpetuating process. What has to be recognized is, if inflation is to be controlled, there is a need to absorb part of the shock of inflation.<sup>4</sup> Acute responsiveness of wages to inflation goes in the opposite direction.

---

<sup>4</sup> I believe it was Professor John Crispo, University of Toronto, who made this point at the OECD Conference on Collective Bargaining and Government Policy in Washington, D.C., July 1978.

## DISCUSSION

MARVIN FRIEDMAN

*Ruttenberg, Friedman, Kilgallon, Gutchess & Associates, Inc.*

Changes in consumer prices have always played a major role in collective bargaining, even before there was such a thing as a Consumer Price Index (CPI), because of the workers' drive to improve their real, as opposed to money, incomes. The development and spread of the modern cost-of-living escalator clause since the end of World War II has added a new dimension to the linkage of wages to prices, in that it provides for periodic adjustments during the term of the collective bargaining agreement in accordance with whatever formula the parties incorporate in their agreement. But it is difficult for me to discern that escalator clauses have made any substantive differences in the role that is played by the CPI with respect to the size of pay increases achieved through collective bargaining.

The difference that escalator clauses have made is in the timing of the wage increases. During periods of rising prices, they have reduced the length of the "catch-up" period. In the absence of escalator clauses, the workers simply have more catching up to do when their collective bargaining agreements expire, and they must do more guessing about the future in connection with the size of the deferred increases to be written into the multiyear agreements without escalators.

Since there is a tendency to base judgments about the future on conditions as they exist at present, and since those present conditions include intolerably high rates of inflation, policy-makers in Washington seem now to be showing greater concern over agreements without escalator clauses than they are showing over those with escalators. Future deferred increases, negotiated now on the basis of the current rates of inflation, will interfere with the winding down process the policy-makers hope will take place. Where escalator clauses exist, of course, any winding down of inflation would lead to a prompt winding down of the size of the wage adjustments.

The concern is not without good reason, in view of the number of agreements that do not contain escalators. For example, according to the data from the U.S. Bureau of Labor Statistics, over two-thirds of the major collective bargaining agreements are for a term of three years



or more, but considerably less than 50 percent of those long-term agreements contain escalator clauses.

There are many reasons that so many agreements exist without such provisions. Sometimes both parties may prefer to operate without an escalator, but most of the resistance has come from employers who do not like the open-endedness of the arrangement. Often employers are prepared to pay for their preference, not alone in the size of the deferred increases that get written into the agreement or in additional fringes, but also in the kinds of cost items—perhaps liberalized manning arrangements or workrule revisions—that do not readily show up as benefits or costs in Sheifer's data on the size of the collective bargaining settlements of units without escalator clauses.

The central point, however, is that escalators have changed the timing of the pay increases and not their size. Unions without escalator clauses routinely examine the changes that have occurred in the CPI since their last settlement in order to determine how much catching up they must do. The most relevant measure, of course, is the lag in compensation rather than wages alone.

It is important to note, too, that even unions with escalators frequently have to do some catching up with inflation whenever they negotiate new agreements. This is because the escalators do not provide adjustments that are fully proportional to whatever increases in prices may have occurred. From the union vantage point, it is a never-ending game of "catch up," with few if any unions able to achieve gains in real hourly compensation matching the nation's growth in output per hour.

In view of this, the recurring efforts that have been made over the years to hold escalator clauses as well as wages responsible for the nation's inflation has, I know, been a source of consternation to the labor movement, and to some others as well. It is, therefore, interesting and a bit of a relief to find that neither of the papers presented here supports the view of the critics of escalator clauses. Mitchell, for example, says, "It is difficult to find escalators as causes rather than effects."

Sheifer is less categorical. He notes, however, that the popularity of escalator clauses has fluctuated with the rate of inflation, which seems once again to suggest that escalator clauses and whatever they produce are, as Mitchell says, not the cause but the effect of inflation.

Sheifer's data showing that bargaining units with escalators seem over time to have received the larger increases in wages are not inconsistent with this conclusion. He himself observes that variables other than the use or nonuse of escalator clauses may account for the differences. Variations in fringe benefit packages might be one. I suspect if

truly valid comparisons could be made, we are likely to find similar increases in pay for comparable bargaining units, even where one has an escalator and one does not.

On this score, I should mention a comparison that was made in my organization several years ago of the wage gains over an eight-year period involving the local transit systems of three major cities in the United States, two of which had escalator clauses. Over the eight-year period, the two with escalator clauses had wage increases of 79 percent and 77.5 percent, while the one without an escalator had received increases of 76 percent. But the latter was once again heading to the bargaining table, and ended up with a settlement that catapulted it once again to the head of the parade—at least for the time being.

Both Mitchell and Sheifer refer to the role of escalator clauses in the shift toward agreements of longer duration, a shift that has been rather dramatic. In 1950, nearly 75 percent of the collective bargaining agreements in the U.S. were for one year's duration, and fewer than 5 percent were for a term of over two years. Now, one-year agreements have pretty much become relics of history, while the BLS reports that two-thirds of the major agreements are for three years or more.

The longer duration of the agreements is presumed by both Mitchell and Sheifer to have aided in improving industrial relations stability. I think logic is on the side of this position, but I also think it is worth noting that since the outset of the 1960s—during which time the number of major agreements of three years' duration or more grew from two out of five, to two out of three—there has been a substantial increase in the number of work stoppages reported by the BLS in connection with the renegotiation of agreements.

The difficulties that negotiators may have in handling the fallout from inflation may account for some or even much of this growth in the number of strikes. But some of the increase in the incidence of strikes may also be due to the problems resulting from the shift to contracts of longer duration. Long-term contracts make each negotiation more important to the parties, because they have to live with the product for a longer period. This may make each party a bit more cautious and a bit stickier in working out compromises. Especially where they have no escalator clause—but even where they have—the longer the term of the agreement, the more the parties must project the future, and the likelier they are to be more concerned about the consequences of any misstep. On top of this, the longer the period between negotiations, the greater will be the buildup of a backlog of problems to be handled at each negotiation.

Thus, although logic suggests that the increase in the number of contracts of longer duration should lead to a reduction of strikes, it may be timely for some further research into this issue and into the meaning of the data showing the increase in the number of strikes since the beginning of the 1960s—all the more so when it is considered that the latest source reference on the subject cited by Sheifer is dated 1962. The data on strikes since the early 1960s imply a deterioration in labor-management relations. If this is, in fact, what the data mean, then there is less reason to be surprised by the behavior of the business community toward the labor law reform bill during the current session of Congress.

# XI. CONTRIBUTED PAPERS: CIVIL RIGHTS AND EQUAL EMPLOYMENT OPPORTUNITIES

---

## Union Seniority Provisions and Discrimination

JACK HOOVER  
*Virginia Polytechnic Institute*

WILLIAM LEAHY  
*University of Notre Dame*

### Union Security Clauses and Discrimination

This article focuses on the important role that union security clauses have in regard to affirmative action. Initially, a brief view of the role of seniority in the work environment will be presented along with the more recent questioning of its effects on hiring, promotion, and layoff of minorities—be they women, blacks, Chicanos, etc. Then a more detailed examination of the legal status of this area will be presented, culminating in the case of *International Brotherhood of Teamsters v. U.S.*, decided on June 30, 1977.

### The Role and Incidence of Seniority

One of the obvious reasons for unions and the process of collective bargaining is to set up the rules under which workers will be promoted, transferred, bumped, and laid off. While historically the concept of ability was most often endorsed by management and others, the concept of seniority has been used extensively by unions and other institutions. For example, the government has also used seniority in terms of step increases on pay scales, retirement benefits, as an input into the weight-

---

Author's address (Hoover): Business Administration Department, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061.

ing for promotions, and for many other benefits that an employee receives in the area of fringe benefits.

The attractiveness of the seniority concept is that it provides a criterion that is more measurable and definitive than ability and that by itself such a system is nondiscriminatory. Once the seniority unit has been decided upon, seniority becomes the concept that is applicable to all workers in that seniority system, whether they be white or black, male or female. Such a system has been traditionally popular with many institutions including unions as well as the employees in their systems. With unions representing 20 to 25 percent of the labor force and experiencing one of their major growth periods over the last 15 years, especially in the public sector, the use of seniority as a criterion continues to spread whether it be for the transfer and layoff of teachers or the opportunity for police to work overtime. Indeed, in 1975, 85 percent of all labor-management contracts contained language that used seniority as a factor in a layoff, with 42 percent of all contracts having seniority as the exclusive criterion and another 30 percent holding that seniority will be a determining factor in layoffs. In some industries such as manufacturing, seniority is even more pervasive for deciding who will be laid off. It must also be noted that seniority not only is related to a seniority unit, but may also be lost if one is laid off beyond a certain specified time, with one year being the normal period. The incidence of this seniority is most often expressed in the popular phrase, "last hired, first laid off."

### **Minorities in Unions and Employment**

The importance of the above rests in the fact that unionized as well as nonunionized employment has been traditionally heavily concentrated in white male membership. Though women account for approximately 50 percent of union membership in the public sector due to the teaching occupation being so heavily unionized relative to other public employment and the large female participation in this occupation, this is not generally true of other areas. It is a fact that women also account for over half of all members in such unions as the Retail Clerks, Communications Workers, Amalgamated Clothing Workers, Ladies Garment Workers, etc. In general, women now account for about 45 percent of the U.S. labor force and are increasingly being covered by seniority provisions in both the nonunionized and unionized sectors. Though women account for less than 10 percent of all union members, they are increasingly entering the unionized sector also. Blacks accounted for about 13 percent of all union members in 1970. In these latter sectors,

women as well as other minorities are the “last hired, first laid off” when the economy ceases to expand as well as being affected by the relevance of seniority to promotion, for example.

During the expanding 1960s and up until the recession of 1974, with more minorities participating in the labor force, the number of people in poverty declined and the unemployment rate for all characteristics of workers declined even though more minorities were joining the labor force. For example, the unemployment rate among nonwhite workers declined from 11 percent in 1961 to below 5 percent in 1973, while both money and real hourly earnings per worker increased each year. Additionally, women and blacks were participating in more occupations that were higher skilled and better paying—the more desirable group of jobs—while participating less in the less desirable job groups. For example, the number of women craft workers grew by 120 percent from 1962 to 1974 while the number of black craft workers increased by 97 percent. Thus the years 1962–74 were ones of gain and the seniority systems, though often questioned, were not the major problem they became with the onset of the recession. With an expanding economy, minorities participated more in the labor force and did secure some gains. Seniority systems did, of course, result in legal action by those who claimed that it adversely affected promotions and transfers and locked them into where they were.

### **The Recession of 1973–75**

But with the recession that set in in 1973–74, real earnings fell for the first time since 1962 and the gains made in reducing poverty were reversed. For example, real hourly earnings fell 2.1 percent in 1973–74. While the magnitude of the recession affected all strata of workers and industries, a greater percentage of jobs held by minorities were cut back than of those held by other workers. For example, in the first seven months of the recession, women lost 12.1 percent of factory jobs vs. 8.7 percent for men. Over half of the Spanish-speaking workers in local government in New York City lost their jobs in the recession. In its 1977 report, the U.S. Commission on Civil Rights stated: “In some areas where minorities represented only 10 to 12 percent of the work force, they accounted for 60 to 70 percent of those laid off in 1974.”

In April 1975, the U.S. Department of Labor said that “recently hired workers, including many women and minority group members, have become early casualties of the economic downturn.” Faced with a recession, employers—private and public—were faced with the necessity of laying off people. Where a formal system prevailed, layoff was

usually done on the basis of seniority. Where a formal system did not exist, most employers adopted a seniority system that protected those workers who had invested their human capital for the longest period of time. The rights of these workers were being protected, but those laid off under the seniority principle now invoked Title VII of the Civil Rights Act of 1964.

### **Seniority Rights and Title VII—Legislative History**

The relationship between Title VII of the Civil Rights Act and union seniority provisions was the object of heated debate when Title VII was initially considered on the floor of the Senate. At that time opponents of the Act voiced a fear that it would invalidate all seniority systems, while proponents claimed that seniority rights would not be affected. In order to clarify this possible conflict, Senators Clark and Case placed an interpretive memorandum in the Congressional Record which specified in part that:

Title VII would have no effect on established seniority rights. Its effect is prospective and not retrospective. Thus, for example if a business has been discriminating in the past and as a result has an all-white working force, when the title comes into effect the employer's obligation would be simply to fill future vacancies on a nondiscriminatory basis. He would not be obliged—or indeed, permitted—to fire whites in order to hire Negroes, or to prefer Negroes for future vacancies, or, once Negroes are hired, to give them special seniority rights at the expense of white workers hired earlier. (110 Cong. Rec. 2804 [1964])

However, these clarifications didn't satisfy the opponents of the original version of the Act, and a compromise bill was introduced which included what is now Section 703(h) of Title VII. This section provides in part that:

Notwithstanding any other provision of this title, it shall not be an unlawful employment practice for an employer to apply different standards of compensation, or different terms, conditions, or privileges of employment pursuant to a bona fide seniority or merit system . . . Provided that such differences are not the result of an intention to discriminate because of race, color, religion, sex, or national origin. . . .

The inclusion of Section 703(h) resolved the question of the relationship between Title VII and seniority rights for Congress and cleared

the way for passage of the Act. However, this represented only the beginning rather than the end of the controversy over the seniority–Title VII relationship.

### **Neutral Procedures That “Freeze” the Position of Discriminatees Rejected by the Supreme Court**

In addition to the provision pertaining to seniority, Section 703(h) also addresses itself to testing:

Notwithstanding any other provision of this Title, it shall not be unlawful employment practice for an employer . . . to give and to act upon the results of *any* professionally developed ability test provided that such test, its administration or action upon the results is not designed, intended or used to discriminate because of race, color, religion, sex, or national origin.

In *Griggs v. Duke Power Co.* (401 U.S. 423 [1971]), black employees brought an action alleging that the company’s requirement of a high school diploma or the passing of an intelligence test as a condition of employment and/or transfer violated Title VII (401 U.S. at 424). The company contended that its general intelligence tests were specifically permitted by Section 703(h) of the Act (401 U.S. at 433).

The Supreme Court ruled in favor of the plaintiffs. In its ruling, the Court stated: “The administrative interpretation of the Act by the enforcing agency is entitled to great deference,” and embraced the EEOC’s guidelines on employment and testing procedures which had been issued as an interpretation of 703(h).

The Commission guidelines defined “professionally developed ability test” to mean “. . . a test which fairly measures the knowledge or skills required by the particular job.” They also required that an employer must have available “data demonstrating that the test is predictive of or significantly correlated with important elements of work behavior which comprise or are relevant to the job or jobs for which candidates are being evaluated” (401 U.S. at 433, fn. 9).

While the major issue before the Court was testing and not seniority, civil rights leaders had reason to be encouraged by the *Griggs* decision for two reasons:

1. Although 703(h) specifically allowed the use of any professionally developed test, this decision severely restricted which tests could be used and how they could be used. The weakening of this portion of 703(h) was particularly encouraging since it is the same section that pertains to seniority rights, which were viewed by many as severely limiting the economic progress of minorities.



2. In its decision, the Supreme Court ruled that: "Under the Act, practices, procedures or tests neutral on their face, and even neutral in terms of intent, cannot be maintained if they operate to 'freeze' the status quo of prior discriminatory employment practices" (401 U.S. at 430). "The Act proscribed not only overt discrimination but also practices that are fair in form but discriminatory in operation" (*id.*).

This is precisely the type of "facially" neutral discriminatory "freezing" that is alleged to result from seniority systems. (See the 1977 report of the U.S. Civil Rights Commission, pp. 35, 36, 39.)

### **Granting Retroactive Seniority Is Not Prohibited by 703(h)**

In *Franks v. Bowman Transportation Co.* (424 U.S. 747 [1976]), a class action suit was brought against the company and the International Union of District 50, Allied Technical Workers, alleging racial discrimination in respect to hire and transfer.

In this case there were two classes of discriminatees relevant to the consideration of seniority rights and Section 703(h). Class 3 discriminatees were nonemployees who had applied for over-the-road (OTR) truck driving positions and were rejected because of their race. Class 4 discriminatees were incumbent employees who had applied for transfer to OTR positions and were discriminatorily rejected. It should be emphasized that all acts of discrimination occurred after the effective date of Title VII.

The Fifth Circuit Court of Appeals decreed that Class 4 employees be given priority considerations for OTR positions, and that those who subsequently transfer to said positions carry all accumulated company seniority into the OTR department (495 F.2d at 417). The court denied seniority relief to Class 3 discriminatees on the basis that it was barred by 703(h). Specifically, the opinion stated that a discriminatory refusal to hire "does not affect the bona fides of the seniority system. Thus, the differences in benefits and conditions of employment which a seniority system accords to older and newer employees is protected [by 703(h)] as 'not an unlawful employment practice.'"

The Supreme Court disagreed with this interpretation and specified that:

Section 703(h) does not bar seniority relief to unnamed members of the class in question, who are not seeking modification or elimination of the existing seniority system but only an award of the seniority status they would have individually enjoyed under the present system but for the illegal discriminatory refusal to hire (424 U.S. at 748).

The term "unnamed" is used in the opinion because it was a class action suit. Each of the Class 3 discriminatees was identified in the record.

The Supreme Court strongly emphasized the economic importance of seniority. It stated that seniority has "become of overriding importance" since one of its major functions is to determine who gets and who keeps an available job. It stated further that seniority clauses, more than any other provision of a collective bargaining agreement, affect the economic security of individual employees (424 U.S. at 766).

The Court ruled that where discrimination is concerned, the district court has a duty to render a decree that will as far as possible eliminate the effects of past discrimination; and that if retroactive seniority was not granted, the discriminatees would forever be denied their rightful place in the seniority system: "He will perpetually remain subordinate to persons who, but for illegal discrimination would have been his inferiors in respect to these [employment] benefits" (424 U.S. at 768).

In denying seniority relief, the Court of Appeals had reasoned that it would be detrimental to the majority of workers. However, in response to this point, the Supreme Court stated that, despite the effect on innocent employees, refraining from granting retroactive seniority would violate the central "make-whole objective of Title VII"; and that "if relief under Title VII can be denied merely because the majority group of employees . . . will be unhappy . . . there will be little hope of correcting the wrongs to which the Act is directed" (422 U.S. at 774, 775).

Although neither of the above cases deals directly with whether layoffs according to seniority violated Title VII, the U.S. Civil Rights Commission in its 1977 report combined the major factors and lines of reasoning from these cases to support its contention that such layoffs do violate the Act. Basically, the Commission reasoned that although "facially neutral," seniority provisions perpetuate prior discrimination via layoffs and therefore are not bona fide and are not protected by 703(h). By using essentially the same logic, the Commission also argued that retroactive seniority could be granted for discrimination that occurred prior to the effective date of Title VII.

### **Seniority Systems That Perpetuate Pre-Act Discrimination Sanctioned by Supreme Court**

The most recent Supreme Court case dealing with the relationship between Title VII and seniority rights is *International Brotherhood of Teamsters v. U.S.; T.I.M.E.-D.C., Inc. v. U.S.*, which was decided on June 30, 1977. This litigation was instituted by the United States which alleged that the company had discriminated against blacks and Spanish-

surnamed individuals (minorities). Minorities were hired only as servicemen and local drivers, which were less desirable and lower paying jobs than the OTR positions which were given exclusively to whites. The Teamsters union was named co-defendant since the government alleged that the seniority provisions in the collective bargaining contract perpetuated the effects of past discrimination. The contract specified that servicemen and local drivers who transfer to OTR positions had to forfeit the seniority accumulated in the previous bargaining unit and start at the bottom of the OTR seniority list. The government sought to have all of those discriminated against given the opportunity to transfer to OTR positions while retaining previously accumulated seniority.

The Northern Texas district court ruled in favor of the minorities and defined the "affected class" as all minorities hired as city drivers or servicemen *whether they were hired before or after the effective date of the Act*. The seniority clause was found to be in violation of the Act since it impeded the progress of minorities. Discriminatees were entitled to preference over all future applicants for OTR positions except that incumbent OTR drivers currently on layoff were to be recalled first. Also, various subclasses of discriminatees were formed according to the "degree of injury," and seniority and degree of preference were established accordingly.

The Fifth Circuit Court of Appeals rejected the "degree of injury" subclasses and ruled that all discriminatees could bid for future OTR jobs on the basis of accumulated seniority and that they could carry that seniority into the OTR department *even if it preceded the effective date of the Act*. The only limit on the seniority grant was the application of a "qualification date" formula. Thus seniority could not be awarded for periods prior to the date when (1) an OTR job was vacant, and (2) the class member met (or, given the opportunity, could have met) OTR qualifications. The class members were permitted to compete with those on layoff by using their retroactive seniority.

Before the Supreme Court, the union argued that the seniority system contained in the collective bargaining agreement did not violate Title VII in any way. It contended that the seniority system was "bona fide" within the meaning of 703(h) and that the purpose of 703(h) is to ensure that perpetuation of pre-Act discrimination is not illegal under Title VII. The union further argued that whether 703(h) immunized post-Act discrimination is irrelevant to the case since discrimination is a grievable issue under the contract, and that it would seek retroactive seniority for post-Act discrimination through the grievance procedure (45 L.W. 4511).

The government argued that a seniority system that perpetuates either *pre- or post-Act discrimination can never* be “bona fide” under 703(h). The Supreme Court ruled as follows:

The seniority system at issue here is entirely bona fide, applying to all races and ethnic groups, and was negotiated and is maintained free from any discriminatory purpose.

Since the Government proved that the company engaged in a *Post-Act* pattern of discriminatory employment policies, retroactive seniority may be awarded as relief for *Post-Act* discriminatees even if the seniority system agreement makes no provision for such relief.

The seniority system was protected by 703(h) and therefore the union conduct in agreeing to and maintaining the system did not violate Title VII.

Employees who suffered only Pre-Act discrimination are not entitled to relief, and no person may be given retroactive seniority to a date earlier than the Act’s effective date.

By virtue of 703(h) a bona fide seniority system *does not* become unlawful simply because it *may perpetuate* Pre-Title VII discrimination, for Congress . . . did not intend to make it illegal for employees with vested seniority rights to continue to exercise those rights, even at the expense of Pre-Act discriminatees. Thus here because of the company’s intentional Pre-Act discrimination the disproportionate advantage given by the seniority system to the white line drivers (O.T.R.) with the longest tenure over the minority member employee who might by now have enjoyed these advantages were it not for the Pre-Act discrimination is sanctioned by 703(h).

This case was further complicated by the fact that the government sought relief for *all minorities* hired as local drivers and servicemen, *not just those who had applied* for transfer to OTR driving. The line of reasoning was that a long-established practice of discrimination would effectively deter a minority member from applying for transfer. The government claimed that the only criterion that should be used to determine if a minority was discriminated against with respect to transfer should be if he is willing to transfer to OTR now. The union took the position that any employee who didn’t apply for an OTR position should not be granted retroactive seniority.

The Supreme Court ruled that a willingness to transfer now is not a good indication of a past willingness, since a discriminatee who transfers now will carry full retroactive seniority with him. All current OTR drivers had to forfeit prior seniority. The Court resolved the dilemma by

making the following decree: “An incumbent employee’s failure to apply for a job does not inexorably ban an award of retroactive seniority; individual non-applicants must be afforded an opportunity to undertake their *difficult task* of proving that they should be treated as applicants and therefore presumptively entitled to relief.” The Court explained that to prove they should be treated as applicants, they must prove that they would have applied for transfer if it weren’t for the company’s practice of discrimination.

The Supreme Court embraced the Fifth Circuit’s “qualification date” formula as well as emphasizing that when it has been proven that a company has engaged in a systematic pattern or practice of discrimination, the affected class members are *presumed* to be eligible for relief. The burden is placed on the company to *prove* when the class member reapplies that he was not initially rejected discriminatorily.

There was one factor that the Court left unresolved—the relationship between those who were granted retroactive seniority and those currently on layoff. In fact, it refused to rule on this point, directing the district court to make the determination, while retaining the right to review.

## Conclusion

It appears from the progression of these cases that the relationship between Title VII and seniority clauses has finally been defined and that, to a certain extent, the inequities perpetuated by seniority systems have been alleviated.

If minorities who work for, or have applied for work at, a company believed to be engaged in a systematic pattern or practice of discrimination, a class action suit should be filed. If the government can establish the existence of the discriminatory pattern, the affected class is *presumed* eligible for relief. The company must give nonemployee discriminatees preference in filling vacancies. It must prove upon their reapplication that their initial rejection was not based on discrimination. When hired, they will receive retroactive seniority based on the “qualification date” formula. Incumbent employees not hired previously can expect to be accorded the same remedy.

Incumbent employees whose requests for transfer were discriminatorily rejected can apply for transfers based on full company seniority. When transferred, their company seniority becomes retroactive departmental seniority—subject to the “qualification date” formula.

It is unfortunate that these remedies do not alleviate the injuries of pre-Act discrimination, but at least those who avail themselves of those

limited remedies will no longer be at the bottom of the seniority roster and will have some additional protection against layoff.

Since the Supreme Court's decision in the *Teamsters* case relied very heavily on the legislative history of Title VII, it would appear that any further action to correct pre-Act injustice is the responsibility of Congress.

### Bibliography

- Basic Patterns in Union Contracts*. Washington: Bureau of National Affairs, 1975.
- Virginia Berquist. "Women's Participation in Labor Organizations," *Monthly Labor Review* (October 1974), pp. 3-9.
- P. S. Foner. *Organized Labor and the Black Worker*. New York: Praeger, 1974.
- Lois S. Gray. "The Jobs Puerto Ricans Hold in New York City." *Monthly Labor Review* (October 1975), pp. 12-16.
- Roberta V. McKay. "Employment and Unemployment Among Persons of Spanish Origin," *Monthly Labor Review* (April 1974), pp. 12-20.
- Major Collective Bargaining Agreements: Layoff, Recall and Worksharing Agreements*. Washington: U.S. Department of Labor, 1972.
- Manpower Report of the President*. Washington: U.S. Department of Labor, 1977.
- New York City, Commission on Human Rights. *City Layoffs: The Effect on Minorities and Women*. April 1977.
- U.S. Commission on Civil Rights. *Report*. Washington: 1977.
- . *Women and Poverty*. Washington: 1974.
- Benjamin W. Wilkinson. *Blacks, Unions, and the EEOC*. Lexington, Mass.: D. C. Heath, 1973.

### CASES

- Franks v. Bowman Transportation Co.*, 424 U.S. 747 (1976).
- Griggs v. Duke Power Co.*, 401 U.S. 424 (1971).
- International Brotherhood of Teamsters v. U.S. and EEO Commission; T.I.M.E.-D.C., Inc., v. U.S.*, 14 FEP Cases 1514 (1977).
- Quarles v. Philip Morris, Inc.*, 279 F.Supp. 505 (1968).

# The Use of Arbitration and Litigation in Employment Discrimination Disputes: An Empirical Comparison

MARGARET OPPENHEIMER

HELEN LAVAN

*DePaul University*

## Introduction

Much has been said and written about the relative merits of arbitration and litigation for settlement of employment discrimination disputes, but little empirical investigation has been done. Between 1972 and 1976, the number of Title VII cases filed in U.S. District Courts increased from 1,015 to 5,321.<sup>1</sup> However, the decision in *Alexander v. Gardner-Denver*<sup>2</sup> left open the role that arbitration can play in the decision of the court. In addition, given the slowness and expense of litigation, discrimination cases continue to be brought to arbitration. This paper will attempt to compare the use of arbitration to the use of litigation for employment discrimination disputes during the past four years.

## Methodology

Data sources for the analyses in this study are the Bureau of National Affairs' *Labor Arbitration Reports* and *Fair Employment Practice Cases* for 1973 to 1977. Eighty-six discrimination cases were reported as being arbitrated, and all were included in the study.<sup>3</sup> A random sample of 100 litigated cases was drawn, of which 94 were usable. Frequency distributions as well as multivariate analyses were performed on the data. It was not technically possible to use more rigorous statistical methods given the primarily nominal and ordinal nature of the data.

---

Oppenheimer's address: Department of Economics, DePaul University, 23 East Jackson Blvd., Chicago, Ill. 60604.

<sup>1</sup> *Annual Report of the Director of the Administrative Office of the United States Courts*, 1972, 1976.

<sup>2</sup> *Alexander v. Gardner-Denver Co.*, 415 U.S. 36, 94 S.Ct. 1011, 7 FEP Cases 81 (1974).

<sup>3</sup> Since not all arbitration cases are reported, the sampling error is considered by the authors to be indeterminable.

## Frequencies

Frequencies that were characteristic of both the arbitration and litigation cases were compared. The largest percentage (59 percent) of arbitration cases occurred in manufacturing, whereas in litigation the largest percentage occurred in the public sector (46 percent) (Table 1, panel A). The analysis of the occupational groups yielded a surprisingly high proportion of white-collar and professional employees; of those identifiable, professional employees were involved in 40 percent of the arbitration cases and 58 percent of the litigated cases. It should be noted, however, that it was not possible to identify the occupations of a full half of those involved in arbitration cases, a substantial proportion of whom are thought to be blue-collar employees.

TABLE 1  
Numbers and Percentages of Cases, Arbitration and Litigation, 1973-77

	Arbitration		Litigation	
	Number	Percent	Number	Percent
<i>A. Industry</i>				
Public	15	17.4	43	45.7
Manufacturing	51	59.3	24	25.5
Utilities	4	4.7	6	6.4
Services	13	15.1	21	22.3
Not determined	3	3.5	0	0
Total	86	100.0	94	100.0
<i>B. Type of discrimination</i>				
Sex	27	37.0	26	29.2
Race	37	50.7	51	57.3
Religion	4	5.5	2	2.2
Sex and race	5	6.8	10	11.2
Total	73	100.0	89	100.0
<i>C. Characteristics of grievants</i>				
Minority	25	30.1	41	45.6
Female	29	34.9	27	30.0
Other	21	25.3	12	13.3
Minority and female	8	9.6	10	11.1
Total	83	100.0	90	100.0

The geographic-location pattern for arbitration cases showed 60 percent of them occurring in the northeastern part of the U.S., with the rest more or less equally distributed in the north central, southern, and western regions. Of the litigated cases, approximately one-third occurred in the Northeast, one-third in the South, and the remaining one-third equally distributed in the north central and western regions.

An analysis of the type of discrimination showed similar patterns (Table 1, panel B). A large proportion of all cases involved racial dis-



crimination (51 percent of the arbitration cases and 57 percent of the litigation cases). Sex discrimination was the next most frequent—37 percent of the arbitration cases and 29 percent of the cases litigated.

There was a much greater tendency for the grievant to be a male member of a protected class in litigation cases than in arbitration cases (Table 1, panel C). Forty-six percent of all grievants in litigation were minority males, whereas 30 percent of all grievants in arbitration were minority males. Approximately the same proportion of grievants were female in each forum—35 percent in arbitration and 30 percent in litigation.

As could be expected, there was more disagreement between the employee and the union in litigation than in arbitration cases—18 percent in litigation and only 7 percent in arbitration. It should be noted, however, that the existence of the union was not mentioned in an overwhelming majority of the litigation cases.

When the decisions in both kinds of cases were compared from the perspective of the employee, the decision pattern was similar (see Table 2, panel A). Fifty-one percent of the grievances in arbitration were denied, and 58 percent of the complaints in litigation were denied. Since it was possible for an employee's grievance to be upheld although discrimination was not found, a determination of the finding of discrimination was made. Discrimination was found more often in those litigated cases in which it was ruled on than in arbitration cases (Table 2, panel B).<sup>4</sup> Discrimination was found in 28 percent of the arbitration cases, while it was found in 44 percent of the litigation cases where it was ruled on. In contrast, back pay was awarded substantially more frequently in arbitration cases (Table 2, panel C). The respective percentages are 23 percent in arbitration and 7 percent in litigation, or 12 percent of cases ruled on.

It is sometimes alleged that arbitration is a suitable forum for cases involving individual inequities in the application of a neutral policy, but that it cannot adequately handle cases where an overall policy may be discriminatory. To address the issues for each case in both samples, it was determined if any rule, policy, or contract clause was alleged to be discriminatory. Table 2, panel D, shows that a rule or contract clause was challenged as discriminatory more often in litigation than in arbitration (67 percent vs. 40 percent). The contract was explicitly challenged in 18 percent of the litigated cases, but in only 6 percent of the arbitrated cases. However, the outcomes were similar. Arbitrators found a

---

<sup>4</sup> In many litigated cases, it was either not an issue at bar or not ruled on by the court in the case in the sample.

TABLE 2  
Case Outcomes

	Arbitration		Litigation	
	Number	Percent	Number	Percent
<i>A. Decision</i>				
Denied	44	51.2	33	35.1 ( 57.9) <sup>a</sup>
Partially sustained	18	20.9	9	9.6 ( 15.8)
Completely upheld	24	27.9	15	16.0 ( 26.3)
Not ruled on	—	—	37	39.4
Total	86	100.0	94	100.0 (100.0)
<i>B. Finding of discrimination</i>				
Yes	24	27.9	21	22.3 ( 43.75)
No	53	61.6	27	28.7 ( 56.25)
Unclear or not ruled on	9	10.5	46	48.9
Total	86	100.0	94	100.0 (100.0)
<i>C. Awarding of back pay</i>				
Yes	20	23.3	7	7.4 ( 12.3)
No	66	76.7	87	92.6 ( 87.7)
Total	86	100.0	94	100.0 (100.0)
<i>D. Challenge to rule or contract</i>				
Yes	34	39.5	63	67.0
No	52	60.5	31	33.0
Total	86	100.0	94	100.0

<sup>a</sup> Figures in parentheses are percent of cases ruled on.

rule to be discriminatory in 38 percent of the cases where it was an issue, compared to 39.5 percent of the litigated cases where the issue was ruled on. These figures indicate that while arbitrators are called on less frequently than the courts to judge a rule or policy, when given the opportunity, they are equally likely to find it discriminatory.

### Cross-Tabulations and Chi-Squares

Using cross-tabulations and chi-squares, significant relations between variables were found in both samples. For example, some variation in arbitrators' decisions by industry were found. Private manufacturing showed the largest percentage of cases denied by arbitrators, 61 percent; in public employment, 40 percent were denied, and in private services, 31 percent ( $\chi^2 = 4.79$ ,  $p = .0896$ ; see Table 3). By comparison, for the litigation sample, a significant relationship by industry was found by comparing all public to all private employment. Here too, however, a greater percentage of cases were denied in the private sector, also with a probability of .09.

There was a significant difference in the pattern of the decision variables between race and sex discrimination cases. Arbitrators found discrimination more often in sex discrimination cases than in race cases

TABLE 3  
Cross-Tabulations

Variables	Arbitration		Litigation	
	Chi-Square <sup>a</sup>	Probability	Chi-Square <sup>a</sup>	Probability
1. Decision × industry	4.79	.0896	4.76	.0908
2. Finding of discrimination × race-sex	3.99	.0433	7.82	.0198
3. Rule × race-sex	6.20	.0124	7.00	.0008
4. Procedures × race-sex			6.92	.0086
5. Law cited × decision	6.32	.0415		
6. Law cited × back pay	9.76	.0022		
7. Law cited × finding of discrimination	5.26	.0707		
8. Law cited × previous litigation	2.60	.1031		
9. Court cited × previous litigation	5.11	.0226		
10. Court cited × back pay	2.58	.1043		
11. Rule × discrimination ruled on			20.21	.0001
12. Rule × decision	5.61	.0171	4.61	.0300
13. Rule × procedure			37.46	.0000
14. Title VII × finding of discrimination			8.39	.0151
15. Title VII × decision			6.88	.0315

Note: Blank cells indicate relationships not relevant.

<sup>a</sup> Expected number in cells meets strict requirement for all chi-square tests listed.

(44 percent vs. 16 percent,  $p = .04$ ). Similarly, the courts found discrimination in 42 percent of the sex discrimination cases and in only 18 percent of the race cases. At the same time, a much greater percentage of race cases were simply not ruled on by the court (57 percent vs. 27 percent,  $p = .02$ ).

If the litigated race cases in the sample were relatively more recent, this alone could explain the pattern. However, there is no significant difference between the distribution over time of the litigated sex and race case. Another possible explanation may be that the courts are finding sex cases more straightforward or less ambiguous. For example, 54 percent of the sex cases involved a challenge at bar to a specific rule or policy, as compared to only 24 percent of the race cases ( $\chi^2 = 7.0$ ,  $p = .008$ ). This relationship also held in the arbitration sample ( $p = .01$ ). Another possible explanation of the greater percent of race cases not ruled on by courts is that race cases confront more procedural issues. For example, in the litigation sample, 82 percent of the race discrimination cases involved some procedural issue, compared to only 54 percent of the sex cases ( $p = .009$ ).<sup>5</sup>

<sup>5</sup> Examples of procedural issues in litigated cases are timeliness, jurisdiction, and the joining of suits.

One of the issues concerning the role of arbitration in this area is the question of whether arbitrators consider the law and court precedents in their decisions, since they are mandated to follow only the contract. In an attempt to find an answer, all arbitration decisions were analyzed to determine whether or not the arbitrator cited (1) federal or state law or EEOC guidelines, (2) federal or state court decisions, and (3) other arbitral decisions, either by the same or another arbitrator. In 60 percent of the arbitrated cases, the arbitrator cited the law and/or EEOC guidelines. Court decisions were cited in 40 percent of the cases, and other arbitration decisions were cited in 35 percent of the cases. None of the three was cited in 28 percent. Therefore, while arbitrators are not required to consider case law or statutes, many in fact do.

The arbitrators tended to cite law in discrimination cases significantly more often when they were ruling in favor of the grievant and/or when discrimination was found. In addition, both the law and court decisions were cited more often when there had been previous litigation in this area.<sup>6</sup>

Perhaps as interesting as what relationships were significant was what relationships were not. For example, whether or not the arbitrator was a lawyer had no significant relationship with any variable, including the use of citations and the outcome of the case. Since concern is sometimes expressed about the arbitrator's jurisdiction over discrimination disputes, the authors looked for no-discrimination clauses in the contracts. The presence of a no-discrimination clause in a contract had no significant effect on the decision variables (finding of discrimination, sustainment of grievance, and award of back pay). Nor did it have any effect on any other variable, including whether or not arbitrability was a question.

Whether or not a contract clause, a rule, or a policy was being challenged as discriminatory was related to other variables in both samples. In litigation, discrimination is considerably more likely to be ruled on (either found or not) if a rule is alleged to be discriminatory ( $p = .0001$ ).

The same relation held when the question was whether or not a contract clause was challenged, although here the number of cases in which a contract clause was specifically alleged to be discriminatory was too small to give a valid test of significance. Apparently there are fewer complications and uncertainties if a specific personnel rule or con-

---

<sup>6</sup> For a fuller discussion of the use of these citations, see "Arbitration Awards in Discrimination Disputes: An Empirical Analysis," *Arbitration Journal* (forthcoming March 1979), by the same authors.

tract clause is to be judged by the court. This was supported by the observation that a case involving a rule was more likely to have no procedural issue at bar ( $p = .0000$ ).

These findings are consistent with some of the relations mentioned above: that a greater proportion of sex cases involve a challenge to a specific rule, that discrimination is found in more sex cases, and that discrimination is not ruled on in more race cases.

Whether or not a rule was in question played a significant role in arbitration as well, although in a different way. A grievance was more likely to be *denied* if a rule was in question ( $p = .017$ ). However, whether or not discrimination was found was not affected by this variable, nor was the awarding of back pay. This is in contrast to litigation where a "grievance" is more likely to be denied if *no* rule is in question ( $p = .0300$ ).

Like the litigation cases, however, a rule was more likely to be in question in sex cases than in race cases ( $p = .0124$ ). It was also interesting to note that whether or not the arbitrability of the case was challenged was not related to whether a rule or policy was in question.

One other interesting, but this time surprising, relation appeared. Discrimination was less likely to be found if Title VII of the 1964 Civil Rights Act was used than if it was not. It was not denied more often, but it was more often not ruled on under Title VII ( $p = .0151$ ). The same was true concerning whether the original grievance was upheld or sustained. It was less likely to be upheld and more likely to be not ruled on under Title VII ( $p = .0315$ ). While several other fair employment practice laws were used, there were not enough examples of any one of them to test for similar relations for other laws.

### Summary and Conclusions

Some differences and some similarities between arbitration and litigation were seen. Arbitration was seen most often in manufacturing, litigation in the public sector. In both forums, more race than sex cases were reported.

Grievances were denied or sustained at about the same rate in both. However, when discrimination was ruled on, it was found more often in litigation than in arbitration. Yet back pay awards were more common in arbitration. It seems that arbitrators, while less likely to find a practice discriminatory, find other grounds to uphold "discrimination" grievances as frequently as the courts, and they award back pay more frequently.

Sex discrimination was more likely to be found than race discrimina-

tion in both forums. However, in litigation this was because race cases were more likely not to be ruled on. Litigation cases involving *no* challenge to a rule, policy, or contract clause were also more likely not to be ruled on. It therefore appears that a challenge to a specific policy facilitates the use of litigation.

A specific rule or policy (rather than the application of a neutral policy) was less likely to be challenged in arbitration. However, if it was challenged, it was equally likely to be found discriminatory in both forums. However, a grievance was more likely to be denied in arbitration if a rule was in question. It was also evident that litigation is much more complex than arbitration. For example, 73 percent of the litigated cases involved some procedural issue.

These data support the hypothesis that arbitration is a useful way to deal directly with and remedy individual grievances, but it may be less effective in determining the extent or pattern of discrimination in employment.

# The Role of Special Grievance Systems in Furthering Equal Employment Opportunities

PAUL F. SALIPANTE, JR.

JOHN D. ARAM

*Case Western Reserve University*

The purpose of this paper is to explore the role which organizational grievance systems can play in resolving equal employment opportunity (hereafter, EEO) complaints and in creating basic changes in organizations' treatment of minorities and women. Our focus is on special systems designed to resolve EEO problems, whether for unionized or nonunion employees. We argue that systems for internal due process will benefit not only minority and female employees, but also their employing organizations, other employees, and governmental regulatory agencies. To do so, we draw on data from an exploratory study of managers, including women and minorities, and administrators of EEO and personnel functions. From this analysis, implications are drawn for governmental EEO policies.

## Review of EEO Policy

A limited review of governmental policy is required to understand the potential contributions of due process systems. When Title VII of the Civil Rights Act of 1964 was passed, the basic concern was to eliminate cases of overt discrimination against individuals. Regulatory agencies and courts found, however, that much discrimination derived from institutionalized rules and informal procedures, establishing the view that EEO policy must deal with entire organizations, not simply cases of individual employees.<sup>1</sup>

At this point, policy-makers in regulatory agencies were faced with

---

Authors' address: Industrial Relations Division, School of Management, Case Western Reserve University, Cleveland, Ohio 44106.

<sup>1</sup> Perhaps the most important cases were those leading to consent decrees for A.T. & T. and for the steel industry. See *EEOC v. A.T. & T. Co.*, 365 F. Supp. at 1108, 6 FEP Cases at 644 (3rd Cir. 1973). Theodore Purcell discusses the managerial implications of such decrees in "Management and Affirmative Action in the Late Seventies" in L. Hausman, O. Ashenfelter, B. Rustin, R. Schubert, and D. Slaiman, eds., *Equal Rights and Industrial Relations* (Madison, Wis.: IRR, 1977), pp. 71-103.

the critical decision of whether to concentrate on organizations' procedures or results, results in terms of actual minority and female employment.<sup>2</sup> Since the national goal was to produce employment results, the choice was made—quite correctly, we believe—in favor of organizational results. Pressure for results (in terms of affirmative action employment goals) created, in turn, some changes in organizational procedures. Still, the continuing focus on organizations' employment results has drawn much attention from the more basic task of developing procedures which assure equitable employer treatment for minority, female, and older employees.

A number of recent developments point up the problems which must be confronted in determining future EEO policy. One is the perception of "reverse" discrimination, a perception stemming from the present emphasis on results. This perception has the potential for leading to widespread resistance to EEO efforts, especially with *Bakke* leaving the door open for reverse discrimination suits. Another current problem is the large backlog of Equal Employment Opportunity Commission cases, with both plaintiffs and employers suffering long delays and employers and agencies bearing high financial costs for litigation in the courts.<sup>3</sup> The general problem is in developing improved procedures for settlement. Normal grievance systems operating under collective bargaining agreements do not provide such a settlement alternative in many discrimination cases, especially since the Supreme Court's ruling that arbitrators' decisions in cases involving possible discrimination are subject to judicial review.<sup>4</sup> All these developments have implications for new EEO policy.

### Reactions of Organizations and Employees

Probably because the entire EEO area is so sensitive to organizations, little investigation has been made of the practices which organizations have adopted to comply with EEO requirements. A data source

---

<sup>2</sup> Daniel Seligman, "How 'Equal Opportunity' Turned into Employment Quotas," *Fortune* (March 1973).

<sup>3</sup> Robert Coulson, "New Fringe Benefit: Voluntary Arbitration of Job-Rights Claims," *New York Law Journal* (April 13, 1978), pp. 1, 4.

<sup>4</sup> *Alexander v. Gardner-Denver*, 415 U.S. 36, 7 FEP Cases 81 (1974). For discussion of a survey of arbitrators and suggestions on relevant arbitration procedures, see Harry T. Edwards, "Arbitration of Employment Discrimination Cases: A Proposal for Employer and Union Representatives," *Labor Law Journal* (May 1976), pp. 265-67. See also Wendy W. Williams, "A Modest Proposal for the Immediate Future," and Wm. L. Robinson and Mollie W. Neal, "A Prospectus for the Future," both in *Arbitration—1976: Proceedings of the 29th Annual Meeting, National Academy of Arbitrators*, eds. Barbara D. Dennis and Gerald G. Somers (Washington: Bureau of National Affairs, 1976), pp. 20-33 and 34-45.



available to us was the report by 77 MBA students of the EEO procedures in their organizations. These students were low and middle-level managers working full time, mostly in large private-sector organizations. Many had direct experience, as supervisors, with their organizations' procedures for hiring and promoting minorities and women. Another data source was a group of 13 employee relations representatives from medium- and large-sized firms in the Cleveland area. These individuals all had some responsibility for their organizations' EEO efforts, often being involved in EEO program development and administration. Both respondent groups completed a semistructured questionnaire concerning their organizations' EEO practices.<sup>5</sup> While the total sample was not large, the responses from the two differing groups of respondents were remarkably similar and a clear picture of organizational actions emerged.

Organizations appear to be internalizing the enforcement mechanisms and measures applied to them by external agencies, especially by the various contract-compliance agencies. The organizations set up internal units to monitor EEO efforts and these units establish hiring goals for individual departments. About 87 percent of the respondents ( $n = 76$ ) reported their organization monitored the hiring of minorities and women and 67 percent ( $n = 51$ ) reported that EEO goals were set for each department. To encourage the meeting of these goals, organizations typically engage in active recruitment (as indicated by over 90 percent of respondents) and in preferential hiring. Questions asked of the most recent groups of respondents, including the 13 employee relations representatives, dealt with preferential hiring. Over 90 percent ( $n = 44$ ) indicated their organizations actively encouraged preferential hiring or promotion of women or minorities when their qualifications equalled those of other applicants. Occasional or frequent efforts to ensure that minorities or women were given preference even when somewhat less qualified were reported by 70 percent of the respondents ( $n = 46$ ). Sixty-three percent indicated that the organization made efforts, at least occasionally, to ensure that only a female or minority employee was hired to fill a particular position, with 22 percent reporting that such efforts were frequent.

Overall, the internal pressure (as the external pressure) is on employment results. Given this mode of responding to EEO compliance pressures, it is not surprising that many managers see reduction of discrimination as costly and as reducing efficiency, with little recognition

---

<sup>5</sup> The questionnaire was developed over a period of eight months and some questions were not asked of early groups of respondents. Due to this development and to a number of "don't know" responses, the number responding to some questions was below the total sample size of 90.

of the long-term improvements in efficiency which should result from reducing discrimination.<sup>6</sup> Also not surprising is the widespread perception of both "regular" and "reverse" discrimination.

Data on perceptions of discrimination were gathered from the managers described above. Respondents were asked whether they had experienced or witnessed specific instances in which minorities or women were *not* hired or promoted for reasons other than their qualifications. A second question, parallel in form, concerned knowledge of hiring or promotions of women or minorities based on criteria other than their qualifications.

Overall, 27 percent of the respondents ( $n = 77$ ) reported they had specific knowledge of discrimination against women or minorities in their organizations since 1975. The percentage was much higher among women and minorities—60 percent ( $n = 20$ ). A majority of all groups of respondents reported knowledge of incidents of "reverse" discrimination: 84 percent of males ( $n = 45$ ) and 58 percent of women and minorities ( $n = 19$ ). Furthermore, 23 percent of the respondents reported incidents of both "regular" and "reverse" discrimination within their organization. These results, especially when combined with the fact that some males reported discrimination against women and minorities and some females and minority group members reported discrimination in favor of such groups, indicates that both forms of discrimination coexist in organizations.

The current regulatory focus on aggregated employment results in an organization permits this coexistence. An organization can satisfy its overall EEO goals by using "reverse" discrimination in some jobs or units to counterbalance discrimination in other jobs. While net EEO results may look favorable, there are definite costs to all parties. Many high-performing minorities and women can still be subjected to arbitrary treatment, while other minorities and women who are not so qualified may be promoted. Also, perceptions of discrimination will be reinforced, leading to general dissatisfaction with EEO efforts. Organizations suffer from these practices in terms of (1) the opportunity cost of forgoing the added efficiency from choosing more qualified personnel (if they have

---

<sup>6</sup> While Peter Doeringer and Michael Piore, in *Internal Labor Markets* (Lexington, Mass.: Heath Lexington Books, 1971, pp. 133–62), present reports of costs and of efficiency reductions, empirical evaluations are lacking in the literature. See Paul Salipante, "Efficiency Explanations of Employment Discrimination," in Oscar Barbarin, ed., *Institutional Racism and Community Competence* (National Institutes of Health, in press) for a discussion of the long-term efficiency improvements expected to result from organizational efforts to reduce discrimination.

valid predictive measures to guide promotions) and (2) whatever productivity decline results from employees' feelings of inequitable treatment.

The above results support the view that equitable treatment of individuals in organizations is a goal which is far from being realized, that organizational procedures have not been established which will ensure *individual* justice. On the other hand, the results imply that necessary improvements have been made in *social* justice, with a greater number of employment opportunities being made available to women and minorities.

### **Impacts of Due Process Systems**

If it is valid that current regulatory policy has not been effective in curbing organizational procedures which allow individual injustice, we believe that an addition to current policy is required. This addition should be to review organizational practices for assuring equitable treatment of individual employees. These types of practices are commonly termed appeal systems, systems of due process, or procedures for "corrective justice."<sup>7</sup> At the same time, regulatory agencies must maintain pressure on organizations in terms of employment results for minorities and women. Our contention is that this pressure is necessary, especially for hiring practices, but insufficient for resolving individual members' charges of discrimination. External pressure alone may permit the co-existence of discrimination against minority and majority employees; internal appeal systems alone cannot insure equitable hiring practices and movement toward social justice.

Systems for due process can counteract discrimination against individuals, according to our exploratory research on a small number of organizations having such systems. The most direct means by which due process systems have these effects is through the opportunity an individual has to appeal and challenge a particular decision in a timely manner. The chance that a final decision in favor of the grievant can be made within the organization means that management will be more committed to the final agreement than if it had been reached in conciliation with an external agency or imposed by the authority of a court.

A more powerful effect of special grievance systems is often overlooked. Knowledge that a breach of the organization's nondiscrimination policy can lead to an appeal may deter a supervisor from breaking or

---

<sup>7</sup> Wendell French, "Organizational Justice," Ch. 8 in *The Personnel Management Process* (Boston: Houghton Mifflin Co., 1978), pp. 126-43.

bending the policy in the first place. A strong impression gained from the exploratory study was that organizations can utilize employee grievances as leverage to bring about changes in the behavior of certain supervisors, thereby giving teeth to their EEO policies.

A third way in which due process systems can improve attainment of EEO objectives is informational. If particular practices continually lead to complaints of discrimination, an appeal system can disclose the cause and enable the organization to correct the practices without external pressure.

The impacts of strong due process systems on discrimination against minorities and women—the direct, preventive, and informational effects—are not farfetched. The same types of effects have been noted with regard to labor relations policies when grievance systems are introduced in labor contracts.

Another likely impact of organizational appeal systems is to reduce perceptions of “reverse” discrimination. One of the organizations studied had an appeal system designed specifically to handle complaints of discrimination. It also had a strong merit system upon which promotions were based. This combination of systems assured employees that promotions of both minority and majority employees were based on qualifications, not race or sex. Complaints of “reverse” discrimination were very rare in this organization, yet the organization was making good progress toward its EEO objectives.

Another potential advantage of due process systems is that they can reduce the currently large backlog of cases before the EEOC and the courts. One organization which had recently introduced an employee appeal system reported that the number of employee complaints of discrimination which had been brought before the EEOC had gradually fallen to about one-half the previous level. An appeal system which succeeds in preventing arbitrary treatment should lead to fewer initial complaints. Further, the availability of an internal system for redress means that a number of complaints can be resolved internally to the employees' satisfaction, obviating the costs and delays of external appeal in many cases. Some company officials have expressed the belief that all complaints will be taken to the courts as long as this final recourse is available. Our preliminary observations indicate this is not the fact, and we suggest systematic empirical work is needed to confirm these impressions.

Our exploratory research indicates that the appeal procedures currently available in many organizations—chiefly, informal appeal to one's superior and on up the chain of command—are inadequate to

produce the above effects.<sup>8</sup> Minority employees reported that this informal procedure was not likely to lead to redress of complaints, and that grievants were likely to be labeled as trouble-makers, ruining their career opportunities in the organization. In organizations with more formal grievance procedures, grieving employees were more likely to find advocates, usually from the organization's employee relations or EEO unit, to support them and to protect them from later recrimination.

In general, we would expect to observe greater benefits to employees and employers where the grievance machinery is simple and easily accessible to employees and where it involves people independent of line management, such as external arbitrators, in the settlement process and especially the final step of settlement. The American Arbitration Association has endorsed the use of binding arbitration based on case-by-case agreement between attorneys for the employee and the employer to submit to arbitration.<sup>9</sup> The concept argued for in this paper envisions a set of organizational procedures in which outside arbitration would be an institutionalized step and not one subject to case-by-case agreement. This means an employer would establish standing policy and procedures for arbitrating discrimination complaints arising at any organizational level. Such policies and procedures might be designed, as outlined by Edwards,<sup>10</sup> to (1) resolve in an earlier and less costly manner the class of complaints capable of arbitral decision, (2) respect the statutory rights of the individual, and (3) provide for strong consideration being given to the arbitral decision in any court review by use of procedures recommended in footnote 21 of *Gardner-Denver*.

The general conclusion, then, is that formal systems of employee appeal offer promise, realized by a few organizations, for preventing discriminatory treatment and for changing organizational practices that permit discrimination in promotion, pay, and disciplinary decisions.

### Implications for Policy

The ultimate criteria for societal and organizational EEO policies are high levels of social justice, individual justice, and organizational efficiency. The difficulty of establishing policy has been to understand

---

<sup>8</sup> For a discussion of the incidence and nature of informal appeal systems, see William G. Scott, *The Management of Conflict: Appeal Systems in Organizations* (Homewood, Ill.: Irwin, Inc., 1965), pp. 56-67 and 114-25 and, by the same author, "Organization Government," *Public Administration Review* 8 (January/February 1969), pp. 43-53.

<sup>9</sup> Coulson, *supra* note 3. Also see *Employment Dispute Arbitration Rules* available from American Arbitration Association offices.

<sup>10</sup> Edwards, *supra* note 4.

and develop appropriate mechanisms for influencing the complex relationships between these factors.

The argument presented here reaffirms the importance of external regulatory pressures on affirmative action hiring programs. These actions speak to the institutional level of discrimination and seek to insure greater social justice in employment. A results emphasis intends to open hiring practices and create necessary up-grading and developmental experiences for previously disenfranchised groups to gain entry and to compete effectively in the internal labor market.

It has been argued that perceptions of individual discrimination can and do exist within these broad policies designed to achieve social justice. We have argued for an additional component of organizational response—due process systems. It is believed that combining a credible internal appeal process with a strong merit promotional system will promote high levels of achievement of individual justice and organizational efficiency and contribute to social justice by reducing discrimination against minorities and women. This viewpoint assumes that EEO goals can be attained by external pressures for hiring targets and strong developmental programs where needed. Thus, comprehensive EEO policy might usefully consider mechanisms for insuring nondiscrimination of individuals on an internal organizational level as well as social justice for covered groups on an institutional level. Our argument is that such a dual approach also enhances organizational efficiency.

If such a posture has merit and key assumptions are validated by further empirical work, what implications can be stated for EEO officials? First, it would seem possible and desirable to develop specific guidelines for affirmative action agencies and their representatives on the various types of organizational appeal procedures and merit systems. EEO agency officials could, through direct contact with employers, provide an educational service about the benefits and requirements of a combined group of internal procedures and programs. Employers may be aided by the availability of such information and guidelines in achieving EEO goals while enhancing organizational efficiency.

Further, this specific information might conceivably be brought into the legal framework in the context of consent decrees. Courts may be attracted to viewing procedures and practices addressed to both institutional and individual discrimination and look favorably on the internal systems discussed here as positive remedies.

EEO policy could give such internal systems additional support by requiring grievants to rely to the fullest on internal organizational procedures for redress before utilizing enforcement agency and legal mech-

anisms. By encouraging employers to develop strong due process systems and encouraging employees to utilize them, EEOC should see earlier and less costly decisions in many cases, thus reducing the court backlog of EEO cases and increasing both employee and employer satisfaction with the process of conflict resolution.

Beyond EEO agency encouragement, we see strong natural incentives for employees and employers to utilize internal appeal systems for EEO complaints. The present system of total court reliance is extremely costly in time and resources for plaintiffs, employers, and government agencies. Positive efficiency considerations should also serve as an incentive to employers to develop due process systems. The real question, at this point largely an empirical issue, is what specific appeal procedures will be perceived by employees to give a fair hearing and an equitable resolution, thereby earning their confidence and good-faith participation.

# Mandate: Minority Business Utilization

PAULA SINGER-SANDLER  
*Maryland Department of Transportation*

Discrimination in employment practices and in the work environment was made illegal by the signing of executive orders<sup>1</sup> and the passage of legislation.<sup>2</sup> Policies, regulations, and guidelines<sup>3</sup> have developed at all levels of government which attempt to end such discrimination based upon sex, age, mental or physical handicap, national origin, color, and creed. Another type of discrimination, however, needs to be addressed, that being discrimination against minority-owned businesses, particularly in the construction industry.

Until recently, there has been little involvement by minority business enterprises (MBEs) in federally funded or assisted construction projects.<sup>4</sup> The proper mechanisms for program development are beginning

---

Author's address: 8 Charles Plaza 507, 2407 Brambleton Road, Baltimore, Md. 21209.

<sup>1</sup> Executive Order 11246 (32 C.F.R. 173), expanded by Executive Orders 11375, 11141, 11478, 11914.

<sup>2</sup> I. Civil Rights Acts: A. 1866 (codified as 42 U.S.C. 1981); B. 1871 (42 U.S.C. 1983); C. 1964, (1) Title VI (42 U.S.C. 2000(c)), and (2) Title VII (42 U.S.C. 2000(e)). II. Education Amendments of 1972 (86 Stat. 373). III. Equal Pay Act of 1963 (29 U.S.C. 206). IV. Age Discrimination Act of 1967 (29 U.S.C. 621-634). V. Crime Control Act of 1968 (42 U.S.C. 3711 et seq., as amended). VI. Rehabilitation Act of 1973 (87 Stat. 355). VII. Vietnam Veterans Readjustment Act of 1974 (38 U.S.C. 2012).

<sup>3</sup> I. EEOC Guidelines (29 C.F.R. 1601 et seq.). II. Department of Labor Guidelines: A. Revised Order No. 4 (41 C.F.R. 60-2); B. Revised Order No. 14 (41 C.F.R. 60-60); C. Guidelines on Sex Discrimination (41 C.F.R. 60-20); D. Guidelines on Employee Selection and Testing (41 C.F.R. 60-3). III. LEAA Guidelines on Equal Employment Opportunity (28 C.F.R. 42.201). IV. HEW Higher Education Guidelines (43 C.F.R. 90). V. Department of Treasury: Section 122(a) of the Revenue Sharing Act. VI. Federal Complaints—U.S. Civil Service Commission (Section 713, U.S.C.S.C. Manual; Section 717, Title VII).

<sup>4</sup> Executive Order 11625 "Prescribing Additional Arrangements for Developing and Coordinating a National Program for Minority Business Enterprise" was signed in October 1971 by President Nixon. (It should be noted that in 1969 Executive Order 11458 created the Office of Minority Business Enterprise to provide assistance and develop programs to aid minority business enterprises nationwide.) This order was premised upon the assumption that "the opportunity for full participation in our free enterprise system by socially and economically disadvantaged persons is essential if we are to obtain social and economic justice for such persons and improve the functioning of our national economy."



to be implemented. The essential "tools" for analyzing the "problem" are just beginning to be utilized on the federal level.<sup>5</sup>

Demands for MBE participation have forced recognition of the discrimination against minority-owned businesses by federal agencies and state and local governments. Certain agencies have promulgated policies to both combat the discrimination and involve MBEs in construction activities, thereby enhancing the growth and development opportunities of such firms. From personal involvement, I am able to discuss one such agency—the Mass Transit Administration (MTA), Baltimore, Maryland.

In the early 1970s, the MTA received a funding commitment for the construction of a \$721 million, eight-mile rapid transit system from the U.S. Department of Transportation's Urban Mass Transit Administration (UMTA). Eighty percent of the money is to be provided by the federal government. The remainder of the project is funded by the State of Maryland. One of the requirements for receipt of the federal monies is the utilization of MBEs by all prime contractors, as well as by the MTA.<sup>6</sup> The MTA must encourage the utilization of MBEs by all prime contractors by requiring that "good faith efforts" be made to this end.<sup>7</sup>

Due to the poorly defined nature of the good-faith-effort approach, the MTA had an analysis performed of the practicality of establishing a "goal" for the involvement of MBEs. MTA management decided that each prime contractor would be required to subcontract or procure supplies and services from MBEs of no less than 10 percent of the dollar value of each contract.

The MTA was, frankly, somewhat apprehensive about establishing this goal as a bid consideration. It was unsure of the actual availability and ability of minority business enterprises. It was even uncertain as

---

<sup>5</sup> See, for example, Urban Mass Transit Administration (UMTA) circular 1165.1 entitled "UMTA Interim Minority Business Enterprise Policy and Requirements for Grant Recipients," December 30, 1977.

<sup>6</sup> UMTA requirement for inclusion in all Notices to Contractors: "The Mass Transit Administration hereby notifies all bidders that it will affirmatively insure that in regard to any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

<sup>7</sup> UMTA requirement for inclusion in the MTA's contractual provisions: "In connection with the performance of this contract, the Contractor will cooperate with the Administration in meeting its commitments and goals with regard to the maximum utilization of minority business enterprises and will use its best efforts to insure that minority business enterprises should have the maximum practicable opportunity to compete for subcontract work under the contract."

to whether or not MBEs would participate in the bidding process (especially prior to bid opening) and would submit bids that were competitive. The MTA did not desire that a prime contractor accept bids from MBEs which were excessive merely to fulfill the bid condition. The program was not designed to give "hand-outs," and the MTA did not wish the minority business community to visualize it as such. Although the bid conditions do provide for a "waiver" of the 10-percent goal, the MTA was reluctant to utilize it and feared the necessity of doing so. To date, it has not proven necessary. Additionally, the MTA was apprehensive about the prime contractor's reaction to the concept of a 10-percent allocation to MBEs.

Defining "minority business enterprise" also proved to be a serious problem. It was soon realized that 51-percent stock ownership by a minority person does not always prove that a firm is a bona fide MBE. "Front" companies (MBEs that were merely an extension of a non-minority company) were proposed as MBEs by prime contractors, and it therefore became necessary to define MBE in terms of "ownership," "control," and "operation" of the corporation, partnership, or sole proprietorship. Using these definitions, an officer of each MBE is required to complete and submit an extensive notarized affidavit providing information and documentation enabling the agency to determine the "true" nature of a given firm.

Limiting MBE participation to those firms based in the State of Maryland also became a critical issue strongly advocated by local MBEs. UMTA, however, prohibits limiting of contracting opportunities by geographic area. Thus, the matter was resolved to permit nationwide participation by MBEs. As a consequence of this policy, some 40 percent (based on dollar involvement) of the MBEs are based outside of Maryland.

Bonding was another issue that arose early in the program. The MTA requires 100-percent-performance and 100-percent-payment bonds from each prime contractor. The prime contractor can therefore pass this requirement on to each subcontractor, including minority subcontractors. Although the MTA encouraged prime contractors to waive bonding requirements, we were also cognizant of the fact that (a) many bonding companies require a bond of certain or all subcontractors, and (b) bonding is difficult to obtain for any small business—minority-owned businesses in particular. So far, the bonding problem has been minimized by waiver and absorption by the prime contractor or the securing of a bond by the MBE, usually with prime-contractor assistance.

The MTA has achieved strong working relationships with the local minority contracting association and resource centers. This relationship fluctuates, particularly as several association representatives have a vested interest in obtaining the subcontractors. Demands have been made which the MTA has considered unreasonable or illegal. Yet we continue to work together, despite some serious disagreements which have delayed contract awards.<sup>8</sup> While the MTA encountered these and other problems in establishing and implementing the MBE program, it has proved to be successful.

Rapid transit construction began in December 1976 and, to date, 12 contracts totaling in excess of \$260 million have been awarded. (The low bid for each contract was below the MTA engineer's estimate.) Minority business enterprises have subcontracts, work orders, purchase orders, or commitments to perform bid items and related work items valued in excess of \$30 million, or 11.6 percent of the bid value of all contracts awarded. Many of the MBEs involved are located in and pay taxes to the State of Maryland.<sup>9</sup>

The MBE involvement is in no way limited to "housekeeping" items. Subcontracts with MBEs include placing reinforcing steel; driving piles; permanent electrical, mechanical, and utility work; the interstate hauling of equipment and materials; taking progress photographs; excavating; installing fences; doing concrete flatwork; shaft work; supplying job materials; and so forth.

The entire Maryland Department of Transportation (aviation, tolls, port, highway, and motor vehicle) is now participating in MBE activities. All transportation-related contracts exceeding \$100,000 require that the lowest responsive and responsible bidder subcontract a minimum

---

<sup>8</sup>The Maryland Board of Public Works, consisting of the state's governor, controller, and treasurer, award or delay the award of all MTA contracts. Any person or group may make a personal appearance and speak his or her opinion to the Board about the responsiveness of the contractor. Statements by members of the minority contractors associations, State Black Caucus, and others have postponed the award of a contract. More often, nonunion status of a contractor would delay the decision. In all cases, however, contracts were awarded by the Board prior to the expiration date of the prime contractor's bid.

<sup>9</sup>As of this writing, 77 different MBEs are or will have participated in the MTA's program. Three of these firms are owned by Hispanic persons, two by Orientals, four are involved in a joint-venture arrangement with a nonminority firm, and all others are owned by black persons.

Thirteen firms provide architectural, engineering, or consultant services. Nine are in "heavy" construction, 14 in "light" construction activities. Twelve firms provide construction supplies to the prime contractors. Eleven MBEs haul excavated or other materials; two transport materials and/or equipment. Sixteen firms provide various services to the contractors, including painting, printing, photography, janitorial, waterproofing, etc.

of 10 percent of each contract to MBEs. The MTA's program itself has expanded and now includes MBEs in procurement activity; architectural, engineering, and consultant contracts; and all bus-division-related contracts.

Rapid transit systems are simultaneously being constructed in Atlanta, Washington, and Boston, under the auspices of UMTA. All three have similar programs. All have had and still have problems, but remarkable progress has been made with the involvement of MBEs in transit-related construction activity.

The MBEs are being given an opportunity not only to perform services, but to work with, learn from, and grow with the "pros." Assistance is given where needed, while each MBE's management, supervisory, negotiating, financial, and technical skills are being refined.

Many firms, since becoming involved in rapid transit activity, have been able to secure lines of credit for expansion, working capital, and/or mobilization, as well as performance and payment bonds required for the many government-sponsored projects. Some MBEs have begun to joint-venture with large construction firms and are now bidding competitively for construction contracts in other parts of the country.

There is still a great deal to be done regarding MBE utilization, but the concept is beginning to catch on. "Good faith efforts" alone are not sufficient for MBEs to have an opportunity to perform their trades. There is discrimination against subcontracting to businesses owned by minorities and women in the construction industry. It may not always be conscious discrimination, but merely the offering of the opportunity to the nonminority contractor or supplier who received the subcontract last time, or the time before, or for the past 20 years.

A prime contractor may not even think of receiving bids from other firms. Establishing a goal, mandating the participation of minority business enterprise *as a bid condition* compels the prime contractor to look at, evaluate, and solicit bids from the minority business community and to provide whatever assistance may be necessary.

The owner/government agency must make the initial effort of involving MBEs in its construction activity to the fullest extent possible. A directory of MBEs, listing their track records and their claimed capabilities, must be made available to every prime bidder at the time plans, specifications, or other contract documents are purchased.

Plans and specifications should be made available, free of charge, to all local minority resource centers and contractor organizations. Minority business enterprises must be kept informed of all contract opportunities. Each MBE should receive a copy of the "Notice to Contractor" or "Legal

Notice” which is advertised in local and national publications, as well as each “Planholders’ List.” A national MBE organization would be doing its members a service by providing such information.

Providing a “Planholders’ List” is of utmost importance as it lists each firm (with a contact) that has purchased plans and specifications for any contract. In addition, MBEs should be encouraged to attend prebid conferences not only to ask project-related questions, but to meet the representatives of the major construction companies.

Obviously, it will take time and effort to provide an equal opportunity for minorities and women in construction contracting. All parties, by necessity, must be involved, including the federal, state, and local branches of government, the owner of each project, major general contractors, minority and nonminority contractor associations, and the MBEs themselves. Commitments must be made and carried through. Follow-up procedures must be maintained.

Only by providing assistance and support and by mandating MBE utilization as a condition of receiving a contract will MBEs secure a place in the free enterprise system and be able to take their place as full-fledged members of the construction industry. The goal for minority business participation was established as an interim measure intended only to facilitate and enhance the equalization of opportunities. We work toward the elimination of the need for goals for minority business participation.

## DISCUSSION

STEPHEN RUBENFELD

*Texas Tech University*

The chairman has asked me to comment on the papers presented by Professors Hoover and Leahy and Ms. Singer-Sandler. Their remarks on seniority and minority business enterprise have addressed fundamental problems concerning the future direction of affirmative action programs. Moreover, consideration of these topics raises questions which challenge the depth of our commitment to equal employment opportunity. In particular, I refer to employment quotas or goals and the question of reverse discrimination.

The "last hired, first fired" principle has stood inviolate as a basic tenet of the American labor movement. Professors Hoover and Leahy note, in their presentation, "Union Security Provisions and Discrimination," that one of the basic goals of the bargaining process is to establish rules under which workers will be promoted, transferred, and laid off. Seniority most often emerged as the basis for these negotiated rules because it is measurable and equitable. Ostensibly, seniority-based rules protect all workers in the unit regardless of their union membership, race, or sex. Although not unfounded, it is ironic that the fairness of seniority systems is today being questioned.

Congress, in drafting civil rights legislation, foresaw a potential challenge to seniority systems and incorporated Section 703(h) in an attempt to assure that all seniority systems would not be invalidated by Title VII. Nevertheless, conflict between affirmative action and seniority provisions was inevitable. A significant chink in the armor of Section 703(h) came with the Court's decision in *Griggs*. The Act was interpreted as proscribing practices and procedures fair in form but which have disparate impact on minorities. The issue was brought to a head by the recession of 1973-75 when the beneficiaries of affirmative hiring programs were the first to experience the effects of employment cutbacks.

The issue, often couched in the rhetoric of reverse discrimination, pits the seniority expectations of long-tenure employees against those of newly placed minorities or women. The question posed is whether the conflict between seniority and affirmative action is reconcilable. To what extent is the court empowered to modify a "bona fide" seniority system or the application of such a system?

The authors shed light on these queries by reviewing two recent Supreme Court cases. In *Franks v. Bowman*, the Court endorsed the principles of retroactive seniority as a remedy in a case involving post-Act discrimination. The Court did not seek to modify the seniority system, but indicated that Section 703(h) does not bar the award of seniority status to individual discriminatees.

In a subsequent case, *International Brotherhood of Teamsters v. U.S.; T.I.M.E., D.C., Inc. v. U.S.*, the decision stated that a "bona fide" seniority system is protected by Section 703(h). The Court explicitly refrained from awarding retroactive seniority as a remedy for pre-Act discrimination. In addition, the decision provided some guidance on who shall be entitled to judicial relief. While job applicants who were denied employment are presumptively entitled to relief, nonapplicants must assume the burden of proving that they should be treated as applicants. These principles are operational for employees and nonemployees alike.

One area of concern which Hoover and Leahy did not address involves the case where a "bona fide" seniority system is amended by a conciliation agreement or by some other means to include a preferential quota for workforce reduction. Given the Court's rulings in the two cases just discussed, as well as in the recent *Bakke* decision, one might speculate that this approach to protecting the recent employment gains of women and minorities will not survive judicial review. The decision would likely rest on the argument that the terms of a valid seniority agreement are protected by Section 703(h), even where these terms perpetuate the effects of past discrimination. One exception might be the case where there was evidence of discriminatory purpose inherent in the seniority system.

I agree with the authors' conclusions that recent cases have helped to define the relationship between Title VII and seniority clauses, and that to a certain extent inequities have been eliminated. However, it should be noted that this alleviation of inequities has benefited only a very limited proportion of the total number affected by discrimination. Pre-Act discrimination remains exempt, and the present mood of the Court indicates that nonapplicants will find it difficult to persuade the Court to grant relief.

Aside from the legal questions that arise when quotas or goals are discussed and wherever the specter of reverse discrimination appears, affirmative action programs must also be examined as social phenomena. Too often we avoid dealing with important policy issues by shunting all inquiries into the legal forum.

From this perspective, my feeling is that the Court's limited reliance on retroactive seniority has not substantially weakened the concept of

service-based job security. Given that two established programs, seniority and affirmative action, are pitted against one another, the position of the Court also yields an equitable solution. It is a decision that is consistent with expectations of equity and fair play: only an *individual* who can "document" injury is made whole. Any decision by the Court to extend retroactive seniority to cover pre-Act discrimination or to grant blanket fictional seniority to all members of a class would be contrary to the letter and spirit of the law, and very possibly counterproductive in the effort to achieve equality and racial harmony.

Ms. Singer-Sandler's paper, "Labor Markets and Civil Rights," examines policies designed to encourage participation by minority business enterprises in federally funded or assisted construction projects. Using a case study, the author highlights the procedures involved and the problems encountered in operationalizing this program.

The author has avoided questions concerning the legality of this program. While the courts have been generally supportive of funding agency requirements for "good faith efforts" to insure minority participation in federal construction projects, future legal challenges are a certainty. For example, it may be that the Supreme Court will be called upon to decide whether MTA's interpretation of these requirements to include a 10 percent minimum is consistent with Title VII or other legislation.

This paper does raise a number of interesting policy questions. The most basic of these questions is whether the government has gone too far in mandating minority participation as a bid condition. I would argue that this does not constitute unwarranted government intervention in the private economy. A strong case can be made that the policy of enhancing development opportunities for minority firms is consistent with our national equal opportunity effort and should yield very positive long-term results.

The question that deserves an answer at this point, however, is whether this program is actually achieving its objectives. As is the case with most affirmative action programs, there is inadequate data to permit a rigorous evaluation of program effectiveness. To point to a dollar goal which has been met or surpassed is not sufficient. Inputs concerning the cost and quality of work performed, labor-management conflicts, the outcome of legal actions, and racial polarization would be helpful. Perhaps most importantly, information with which to assess the long-term impact on minority firms and their employees is necessary. At this point, the only firm conclusion we can draw is that this affirmative action program is meeting its stated objective of limiting systematic discrimination in one segment of the construction industry.



## DISCUSSION

ANDREA H. BELLER

*Radcliffe Institute for Independent Study*

The Salipante-Aram paper's basic argument is that EEO or not, there will always be individual cases of discrimination; thus, to achieve individual justice, we need to combine organizational grievance systems with the present EEO system, which focuses on institutionalized discrimination. I am frankly not sure that individual justice isn't precisely what Title VII of the Civil Rights Act of 1964 was designed to achieve. If it is failing, then should we not consider how the current system can be improved before, or at the same time as, we look elsewhere? This is in fact what I initially thought the authors were going to discuss.

Despite this reservation, I found this paper basically stimulating and informative. It raises a number of interesting issues—ones that have only begun to be considered.

From my position evaluating external EEO programs on a nationwide basis, I am very interested to learn that organizations "appear to be internalizing the enforcement mechanisms and measures applied to them" by enforcement agencies. Because of the time and money costs involved in the EEO complaint process, as the authors mention, to be successful the EEO program must become internalized.

The authors next raise the issue of preferential hiring. A majority of respondents to a survey of managers believed that minorities and women were given preference even when "somewhat less qualified." This statement immediately raises the question of whether someone who is "somewhat less qualified" isn't nevertheless able to do the job equally well—differently, perhaps, but equally well. Further, the respondents were asked to report having specific knowledge of discrimination against women and minorities. Not surprisingly, a higher proportion of women and minority managers (60 percent) than of all managers (27 percent) reported they had. Furthermore, the male managers were far more likely to report incidents of reverse discrimination (84 percent) than were women and minorities (58 percent). These differences in perception about qualifications, favoring one's own group, suggest the need for developing more objective standards for judging what "qualified" means. Ideally, what we really want to look at are measures of productivity, that is, at outputs, not at inputs.

Given the strength of differences in perception, I wonder whether it is ever possible to achieve what the authors conclude is “a goal far from being realized”—the equitable treatment of individuals in organizations. In my view, there will always be some people who perceive discrimination. The problem thus becomes, and the problem with the present approach is: What level of complaints do you allow and still say that discrimination no longer exists? What percentage of individuals would still perceive discrimination even after it has been eliminated? I would have to argue with the authors’ statement that “the fact that some males reported discrimination against women and minorities and some females and minority group members reported discrimination in favor of such groups indicates that both ‘regular’ and ‘reverse’ discrimination coexist in organizations.”

I would reinforce their idea that informal grievance procedures are inadequate for attaining individual justice. But I wonder whether even formal ones can deal effectively when prejudice and differences in perception intervene in hiring and promotion decisions. And what about sensitive grievances such as sexual harassment, which I have been hearing about with increasing frequency? Can formal grievance procedures deal effectively with this type of individual discrimination? I would like to believe that they can; I would like to hear more from the authors to convince me.

One final point on this paper: The authors doubt that perceptions of reverse discrimination can be reduced other than through systems for organizational due process. I believe that they can also be reduced by restoring full employment. Claims of reverse discrimination only became prevalent during the 1970s when employment opportunities had diminished for everyone. It is far easier for a white male to believe that he is unemployed because of his sex or race than because he wasn’t the best qualified applicant.

LaVan and Oppenheimer intend to consider the relative merits of arbitration and litigation in EEO disputes, a worthy endeavor. Instead, they do a descriptive analysis of each, which does not allow us to distinguish critically between the two. What hypotheses they wish to test and how their results should be interpreted are unclear. Although the numbers are interesting, their paper needs a contextual setting for the reader to be able to evaluate its contribution.

As the authors indicate, their sample includes all arbitration cases that are reported, because not all are. But this introduces the possibility of selection bias to their sample, so the authors might want to provide

some notion of the direction of the bias. For instance, are the more successful cases the ones more likely to get reported?

Their most interesting finding is the significantly higher rate at which both arbitrators and the courts found discrimination in sex than in race cases. I can speculate on why. It could be because the issues involved in sex complaints are more readily recognizable as discrimination than are those in race cases. For example, women are more likely to be denied access to a particular type of job, and employment discrimination is more easily recognizable than wage discrimination. I note that the sample contains fewer sex than race cases. If sex discrimination is as prevalent as race discrimination, then another possibility is that women file charges only when they are more certain of the outcome—more sure that they have a case. Regardless of the explanation, this finding is consistent with my own—that sex discrimination charges under Title VII have been successful in narrowing the sex differential in earnings, but race discrimination charges have not narrowed the race differential.

I have recently learned that we use litigation in EEO cases more frequently than the Europeans do. Their EEO laws are newer than ours; they rely more extensively on collective bargaining and other out-of-court mechanisms. Given these differences, perhaps a comparative study could shed light on the question the authors wish to answer.

## XII. NEW DEVELOPMENTS IN THEORETICAL LABOR ECONOMICS AND IMPLICATIONS FOR POLICY ANALYSIS

---

### Labor Supply Estimates for Public Policy Evaluation\*

GEORGE J. BORJAS

*University of California, Santa Barbara*

JAMES J. HECKMAN

*University of Chicago*

*and*

*National Bureau of Economic Research*

In recent years, the study of labor supply has occupied the attention of a great number of economists. The availability of new sources of data and the recurring desire of policy-makers to be able to estimate the labor supply response to alternative programs of welfare reform have combined to stimulate an immense volume of theoretical and empirical work on the topic. Elaborate "experiments" have been conducted in order to provide estimates of responses to social programs.

With the growth in interest in the topic and with the inevitable diversity of economic models and statistical methods proposed by new entrants in the field, the literature has developed its own folklore. The principal legend is that the empirical estimates of the same parameters obtained from the set of available studies display such diversity that they are of little use to policy-makers. This argument was advanced in

---

\* In preparing this paper we have benefited greatly from three references: (a) the excellent general discussion by G. Cain and H. Watts, Chapter 9; (b) an unpublished simulation study by J. DaVanzo, D. DeTray and D. Greenberg; (c) a forthcoming survey by M. Killingsworth (references to each of these studies is given in the text). This research was supported by a NSF Grant SOC 77-27136 to the National Bureau of Economic Research. Borjas's address: Department of Economics, University of California, Santa Barbara, Calif. 93106.

defense of the enormous cost of collecting "experimental" data to resolve the apparent ambiguity in the empirical evidence on labor supply behavior. The fact that analyses of experimental data have produced a range of estimates comparable in width to those produced by more traditional data sources apparently only serves to strengthen the original observation.

This paper disputes the folklore. We claim that there is more agreement than disagreement once a few reasonable criteria based on recent theoretical work are used to eliminate certain studies from consideration, and once we are careful about posing the question we seek the estimates to address.

### **I. The Use of Labor Supply Functions in Policy Analysis**

The needs of policy analysis are very specific. The goal of the policy-evaluator is to estimate the response to programs that have been proposed but have never been observed in operation. To make such estimates, it is necessary to adopt a model—either explicitly or implicitly—in order to predict likely policy impacts.

One way to justify the widespread appeal of the negative income tax experiments was that they offered a "model free" approach to the evaluation of policy. If an "experiment" could be conducted that closely resembled a proposed program, no model-building was required in order to assess the impact of the program. As is evident from the literature this hope was illusory.<sup>1</sup> It is now clear, especially in the work of Hausman and Wise,<sup>2</sup> that experimental data require as much and possibly more care in their analysis than do traditional data, in large part because of initial administrative decisions used to create samples and because of self-selection decisions by experimental participants. It is now widely recognized that the experiments did not and could not directly estimate the likely impact of a widespread long-duration negative income tax.

Like it or not, we are stuck with the need for a model to interpret data and to make policy forecasts. However, no single model can be said to be universally accepted by economists who work on labor supply. Nonetheless, the theoretical model that underlies most interpretations of data in this field is the neoclassical theory of consumer choice under certainty. Most workers in the field adopt it as the starting point, and

<sup>1</sup> See J. Pechman and M. Timpane, *Work Incentives and Income Guarantees* (Washington: The Brookings Institution, 1975).

<sup>2</sup> J. Hausman and D. Wise, "Stratification on Endogenous Variables and Estimation: The Gary Income Maintenance Experiment," Massachusetts Institute of Technology, 1977.

indeed, it seems that every paper now written on the subject demonstrates to the reader the point—already apparent to Hicks<sup>3</sup>—that the economics of time is a special case of the theory of consumer choice. This is not to say that the basic model has not been extended; indeed, there is a considerable volume of activity associated with such extensions. However, we stick to the old model—on which considerable empirical evidence has been accumulated—and do not shift to each new model that comes along until evidence is accumulated that a new model is a genuine empirical improvement on the old.

The working assumptions in the neoclassical model as *conventionally applied* in practice are (1) that consumers face an exogenous gross wage rate (thus, tax rates, equalizing differentials payments, and the like are ignored); (2) the appropriate theoretical time dimension for the analysis is (conveniently) the one at the analyst's disposal, e.g., annual hours of work, participation in a week, etc. (thus, life-cycle considerations are ignored, as are interrelationships among different dimensions of labor force activity); (3) labor supply behavior can be characterized by the classical theory of consumer choice, complete with its optimality conditions that set marginal benefits equal to marginal cost (thus, fixed costs, nonlinear budget sets, corner solutions, and the like are ignored, and unemployment and uncertainty are neglected).

All of these assumptions have been challenged in new papers in the literature. But because much of this work is so new, little consensus on empirical estimates from the new models has emerged. In our view, this lack of agreement is only a transitional phenomenon. Unknown to most practitioners in the field, a consensus in fact exists in the studies based on the conventional analysis.

It is by now well known that estimates from the neoclassical model can be used to predict the labor supply response to social programs. For example, Masters and Garfinkel<sup>4</sup> and Ashenfelter<sup>5</sup> demonstrate how estimates of the standard labor supply function can be used to predict (a) participation in a negative income tax program, and (b) the reduction in hours worked by participants. In view of this work, we spare the reader a restatement of this point. Instead we ask the question, "Which of the available estimates should be used in such simulations?" In this regard, it is helpful to focus attention on a few studies for prime-

<sup>3</sup> J. Hicks, *Value and Capital* (Cambridge: Oxford University Press, 1939), p. 313.

<sup>4</sup> S. Masters and I. Garfinkel, *Estimating the Labor Supply Effects of Income-Maintenance Experiments* (New York: Academic Press, 1977), p. 217 ff.

<sup>5</sup> O. Ashenfelter, "The Labor Supply Response of Male Wage Earners in the Rural Negative Income Tax Experiment," in *Welfare in Rural Areas*, eds. J. Palmer and J. Pechman (Washington: The Brookings Institution, 1978).

age males enshrined in a survey by Cain and Watts<sup>6</sup> that are based on the traditional model. The labor supply response of prime-age males is of central concern to policy-makers and has received the most attention in the empirical literature. For these reasons, as well as for the sake of brevity, we focus attention on this group. The Cain-Watts estimates are presented in Table 1. All of these studies share the following features in common: (a) they are based on cross-section survey data; (b) they are for prime-age males (the Fleisher, Parsons, and Porter study is based on older males 45-59, while the other studies are more broadly based); (c) "cross effects" of wife's labor force activity on husband's hours of work are ignored; (d) all studies focus on an annual measure of labor supply.

The diversity in the estimates is enormous. But how many of these estimates would we judge to be of interest in the light of recent work? To answer this question we first introduce some new results from the literature.

## II. A Summary of Recent Results

The neoclassical theory establishes a relationship between hours of work ( $h$ ), wage rates ( $W$ ), and unearned income ( $Y$ ). This relationship can be written for a consumer who equates marginal benefits to marginal costs as:

$$(1) \quad h = \alpha_0 + \alpha_1 W + \alpha_2 Y + \epsilon$$

where  $\epsilon$  is a portmanteau variable of unobservables. Estimates of the parameters in this function are required to perform the policy simulations mentioned earlier. All of the studies listed in Table 1 purport to estimate  $\alpha_1$  and  $\alpha_2$ . It is our contention that for three reasons not all studies, in fact, estimate these parameters.

### SAMPLE INCLUSION CRITERIA AND THE CHOICE OF THE DEPENDENT VARIABLE

All of the studies listed in Table 1 claim that " $\epsilon$ " is uncorrelated with  $W$  and  $Y$ . But in many studies this claim is untenable. Consider, for example, the study by Kalachek and Raines. In this study, households with income greater than twice the Social Security Administration's low-cost-budget income level were excluded. The rationale for this exclusion is that the authors seek to explore the labor supply behavior of poor people. The implicit notion behind this restriction is a

<sup>6</sup> G. Cain and H. Watts, *Income Maintenance and Labor Supply* (Chicago: Rand McNally, 1973), Chapter 9.

TABLE 1  
Labor Supply Elasticities for "Prime-Age" Males<sup>a</sup>

Author	Uncompensated Wage Elasticity	Compensated Substitution Elasticity	Total Income <sup>b</sup> Elasticity
1. Ashenfelter-Heckman (in Cain-Watts)	-.15	.12	-.27
2. Boskin	-.07	.10	-.17
3. Fleisher-Parsons-Porter <sup>c</sup>	-.19	.04	-.23
4. Greenberg-Kosters	-.09	.20	-.29
5. Hall	-.18 to -.45	.06	-.24 to -.51
6. Hill	-.21 to -.34	.47 to .52	-.68 to -.86
7. Kalachek-Raines	.55	.86 to .96	-.31 to -.33
8. Masters-Garfinkel <sup>d</sup>	.01 to -.11	-.04 to .06	-.06 to -.12
9. Rosen-Welch <sup>e</sup>	-.27	.14	-.41

<sup>a</sup> Adapted from Cain and Watts, Table 9.1, pp. 332-33. For references and descriptions of the papers, see Cain and Watts.

<sup>b</sup> This is defined as  $W \cdot (\partial h / \partial Y)$  where  $W$  is the wage rate,  $(\partial h / \partial Y)$  is the effect of a change in unearned income on hours worked. See Cain and Watts.

<sup>c</sup> These estimates (reported by Cain and Watts) are only one of the many estimates reported in this study.

<sup>d</sup> This study replaces Garfinkel's analysis in the Cain and Watts volume with Garfinkel's latest estimate of these effects reported in Masters and Garfinkel, Table 5.7, p. 95.

<sup>e</sup> This is the estimate for urban workers using hourly wage rates and annual hours worked (Table 1, Col. 1 of Rosen and Welch), rather than the estimate reported by Cain and Watts which was based on a regression of annual hours on weekly earnings. As Rosen and Welch point out, this latter procedure leads to an upward bias in the estimated wage effect.

"culture of poverty" concept—that poor people have different labor supply behavior than others, and that poverty is a static concept.<sup>7</sup> The work of McCall<sup>8</sup> belies the second argument—there is a lot of turnover in and out of poverty. The first argument may be correct, but the authors run the risk of manufacturing *selection bias* by using only a sample of poor men on which to estimate their functions.

To illustrate, suppose  $\epsilon$  is a random variable with mean zero in a random sample of data. Restricting an empirical analysis to poverty samples, we select from a random sample of men with identical values of  $W$  and  $Y$  those men with a lower than average value of  $\epsilon$ . This is so since poverty is defined by total income  $I$ ,

$$I = Wh + Y = \alpha_0 W + \alpha_1 W^2 + \alpha_2 WY + Y + W\epsilon$$

Holding  $W$  fixed and increasing  $Y$ , the average value of  $\epsilon$  must decrease for the selected sample if consumption is a normal good. Moving across groups with the same  $Y$ , but higher values of  $W$ , implies that the average value of  $\epsilon$  must decrease provided that certain empirically plausible

<sup>7</sup> *Ibid.*, p. 341.

<sup>8</sup> J. McCall, *Income Mobility, Racial Discrimination and Economic Growth* (Lexington, Mass.: Lexington-Heath, 1973).



conditions hold.<sup>9</sup> To summarize, a regression fit on a selected sample may be written as

$$(2) \quad h = \alpha_0 + \alpha_1 W + \alpha_2 Y + E(\epsilon | \text{selection rule}) + V$$

where “ $E(\epsilon | \text{selection rule})$ ” is the expected value of the unobservables for the selected sample. This term decreases with  $Y$  and with  $W$ , suggesting that estimates based on “poverty samples” will tend to produce downward biased estimates of  $\alpha_1$  and  $\alpha_2$  since the analyst ignores how the sample is generated and hence omits the term “ $E(\epsilon | \text{selection rule})$ ” from his equation. “ $V$ ” is uncorrelated with the other right-hand side variables by construction.

The papers numbered [3], [4], [6], [7], and [9] in Table 1 present labor supply estimates based on low-income samples, and hence suffer from this bias. Given the very high income cut off employed in studies [3] and [4], we feel that the income truncation problem is less pronounced in these studies. One cannot, a priori, say that there is no merit in stratifying samples. People who are poor have different labor supply behavior than others. Studies by Heckman<sup>10</sup> and Burtless and Hausman<sup>11</sup> reveal considerable dispersion in preferences for work. However, inducing selection bias can manufacture apparent differences in estimated labor supply parameters between rich and poor.

There is a related *inclusion bias* that affects the analysis in some of the other papers: the choice of dependent variables used in the empirical work. For example, Hall seeks to explain the labor supply of all workers. If a worker does not work any hours, he receives a zero in the Hall analysis and is pooled in the sample with workers. As noted by Lewis,<sup>12</sup> Ben-Porath,<sup>13</sup> and others, the participation function differs

<sup>9</sup> More precisely it is required that

$$\epsilon < (C - Y)/W - \alpha_0 - \alpha_1 W - \alpha_2 Y$$

where  $C$  is the cut-off on earnings,  $C - Y \geq 0$  for most observations. If  $\alpha_1 > 0$ , the statement in the text is correct. Otherwise, it need not be. For the studies considered in this paper, the statement is plausibly correct. In the Kalachek-Raines study,  $C \cong \$8500$  and mean  $Y$  is less than \$1000. If  $\alpha_1$  is as small as  $-250$  (a very small number in view of the estimates presented in Table 1), the statement in the text is valid for wage rates up to (roughly) \$5.50 per hour—a high wage in the 1966 sample used by them. For wage rates in excess of this amount, the effect of an increase in  $W$  is to increase the mean value of  $\epsilon$  in the selected sample.

<sup>10</sup> J. Heckman, “Effects of Child Care Programs on Women’s Work Effort,” *Journal of Political Economy* (March/April 1975), pp. S136–S163.

<sup>11</sup> G. Burtless and J. Hausman, “The Effect of Taxation on Labor Supply: Evaluating the Gary Negative Income Tax Experiment,” Massachusetts Institute of Technology, 1977.

<sup>12</sup> H. G. Lewis, “On Income and Substitution Effects in Labor Force Participation,” University of Chicago, 1967.

<sup>13</sup> Y. Ben-Porath, “Labor Force Participation Rates and the Supply of Labor,” *Journal of Political Economy* (June 1973), pp. 697–704.

structurally from that of the hours-of-work decision. The probability that someone participates is  $P(W, Y)$ . The effect of a change in  $W$  and  $Y$  on  $P$  is *not* the same as the effect of a change in  $W$  and  $Y$  on  $h$  given in equation (1).<sup>14</sup> The hours-of-work function for workers is given by equation (2) with the selection rule being “some work in the survey period.”

The Hall paper essentially estimates a regression approximation to

$$(3) \quad h = P(W, Y) (\alpha_0 + \alpha_1 W + \alpha_2 Y + E(\epsilon | \text{“some work”}) + V) \\ = \beta_0 + \beta_1 W + \beta_2 Y + V^*$$

Hall's estimates of  $\beta_1$  and  $\beta_2$  do *not* correspond to  $\alpha_1$  and  $\alpha_2$ , respectively. His estimates confound parameters of the participation function with the parameters of the true structural hours-of-work function. It is the latter that are required for policy analysis.<sup>15</sup>

Superficially, it would seem that this consideration is more important for the labor supply of secondary workers than it is for the labor supply of prime-age males who have high participation rates. However, DaVanzo, DeTray and Greenberg<sup>16</sup> demonstrate that, in their sample of prime-age males, adding in “zero hours worked” observations into the sample raises the estimated value of the wage effect on labor supply. Their evidence is consistent with the notion that participation probabilities are related to wage rates.

To summarize, there are two sources of bias: (a) “zero hours of work” observations do not lie on the structural labor supply function, and (b) restricting estimates to subsamples of individuals with positive hours of work may result in selection bias. The method proposed by Hall of pooling “zeros” with continuous observations has no analytical justification, and the evidence in DaVanzo et al. suggests that estimates based on his procedure overstate the true value of the structural wage elasticity.

---

<sup>14</sup> J. Mincer, “Labor Force Participation of Married Women: A Study of Labor Supply,” in *Aspects of Labor Economics*, ed. H. G. Lewis (Princeton, N.J.: Princeton University Press, 1962), has derived a model in which the wage and income parameters for  $P$  are the same as for  $h$ . However, his model requires unacceptably strong assumptions. For a more detailed discussion, see J. Heckman, “A Partial Survey of Recent Research on the Labor Supply of Women,” *American Economic Review* (May 1978), pp. 200–12.

<sup>15</sup> Boskin estimates equation (2) and  $P(W, Y)$  separately. His first equation thus suffers from selection bias. The second does not yield policy parameters, and his combined estimates are of little structural (and hence policy) interest. Ashenfelter and Heckman only report estimates of labor supply for individuals who work and thus commit the same error as Boskin.

<sup>16</sup> J. DaVanzo, D. DeTray, and D. Greenberg, “Estimating Labor Supply Response: A Sensitivity Analysis,” Rand Corporation, R-1372-OEO, December 1973.

A related point about sample inclusion bias can also be made about other definitions of labor supply used in the literature. For example, the Masters and Garfinkel estimates reported in Table 1 are based on a labor supply measure obtained by adding hours worked to hours unemployed (or on strike) for labor force participants. This is an appropriate measure only if individuals are surprised by involuntary unemployment (or strikes). An alternative view of unemployment advanced by Lucas and Rapping<sup>17</sup> views unemployment time as another form of leisure activity so that only measured hours of work are relevant in estimating labor supply functions. A third view of unemployment as search activity by Burdett and Mortensen<sup>18</sup> suggests a separate equation for unemployment time. There is no convincing evidence on which of these three views is correct.<sup>19</sup>

If, in fact, the behavioral function that characterizes unemployment differs from that of hours worked, the Masters-Garfinkel estimates are a weighted average of the two functions. This combined function is of little structural interest and certainly is not a basis for providing estimates of equation (1). This point highlights a glaring omission in the theoretical model currently used to evaluate policy—it ignores unemployment. The model of Burdett and Mortensen provides the first step towards a framework that accommodates labor supply and turnover behavior.

There is another source of sample selection that is somewhat more subtle. Studies [4], [7], and [9] defined annual labor supply as annual weeks worked (or in the labor force), times hours worked in the week preceding the survey. As noted by DaVanzo et al. (pp. 95–96), if a worker did not work in the week preceding the survey, his annual hours are estimated to be zero. If higher-wage workers are more likely to have worked in the survey week, this source of measurement error—or selection bias—results in an upward biased estimate of the effect of wages on labor supply. DaVanzo et al. present evidence that this point is empirically relevant.<sup>20</sup>

<sup>17</sup> R. Lucas and L. Rapping, "Real Wages, Employment and Inflation," in *The Microfoundations of Employment and Inflation Theory*, ed. E. Phelps (New York: Norton, 1969).

<sup>18</sup> K. Burdett and D. Mortensen, "Labor Supply Under Uncertainty," Northwestern University, 1977.

<sup>19</sup> Recent work by F. Kalachek, W. Mellow and F. Raines, "The Male Labor Supply Function Reconsidered," *Industrial and Labor Relations Review* (March 1978), presents some preliminary tests between the first two models and offers evidence in support of both.

<sup>20</sup> Some additional discussion of this problem is available in S. Sandell and P. Koenig, "Measurement Error and Its Consequences: The Case of Annual Hours of Work," Ohio State University, 1978.

## USE OF WORK-RELATED TRANSFERS AS UNEARNED INCOME

Since the original observation by Mincer, economists have been warned against using transfer payments and income transfers that are a *result* of labor supply choices as a determinant of those choices. Such a procedure builds a spurious negative relationship between income (as measured) and labor supply. Studies [6] and [9] include welfare and unemployment payments in  $Y$  and not surprisingly estimate large negative income effects. The remaining studies are not entirely clean on this point either. Since measured unearned income is largely a consequence of past work effort, it is likely that it is correlated with error " $\epsilon$ " in equation (1). To purge this bias, Greenberg and Kusters (study [4]) and Ashenfelter and Heckman (study [1]) use instrumental variables in an attempt to correct for any bias that results from this source.

MEASUREMENT ERROR IN  $W$  AND  $Y$ 

Survey data are ridden with error. It is well known that data on unearned income is measured with error. Unless instrumental variable methods are used (or the measurement error is somehow corrected) as in studies [1] and [4], the estimated value of the income term is biased toward zero.

Studies [6], [7], [8], and [9] define the wage rate as the ratio of earnings (in a time unit, usually a year) to labor supply. If labor supply is measured with error, the effect of the use of this measure is to bias the estimate of  $\alpha_1$  downward.

Other studies ([1], [2], [4], [5]) based on the Survey of Economic Opportunity (SEO) data are not entirely free of measurement error either. The wage measure used in these studies is constructed by dividing "normal" weekly earnings by actual hours worked in the survey week. Apart from the fact that this variable is not available for workers who supply no hours during the survey week, error is induced by transitory fluctuations in hours of work in the survey week, biasing  $\alpha_1$  toward zero.

In order to circumvent the measurement error bias in wage rates, and to predict missing values of the wage, some studies ([2], [5]) predict wages by running a regression on the sample of workers for whom wage data are available to predict a wage for observations with missing values and for the balance of the sample as well. This procedure seems attractive because it appears to solve two problems at once: (a) a missing-data problem, and (b) an error-in-variables problem. However, this claim is quite misleading. For two reasons, such "instrumental" variable estimates may, in fact, be an important source of error. First,

the wage data are missing nonrandomly. Low-wage individuals are the ones more likely to be missing from wage samples and hence the imputation procedure overstates the missing wage. If hours of work are correctly measured, the imputation procedure biases the estimate wage effect downward. Second, if the imputed wage is divided into the earnings to estimate labor supply (as in [2] and [5]), any error in measuring wages is transmitted to the dependent variable and hence the estimated wage coefficient has an additional downward bias.<sup>21</sup>

### III. Our Choice of Estimates: Uncertainty Reduced

In our judgment, the evidence is sufficiently clear that studies [6] and [9] should be eliminated from consideration as a source of estimates for policy analysis. Both studies are based on "poverty samples" with the income inclusion criterion much more stringent than that used in the other studies. Moreover, they both define wage rates by dividing earnings by labor supply and hence induce a negative bias in the estimated wage effect. Finally, both also include work-determined transfers in the measurement of unearned income.

The study by Kalachek and Raines is unusual for its high estimated substitution elasticity. This elasticity is based on a definition of labor supply that combines the wage effect of participation with the wage effect on hours. For reasons discussed earlier, this estimate is of little interest in policy evaluation. Nonetheless, it is much higher than that estimated by Boskin who also presents an estimated substitution elasticity that combines the participation and hours decision. In our judgment, this difference arises, in large part, from the stringent low-income criterion employed by Kalachek and Raines (and not employed by Boskin). Their criterion results in a sample with a lower than average participation rate. Since much evidence suggests that the participation-wage relationship is nonlinear (becoming virtually flat at very high wage rates), it is not surprising to find a much greater estimated wage-participation relationship in their analysis than in that of Boskin. These arguments lead us to drop the Kalachek-Raines estimates from further consideration.

---

<sup>21</sup> The labor supply function literature provides some of the best examples of the misuse of the instrumental variables method available. It is alleged to be "ego tu absolvo" of all error and empirical sin. As Cain and Watts note, application of the method requires that certain variables that determine wage rates do not determine labor supply. Often the exclusion criterion is quite arbitrary. Certain studies ([2], [5]), exclude education from the supply function in order to use it as an instrument for wage rates. One of the main findings in the DaVanzo et al. analysis is that excluding education from the hours-of-work function and using it as an instrument to predict wage rates leads to an upward revision in the estimated wage coefficient.

Eliminating these three studies greatly reduces the range in the estimates. The study by Hall [6] appears discrepant. The most surprising comparison is the contrast between his estimates and those presented by Boskin [2] which are based on almost exactly the same data set. We believe this discrepancy arises from the manner in which Cain and Watts chose to summarize the Hall study. They represent an evaluation of wage effects *for a given level of ("whole") income and family composition*. The Boskin estimates should be interpreted as a simple summary of Hall's estimates for the full sample, in a format comparable to the other studies in the table. This observation further narrows the range of uncertainty.

The Boskin study is based on a pooled sample of workers and non-workers. Thus it estimates an equation like (3), combining participation and structural parameters. However, in view of his virtually inelastic participation function, it is not surprising to find that his estimates are closely in accord with the estimates for studies [1], [3], and [4] that are essentially based on samples of participants. As expected, his estimated wage effect is slightly more positive than that found in the three studies just cited, but the difference is too slight to be taken seriously.

The only truly discrepant study remaining in the table is that of Masters and Garfinkel. Their estimates are derived from two data sources: the SEO and the Panel Survey of Income Dynamics (PSID). The estimates based on the PSID are dominated by one extreme observation which when removed from the sample leads to agreement in the estimates from the two samples. The SEO-based estimated income elasticity ( $-.06$ ) and uncompensated wage elasticity ( $.01$ ) are larger than the remaining estimates in the table. Much of this discrepancy can be traced to Masters and Garfinkel's definition of labor supply as the product of weeks in the labor force times 40 if the observation normally works "full time" or would like to work full time, or 20 if the individual voluntarily works part time. This treatment of hours worked per week flattens the estimated relationship between hours per week and wage rates—a relationship known to be negative for the wage measures used by Masters and Garfinkel (see DaVanzo et al.)—and hence results in an upward bias in their estimated wage effect. Further, their measure gives greater play to the weeks-wage relationship which is known to be positive. Similarly, if unearned income reduces hours worked per week—as the theory predicts—their rather unusual treatment of hours worked per week leads to an understatement of the wealth effect. For these reasons, we drop the Masters-Garfinkel results from further consideration.

When this is done, the agreement in estimated elasticities is much closer than is assumed to be the case. The range in uncompensated wage elasticities is from  $-.19$  to  $-.07$ . The range for income elasticities is  $-.29$  to  $-.17$ . These estimates imply that the effect of a negative income tax of a \$2400 income (1966 dollars) guarantee and a 50 percent tax rate on the covered male labor supply would be to reduce male labor supply by 8 to 15 percent in covered families.

#### IV. Summary, Conclusions, and Qualifications

This paper has demonstrated that independent estimates of prime-age male labor supply functions based on cross-section data display less diversity in the estimated coefficients than is commonly assumed to be the case once a few reasonable criteria are applied to evaluate existing studies.

We have focused our attention on the labor supply behavior of the group most frequently analyzed—prime-age males—and have deliberately kept to the traditional model most often utilized to interpret labor supply behavior. In choosing this demographic group, and the most elementary model of labor supply, we have abstracted from a host of problems discussed extensively elsewhere.<sup>22</sup>

Nonetheless, we find that the agreement among the reasonable estimates recorded in Table 1 is remarkable especially in view of different samples used, treatment of taxes, and control variables employed in the surviving studies. In our judgment, the range of admissible estimates could be and will be further eliminated as the data, theory, and empirical technique improve.

However, it is important to note that each study in our table can be faulted. We have pointed out these flaws, and have eliminated the most flagrantly biased estimates. We have not used all the criteria in Section II to eliminate the studies under consideration. The agreement in the remaining studies may arise either from the lack of practical importance of the potential defects we have mentioned, or because of a happy coincidence of offsetting errors.

<sup>22</sup> M. Killingsworth, "Labor Supply: A Survey," Princeton University, 1978.

## DISCUSSION

V. JOSEPH HOTZ

*Carnegie-Mellon University*

Kindled by the interest in such policy questions as the impact of income maintenance programs on labor supply behavior and the availability of large data sets with observations on individuals, the last few years have seen a good deal of attention paid to the estimation of income and substitution elasticities from labor supply equations. Numerous studies have attempted to cope with such potential problems as the use of selective samples, the endogeneity of income measures, and problems of mismeasurement of wage rate and income data. What is needed now, especially for policy purposes, is an evaluation of the empirical importance of these problems and of whether or not there exists a set of "consensus" estimates which can be used to evaluate the effect of various programs of the U.S. population's labor supply. The work of Borjas and Heckman is a first step at searching for such a consensus.

Borjas and Heckman consider nine different sets of elasticity estimates for the traditional, neoclassical labor supply model that were originally part of the volume on labor supply by Cain and Watts.<sup>1</sup> As Table 1 of their paper indicates, the range of estimates for uncompensated wage, compensated substitution, and total income elasticities is relatively large. The contention of their paper is that this range can be narrowed considerably by eliminating those studies which fail to deal with a number of problems that may lead to biased estimates of theoretically desired parameters. In particular, Borjas and Heckman propose to eliminate studies which use selective samples and inappropriate measures of dependent variable, which use work-related transfer payments as unearned income, and which include wage rate and income variables which suffer from measurement error. I can find no fault with the problems that Borjas and Heckman do address, and, as the work of DaVanzo et al. indicates,<sup>2</sup> labor supply elasticity estimates appear to be

---

<sup>1</sup> Glen G. Cain and Harold W. Watts, eds., *Income Maintenance and Labor Supply* (Chicago: Rand McNally, 1973). Note that the estimates of Masters and Garfinkel presented in Table 1 of the Borjas and Heckman paper are actually taken from Stanley Masters and Irwin Garfinkel, *Estimating the Labor Supply Effects of Income Maintenance Experiments* (New York: Academic Press, 1977).

<sup>2</sup> Julie DaVanzo, Dennis DeTray, and David Greenberg, "Estimating Labor Supply Response: A Sensitivity Analysis," Rand Corporation, R-1372-OEO, December 1973.



quite sensitive to how these problems are handled. But, let me briefly note some additional problems recently addressed in the literature which may be relevant for the behavior of the prime-age male population and which, preliminary evidence suggests, may induce nontrivial biases in the parameters of labor supply relationships.

The first problem concerns the presence of various types of constraints which may impinge upon individuals' labor supply decisions. The neoclassical model has incorporated the presence of a budget constraint which acts as a constraint on desired leisure consumption, but other types of constraints are also of potential importance. Constraints, such as the availability of only part-time work, and layoffs and spells of involuntary unemployment in general, tend to drive a wedge between desired hours of work generated by neoclassical labor supply models and observed hours of work. Recent studies by Ham<sup>3</sup> and Abowd and Ashenfelter,<sup>4</sup> which maintain the view that such constraints are exogenously imposed upon individuals, have found that labor supply elasticities of individuals identified as being "constrained," differ significantly from those individuals who are not constrained. This work, while still in its formative stages, suggests that the estimation of labor supply equations which fail to account for the presence of constraints on hours of work may result in biased estimates of the desired labor supply elasticities.

An alternative view of the above issue of constraints is that individuals jointly choose their labor supply and the set of constraints they will face. The recent literature on implicit labor contracts<sup>5</sup> suggests that individuals enter into employment agreements which entail a joint choice of a fixed wage rate and a set of probabilities for layoffs and/or dismissals. The empirical implications of this literature has only begun to be explored, but it suggests that (1) there may be significant interactions between the parameters of labor supply equations and occupational and industry choice, and (2) labor supply equations which fail to account for the endogeneity of the wage rate may suffer from a simultaneity bias in the wage elasticity estimates.

---

<sup>3</sup> John Ham, "Rationing and the Supply of Labor: An Econometric Approach," Industrial Relations Section, Princeton University, Working Paper No. 103, November 1977.

<sup>4</sup> John Abowd and Orley Ashenfelter, "Unemployment and Compensating Wage Differentials," unpublished paper presented at NBER-Universities Conference on Low Income Labor Markets, June 1978.

<sup>5</sup> Martin N. Baily, "Contract Theory and the Moderation of Inflation by Recession and by Controls," *Brookings Papers on Economic Activity*, No. 3, 1976, pp. 585-633; and Costas Azariadis, "Implicit Contracts and Underemployment Equilibria," *Journal of Political Economy* (December 1975), pp. 1183-1202.

Borjas and Heckman discuss the potential for biased elasticity estimates due to mismeasurement of wage rate and unearned income. There appear to be two aspects to this argument: (1) survey information may not allow one to measure actual wage rates and unearned income with complete accuracy, and (2) actual wage rates and unearned income may not accurately measure the theoretically desired variables for these models. With respect to this latter point, most of the studies considered implicitly assume that the appropriate model for analysis of labor supply effects is one in which lifetime average or "permanent" levels of wage rates and income are related to lifetime average labor supply.<sup>6</sup> From this perspective, the use of actual wage rates and income variables may induce measurement error biases in coefficients due to the presence of transitory components in these variables. Two points should be considered with regard to this question of the appropriate independent variables and question of their measurement. First of all, to the extent that some policies are temporary in nature, such as short-term income tax surcharges and/or temporary manpower or public employment programs, policy-makers may wish to know the elasticities of labor supply with respect to transitory changes in wages and income as well as those of permanent changes. Second, recent empirical investigations of this permanent and transitory dichotomy using panel data sets<sup>7</sup> suggest that transitory components of wage rates are autocorrelated over time rather than being serially uncorrelated. This finding provides another justification for Borjas and Heckman's skepticism for the use of imputed wage and income variables in regressions. Furthermore, it is not inconsistent with recent arguments by Heckman in his analysis of female labor supply<sup>8</sup> that there are important dynamic and life-cycle effects present in data on individuals which cover only a short period of their life cycles and that these effects may compromise our ability to estimate parameters of static, lifetime labor supply models.

I have no arguments with the set of studies Borjas and Heckman finally choose given their criteria, and they do succeed at narrowing the range of elasticity estimates. On this later point, I think they have shown that there is less diversity in the set of studies considered than Cain and Watts originally found.<sup>9</sup> But I also think one must be cautious

<sup>6</sup> See DaVanzo et al., p. 314.

<sup>7</sup> Lee A. Lillard, "Estimation of Permanent and Transitory Response Functions in Panel Data: A Dynamic Labor Supply Model," NBER Working Paper No. 185, July 1977.

<sup>8</sup> James J. Heckman, "A Partial Survey of Recent Research on the Labor Supply of Women," *American Economic Review, Papers and Proceedings* (May 1978), pp. 200-12.

<sup>9</sup> Cain and Watts, p. 331.

about rushing to some other conclusions which might appear warranted. First of all, I am not sure that one would want to conclude that Borjas and Heckman have arrived at the consensus estimates of labor supply elasticities for use in future policy evaluations. I think more confirmations of these numbers need to be found before we reach such agreement. For example, I think other data sets should be explored since, with the exception of the study by Fleisher, Parsons, and Porter, all of the other studies utilize the same data set, namely the Survey of Economic Opportunity. Second, I do not think one can conclude based on this paper that the net benefits of nonexperimental data outweigh those of data from the income maintenance experiments. This seems to remain an open question which will require further evaluation.

## **XIII. IRRA ANNUAL REPORTS FOR 1978**

---

### **IRRA EXECUTIVE BOARD SPRING MEETING**

May 13, 1978, Los Angeles

The IRRA Executive Board met at 7:30 p.m. on Thursday, May 13, 1978, in Los Angeles, with President Charles Killingsworth presiding. Attending were Secretary-Treasurer David R. Zimmerman, Editor Barbara D. Dennis, and members Bernard Anderson, Marcia L. Greenbaum, Lois Rappaport, and Donald Vial. Also attending were Benjamin Aaron, Irving Bernstein, Gerry Fellman, Elizabeth Gulesarian, and Douglas Soutar.

Secretary-Treasurer Zimmerman announced that the membership continues to rise, with 365 new members since January 1978 bringing the total membership to nearly 4500. This increase is particularly gratifying given the large promotion undertaken last year and continuing this year. A number of Board members suggested that promotional material be sent to local chapter members reminding them that if they are members of the National Association they will be listed in and will receive a copy of the IRRA Directory. Local chapter presidents could send this material in their announcements of local chapter meetings in the next year. The National Association will write to local chapter presidents requesting their assistance and asking for an estimate of the number of local chapter members to whom announcements will be sent.

Mr. Zimmerman reported that in general the Association was in stronger financial condition, and that for the first time it can pay all 1977 expenses out of 1977 dues and have some funds in reserve for life membership obligations. However, the increasing costs of publications generally, and the Directory in particular, will significantly increase the cash outflow in the coming year.

Mr. Zimmerman reported the slate of candidates for the 1978 Fall Executive Board Election. They are: Jean Boivin, Lily Mary David, John Fryer, Gladys Gershenfeld, Robert D. Helsby, Raymond W. MacDonald, Felix Quinet, Sidney W. Salsburg, Thurman M. Sanders, and Donald H. Wollett. Charles Killingsworth reported that he will announce the members of the nominating committee for the 1979 slate of candidates soon.

Mr. Killingsworth announced his nominations for the standing program committee, which was authorized by the Board at its December 1977 meeting. President-elect Rosow was consulted and concurred in these nominations. The nominees for 1979 were: Bernard Anderson, John Burton, Henrietta Dabney, Marcia Greenbaum, Rudolph Oswald, A. H. Raskin, George Strauss, and Paul Yager, in addition to the immediate past president, current president, president-elect, secretary-treasurer, and editor. All the nominees were approved by the Board. A number of questions were raised concerning the number of members authorized to serve on the committee and who should be the chairperson of the committee. It was agreed that during this transition year the President would serve as chairperson and from then on the President-elect would chair the committee, and that an expanded committee would be used during the first year.

The Executive Board next heard a report from Secretary-Treasurer Zimmerman on the progress of the Comprehensive Review Committee report. Mr. Zimmerman announced that, as requested by the Executive Board at its December 1977 meeting, a questionnaire designed to elicit the opinions of the membership on the recommendations of the Comprehensive Review Committee had been drafted, reviewed by the members of the Executive Board and the Review Committee, and sent to each member of the National Association. The results would be tabulated by the IRRA office and presented to the Executive Board at its August meeting in Chicago.

Barbara Dennis then presented the editor's report. She reported that the Proceedings of the December 1977 Meetings will be approximately 450 pages in length and could cost more than \$20,000 to publish. Ms. Dennis noted that we would be using a different printer this time, after taking bids for the publication of the Proceedings. She stated that she would be distributing publication instructions to presenters at the Chicago Meetings, and she noted that if the IRRA was going to increase the length of papers from 3000 to 4200 words, it was necessary to reduce the number of papers in order to prevent a large increase in publication costs.

Ms. Dennis also reviewed the status of the Collective Bargaining volume, being written under contract with the Department of Labor. Seven of the ten chapters have been sent to Washington for review. Two others are in the typing stage and one has been submitted in first draft form. Jack Barbash has also started a first draft of the summary chapter. Ms. Dennis noted that the chapters are running quite long, 80-90 pages each, and that the entire volume could be excessively lengthy. She re-

ported that she does not know at this point whether DOL will publish the volume. The Bureau of National Affairs was suggested as an alternative publisher. Ms. Dennis said that she will pursue this possibility with BNA, and that she will also check to see whether DOL will publish the volume.

Mr. Aaron reviewed the status of the 1978 Research Volume on Public Sector Collective Bargaining. He noted that the chapters seemed to be progressing smoothly and that he believes the volume will be a valuable contribution to the literature in this area. He raised the possibility of an outside publisher and suggested that this may be something the IRRA would like to pursue. Ms. Dennis said that she will also pursue with BNA the possibility of publishing the Research Volume. David Zimmerman then reviewed the status of the 1979 IRRA Directory. He stated that a contract had been signed for the printing of the Directory with the same printing firm that we will be using for the Proceedings. The membership questionnaires for the Directory will be sent out in the fall and it is expected that the Directory will be published in early 1979.

Charles Killingsworth reported on the status of the 1980 Research Volume. He suggested deferring a decision on the subject area of the Research Volume until the August meetings. In the interim he will meet with Jack Stieber, who has expressed willingness to take on the responsibility for the volume. Stieber was thinking of a volume on grievance procedures. Stieber and Killingsworth will have a suggested topic for the volume at the August meetings.

Applications for affiliation from two new local chapters were announced by David Zimmerman. The applications came from the Alamo chapter in Texas and the Oregon chapter in Portland, Oregon. The by-laws and programs of the two chapters conform to the national constitution and by-laws. A motion for approval of the two new chapters was passed unanimously by the Executive Board. Charles Killingsworth also reviewed the situation with respect to a proposed Syracuse chapter. After some discussion about whether or not there was local support for the Syracuse chapter, it was decided that the National Association will take no action until a formal proposal for affiliation of the Syracuse chapter is received. Such a proposal will be reviewed in the same manner as other local chapter requests for affiliation.

President Killingsworth then reviewed the developments on the appeal by the St. Louis chapter for reconsideration of the Board's decision about the 1979 Spring Meeting site. He noted that he had polled the members of the Executive Committee by mail about whether or not the

Board's decision should be reconsidered and, if so, whether or not St. Louis would be designated as the 1979 Spring Meeting site. He then announced the results of that vote, which were 9 in favor of reconsideration and 3 opposed to consideration; subsequently, 8 voted in favor of establishing St. Louis as the Spring Meeting site and 3 voted against the establishment of St. Louis as the site. Therefore, St. Louis will be the site of the 1979 Spring Meetings.

President Killingsworth next reported on the progress of the August meeting in Chicago. He noted that having one meeting in December and the next meeting in August of the following year did not leave much time for adequate consideration of the program and that consequently some arbitrary choices were inevitable.

No other business was initiated and the meeting was adjourned by President Killingsworth at 9:45 p.m.

## IRRA EXECUTIVE BOARD ANNUAL MEETING

August 29, 1978, Chicago

The IRRA Executive Board met at 6 p.m. Tuesday, August 29, 1978, with President Charles C. Killingsworth presiding. Attending were Incoming President Jerome R. Rosow, President-Elect Jack Barbash, Secretary-Treasurer David R. Zimmerman, Editor Barbara D. Dennis, and members Bernard E. Anderson, Jean Boivin, Ben Burdetsky, Gladys Gershenfeld, Marcia L. Greenbaum, Robert D. Helsby, James E. Jones, Jr., Raymond W. McDonald, Jerome A. Mark, Bertram N. McNamara, Lois A. Rappaport, Markley Roberts, Bernard L. Samoff, and Donald H. Wollett. Also present were James Crawford, Gladys Gruenberg, Richard Lester, Conchita Poncini, Douglas Soutar, and Jack Stieber.

Secretary-Treasurer Zimmerman announced that the total current membership of the Association was 4,622, which reflects an increase of almost 600 members (or 15 percent) in the past two years. He noted that the prospects for continued growth of the Association were good, although this growth would probably be less rapid than in recent years. Mr. Zimmerman reported that the Association's cash and investment position as of June 30, 1978, was \$36,477 and that for fiscal 1978 the excess of income over expenditures was approximately \$1,000. He noted that while the Association was in relatively strong financial condition at the present time, projected expenses will significantly increase the cash flow in the next fiscal year, particularly because of the publication of the next edition of the Association's Directory. In addition, he pointed out

that the costs of the Association's publications in general have risen substantially in recent years.

Because of these increasing costs, Mr. Zimmerman recommended an increase in membership dues. He noted that, under the amended Association bylaws, the Executive Board has the authority to raise dues by an amount proportional to the cost of living. On that basis, Mr. Zimmerman recommended an increase in regular membership dues and subscriptions to \$24.00 per year, in contributing membership dues to \$65.00 per year, and in dues of students, retired persons, and foreign members to \$7.50 per year. A motion to this effect was made, seconded, and passed. Mr. Zimmerman also recommended increases in the salaries of the IRRA office staff. These recommendations were approved by the Board.

Mr. Zimmerman also reported the results of the 1978 elections, as certified by the Committee on Elections. The results were as follows: Jerome R. Rosow, president; Jack Barbash, president-elect; executive board members, Jean Boivin, Gladys Gershenfeld, Robert D. Helsby, Raymond W. McDonald, and Donald H. Wollett.

The Secretary-Treasurer reported that no chapters had applied for affiliation with the national Association since the Spring Meeting in Los Angeles. At that time applications for affiliation from two new local chapters—the Alamo Chapter in Texas and the Oregon Chapter in Portland, Oregon—were approved by the Executive Board.

President Killingsworth read a letter from a charter member protesting the "politicalization" of the Association in the decision of the Executive Board at its 1977 New York meeting to hold spring meetings only in states where the Equal Rights Amendment had been ratified. President Killingsworth also said that he had received a letter from a group at Michigan State University favoring the Board's decision. He noted that the IRRA had made a firm commitment to hold fall/winter meetings in conjunction with ASSA, that the decision for the Chicago site was made in 1971, and that contracts had been signed around that time. The decision for the Atlanta meeting, he pointed out, was made in 1972 or 1973.

Conchita Poncini gave a report on plans for the fifth World Congress of the International Industrial Relations Association (IIRA) in Paris in September 1979. She noted that the registration fee will be 350 French francs. The Association was also informed that it must elect a representative on the IIRA Council to replace Gerald Somers. It is the Association's understanding that this individual will also be on the Executive



Committee of the IIRA. A motion was made that a committee be constituted, to be composed of the most recent past president, the current president, and the president-elect, to select a nominee for the IIRA Council position, with the nominee's name to be presented to the IIRA Executive Board for confirmation; that a member of the nominating committee may be selected as the nominee; and that the Association cannot make an open-ended commitment to support the nominee's expenses in attending meetings of the IIRA Council or Executive Committee but that individual requests for assistance in meeting those expenses would be considered by the IIRA Executive Board. This motion was seconded and passed.

Gladys Gruenberg, St. Louis arrangements chairperson, reported on plans for the 1979 Spring Meeting in St. Louis. She recommended changing the dates of the meeting from Thursday through Saturday to Wednesday through Friday; the meeting is now planned for Wednesday, April 25, through Friday, April 27, at the Bel Air Hilton Hotel on the riverfront. The hotel will provide a \$28.00 single room rate for the meetings. She also outlined in general the program for the meeting, which was approved by the Executive Board. The central theme of the meeting will be "New Developments in Collective Bargaining—What Practitioners Need to Know and How Researchers Can Help Them Plan for the Future."

Editor Barbara Dennis gave a report on various IIRA publications. She announced that the 1978 Spring Meeting Proceedings were being shipped from Commerce Clearing House the last week in August and that they should be in the mail to members within a couple of weeks.

The Bureau of National Affairs will be publishing the 1978 research volume on Public-Sector Bargaining. Seven of the nine chapters have been delivered to BNA and are being set in type. The cost to the Association for 5,000 paperbound copies is \$9,000, provided that the volume is no longer than 300 pages. BNA will pay 10 percent royalties after the 5,000. BNA also has the authority to determine the price of the volume. The Board recommended that a request be made for the identification of IIRA on the cover of the volume.

Questionnaires will be mailed to members in September as the first step in gathering information for the 1979 IIRA Directory. The Directory will be an expensive publication, much more so than the annual research volumes. Three bids for publication of the Directory were received and the low bid was accepted. There was some discussion of including advertisements in the Directory to help meet costs, but the

Board felt that ads would detract from the dignity of the Directory. Current plans call for the Directory to be mailed to members in May 1979.

With respect to the collective bargaining volume project, nine of the ten industry studies have been sent to the Department of Labor for comment. The Association has received DOL comments on four chapters. Jack Barbash, who is replacing Gerald Somers as author of the concluding chapter, has finished a first draft of that chapter. The contract deadline for the project has been extended to October 1, 1978, and the Association expects to meet that deadline. It is uncertain whether the Department of Labor, which has first publication rights, will publish the volume or whether responsibility for publication will revert to the Association. The Board agreed that the volume was an important one and that efforts should be made to publish it as soon as possible. The Board recommended that the officers pursue alternative publication possibilities in the event the Department of Labor decides not to publish the volume.

Jack Stieber has agreed to be chairman of the Editorial Board for the 1980 research volume. The topic proposed is a Critical Assessment of the U.S. Industrial Relations System. A motion was passed approving Jack Stieber as editor and Bob McKersie of Cornell and Quinn Mills of Harvard as members of the editorial board for the volume. Permission was granted to Jack Stieber to seek a small foundation grant in order to permit the authors to perform their editorial functions. No decision on editors or topic for the 1981 research volume has been made.

President Killingsworth and James Crawford, Atlanta local arrangements chairman, gave a short report on the 1979 Annual Meeting in Atlanta. The Hilton Hotel will be the ASSA headquarters for the meetings, which will be held December 28 through 30. IRRA hotel arrangements have not been made as yet. Several board members and officers stated that they had received requests from members for a separate IRRA registration in the hotel in which the Association had its headquarters. President Killingsworth noted that this issue had arisen previously and that the Association had not had much luck in persuading the ASSA to permit separate registration for the IRRA. He also noted that in a 1973 membership referendum the members of the Association voted to continue holding the IRRA Annual Meetings in conjunction with the ASSA meetings. Incoming President Rosow said that he would undertake the task of negotiating with the ASSA before the Atlanta meeting about the site registration procedures.

A major item on the Board's agenda was further discussion of the

report and membership survey on the recommendations of the Comprehensive Review Committee, chaired by Richard Lester. Secretary-Treasurer Zimmerman gave a general overview of the results of the membership survey on the recommendations made by the committee. A copy of the results of the membership survey is included at the end of the minutes of the Board meeting. He noted that the members had approved many of the recommendations of the committee, some overwhelmingly. Considerable discussion then took place about appropriate ways to inform the members about the committee's report, but no action was taken by the Board on this issue.

The Board then discussed each of the recommendations individually. With respect to increasing the size of the IRRA Newsletter, a number of Board members raised questions about the costs and contents of an expanded Newsletter. President Killingsworth informed the Board that Ohio State University had offered to edit the Newsletter. It was suggested that the Association pursue this possibility, as well as offering the same opportunity to other organizations. After much discussion, a motion was made and passed to defer discussion on the expanded Newsletter, as well as the various strategies outlined to fund the Newsletter, until the Executive Board meeting at either the 1979 Spring Meeting in St. Louis or the 1979 Annual Meeting in Atlanta. During this time the incoming president will appoint a committee to obtain specific estimates of the costs and the contents of an expanded Newsletter and to examine the implications of the cost-savings strategies. The committee will present the various options to the Board so that it can make a judgment at either of the two meetings.

Pursuant to the recommendation of the Comprehensive Review Committee, the Executive Board passed a motion approving the establishment of an IRRA standing committee on the labor market for the services of trained personnel in the industrial relations field. The Board also stipulated that any publications of this committee would be without charge to the Association. The Board also approved the Lester Committee's recommendation that one of the expressed purposes of the Association should be "the strengthening of common interests between researchers and practitioners in the field of industrial relations."

The next item discussed was the committee's recommendation that the local chapters be given primary responsibility for planning and managing the spring meetings. It was noted that in recent years the local chapters have already become much more involved in the plans and activities associated with the spring meetings. After much discussion, the Board approved a statement of general intent favoring greater involve-

ment of local chapters in the spring meetings, depending upon the size, desire, interest, and closeness of the local chapters. A motion was approved to continue to encourage the local chapters to participate in planning the spring meetings. The Board stipulated, however, that the National Association will maintain financial and overall responsibility for the spring meetings and that no changes will take place in the existing arrangements between the national organization and local chapters in this regard. It was also suggested that a manual be developed to assist the local chapters in planning the spring meetings, as well as their role in the annual meetings.

A number of questions were raised about the committee's recommendation that the IRRA encourage and assist local chapters to form regional and/or national connections for such purposes as exchanging information and experience and in conducting regional meetings. Some members were unsure of what types of regional or national connections would be appropriate. Others expressed the opinion that in many cases such connections had already been developed on an informal basis. The Board stated that it was opposed to having the National Association assist local chapters to form connections as "an undesirable and unnecessary burden for the National Office." A motion was passed to defer action on the committee's recommendation until it can determine how well informal encouragement works. The Board also agreed to table the committee's recommendation that a complete mailing list of local chapters' membership be compiled each year.

The Board expressed its appreciation for the efforts of the Comprehensive Review Committee and particularly those of Richard Lester. President Killingsworth stated that he would include a formal expression of thanks to Dean Lester and the members of the committee in his report to the membership meeting the following day.

The Board then discussed the use of and the rates for the use of the IRRA membership mailing list. After a short discussion of appropriate uses of the mailing list, President Killingsworth suggested that the National Office remain alert to prevent objectionable use of the lists. This suggestion was approved by the Board. A suggestion was also made that the rates for the use of the mailing list should be increased. Incoming President Rosow noted that the rates for the use of mailing lists vary from \$35 to \$70 per thousand, depending on the quality, and that he believed that the IRRA's mailing list could go in the higher part of that range. The Board approved a resolution to give the officers of the national Association the authority to set the rates for the use of the mailing list.

On behalf of the Nominating Committee, Chairman Vernon Briggs reported the committee's recommendations for president-elect and for the candidates for the Executive Board to replace those members who will be completing their terms in 1979. The Board unanimously approved the committee's recommendation, with thanks to members of the committee. The election will be held in the fall of 1979.

The Board then considered the site for the 1980 Spring Meeting. Three local chapters—West Virginia, Philadelphia, and Wisconsin (Milwaukee)—had submitted invitations to be sites for the Spring Meeting. The Board voted to hold the 1980 Spring Meeting in Philadelphia.

The meeting was adjourned at 12:50 a.m.

#### RESULTS OF MEMBERSHIP SURVEY ON RECOMMENDATIONS OF COMPREHENSIVE REVIEW COMMITTEE

Number of members responding: 763

<i>Questions</i>	<i>Response</i>
1a. Would you favor an expanded <i>Newsletter</i> , assuming the expansion could be financed by the three cost-saving means set forth in item 2 below?	Percent responding yes: 71% Percent responding no: 24% Percent not responding: 5%
1b. Would you favor an expanded <i>Newsletter</i> , if it were to be financed by a \$2.00 increase in annual dues?	Percent responding yes: 60% Percent responding no: 36% Percent not responding: 4%
2a. Would you favor a ceiling of 320 pages on the length of the Winter proceedings, involving a 50-page reduction in the average length for recent years (estimated cost saving of about \$2,000)?	Percent responding yes: 59% Percent responding no: 37% Percent not responding: 4%
2b. Would you favor a ceiling of 210 pages on the length of the annual research volume, involving a 35-page reduction on the average length for recent years (estimated cost saving of about \$1,600)?	Percent responding yes: 51% Percent responding no: 43% Percent not responding: 6%

- |   |   |
|---|---|
| 2c. Would you favor that the IRRA discontinue its current practice of buying from the Commerce Clearing House and sending to members a copy of the Spring Meeting proceedings? The proceedings are regularly published in the August issue of the <i>Labor Law Journal</i> prior to the mailing of reprints to members (estimated cost saving about \$2,500)? | Percent responding yes: 47%<br>Percent responding no: 49%<br>Percent not responding: 4% |
| 3a. Do you favor the establishment of an IRRA standing committee on the labor market for the services of trained personnel in the industrial relations field?   | Percent responding yes: 82%<br>Percent responding no: 16%<br>Percent not responding: 2% |
| 4a. Do you approve of the Committee's recommendation that one of the expressed purposes of the Association should be "the strengthening of common interests between researchers and practitioners in the field of Industrial Relations?"  | Percent responding yes: 93%<br>Percent responding no: 5%<br>Percent not responding: 2%  |
| 5a. Do you approve of the Committee's recommendation that the local chapters be given the primary responsibility for planning and managing the spring meetings?   | Percent responding yes: 82%<br>Percent responding no: 13%<br>Percent not responding: 5% |
| 6a. Do you approve of the Committee's recommendation that IRRA encourage and assist local chapters to form regional and/or national connections for such purposes as exchanging information and experience and conducting regional meetings?  | Percent responding yes: 86%<br>Percent responding no: 10%<br>Percent not responding: 4% |
| 7a. Do you approve of the Committee's recommendation that a complete mailing list of local chapter mem-   | Percent responding yes: 87%<br>Percent responding no: 10%<br>Percent not responding: 3% |

bers be compiled each year, which would provide mailing addresses and other information for use by the national IRRA and local chapters?

- |  |   |     |
|--|---|-----|
| 8. Do you have concerns and views on one or more of the subjects in the questionnaire that you would like to express here? | Percent of respondents offering additional comments:    | 20% |
|  | Percent of respondents offering no additional comments: | 80% |

## IRRA GENERAL MEMBERSHIP MEETING

August 30, 1978, Chicago

President Charles C. Killingsworth opened the meeting by expressing his thanks to the staff members and officers of the national Association for a productive year. He also briefly explained the selection of St. Louis as the site for the 1979 Spring Meeting, noting that St. Louis had formally appealed the decision by the Executive Board at its New York meeting, and that the members of the Executive Board had voted by mail to reconsider the earlier Board decision and to hold the 1979 meeting in St. Louis. President Killingsworth then presented a general discussion of the activities of the Comprehensive Review Committee and the deliberations of the Executive Board on the committee's recommendations. He expressed the thanks of the members and the officers of the Association for all of the many hours and weeks that the Lester Committee had put in. He reminded the members that in December the Executive Board had adopted those recommendations of the Lester Committee that did not involve a change in the bylaws and some additional expenditure that might affect the dues level. President Killingsworth informed the members that the Executive Board at its meeting the previous evening had adopted some of the committee's recommendations and had deferred action on other recommendations until more specific information about the implications of the recommendations was available.

Secretary-Treasurer David R. Zimmerman presented a report on the membership and finances of the Association. He noted that the current membership of the Association, approximately 4,600 people, represented a 15 percent increase in the last two years. He also stated that the Asso-

ciation was in relatively good financial position at the moment, but that inflation, particularly involving the increasing costs of the Association's publications, would put an increasing burden on the Association's finances in the coming year. In particular, he noted the high cost of publishing the 1979 Membership Directory. Because of these increasing costs, Mr. Zimmerman announced that the Executive Board had approved an increase in membership dues for regular members and subscriptions to \$24.00, for contributing members to \$65.00, and for student, retired, and foreign members to \$7.50. He noted that the Board has the authority to increase dues without membership referendum by an amount proportional to increases in the cost of living. Mr. Zimmerman also announced the results of the most recent annual election.

Editor Barbara D. Dennis then presented to the members a report on the status of the research volume for 1978, the 1979 Membership Directory, the collective bargaining volume being written under contract with the Department of Labor, and the 1980 and 1981 research volumes. Gladys Gruenberg, St. Louis local arrangements chairperson, then gave a short report on the 1979 Spring Meeting to be held April 25 through 27 at the Bel Air Hilton Hotel in St. Louis. The central theme of the meeting will be "New Developments in Collective Bargaining—What Practitioners Need to Know and How Researchers Can Help Them Plan for the Future."

A member of the Association then requested that the ERA issue be put to a membership referendum. President Killingsworth said that this request should be taken up by the Executive Board at its next meeting.

Another member reported that concern had been expressed at the Dissertation Round Table about the narrowness of the program at the Chicago Meeting and the Spring Meeting, and that insufficient emphasis had been placed on the organizational behavior area. President Killingsworth responded that the organizational behavior area had been included at the New York meeting, and he expressed his belief that the broadly based program committee that is now responsible for planning the annual meetings should be helpful in developing a diversified program content for the meetings. A question was also asked about the future of the Contributed Papers sessions. President Killingsworth responded that he thought there had been progress made in this area, with the number of Contributed Papers sessions being increased to three at the Chicago Annual Meeting. He noted that one alternative for the program committee would be to increase the number of Contributed Papers sessions at the meetings.

A member of the Association then extended an invitation for the



Association to hold an upcoming spring meeting in Israel. President Killingsworth said that this invitation could also be considered by the Board at its next meeting. The meeting was adjourned by President Killingsworth.

## IRRA AUDIT REPORT

We have examined the statement of cash and investments of the Industrial Relations Research Association as of June 30, 1978 and 1977 and the statement of cash receipts and disbursements for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As described in Note 1, the Association's policy is to prepare financial statements on the basis of cash receipts and disbursements; consequently, certain revenue and the related assets are recognized when received rather than earned and certain expenses are recognized when paid rather than when the obligation is incurred. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly the cash and investments of the Industrial Relations Research Association as of June 30, 1978 and 1977 and the cash transactions for the years then ended, on the basis of accounting described in Note 1, which basis has been applied in a manner consistent with that of the preceding year.

SMITH & GESTELAND  
Certified Public Accountants

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION  
Madison, Wisconsin  
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS  
For the Years Ended June 30 1978 and 1977

	1978	1977
Cash and investments—July 1	\$ 35,440.81	\$28,977.47
Cash Receipts		
Membership dues	\$ 60,407.50	\$50,815.00
Chapter dues	1,925.50	2,896.20
Subscriptions	8,931.00	6,555.00
Sales	10,088.54	7,867.92
Royalties	1,009.27	384.30
Mailing list	3,222.27	2,052.40
Travel, conferences and meetings	13,515.05	8,096.18
Interest income	2,089.60	1,651.03
Miscellaneous		56.50
Gain on Redemption of Bond	580.38	525.12
Total cash receipts	\$101,769.11	\$80,899.65
Cash Disbursements		
Salaries and payroll taxes	\$ 23,234.39	\$18,393.68
Retirement plan	2,669.40	2,518.32
Honorarium	3,000.00	1,000.00
Postage	4,386.86	4,046.03
Services and supplies	5,495.21	7,153.66
Publications and printing	45,020.21	32,819.34
I. R. R. A. conferences and meetings	15,140.79	7,062.48
Telephone and telegraph	768.49	680.08
Miscellaneous	317.31	162.72
Audit	700.00	600.00
Total cash disbursements	\$100,732.66	\$74,436.31
Excess of receipts over disbursements	\$ 1,036.45	\$ 6,463.34
Cash and investments—June 30	\$ 36,477.26	\$35,440.81

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION  
Madison, Wisconsin

STATEMENT OF CASH AND INVESTMENTS  
June 30, 1978 and 1977

	1978	1977
CASH		
Checking account—First Wisconsin National Bank of Madison	\$ 802.43	\$ 7,285.96
Golden Passbook—90 day—First Wisconsin National Bank of Madison	8,347.08	101.48
Golden Passbook—1 yr.—First Wisconsin National Bank of Madison	5,458.64	5,140.79
Golden Passbook—2½ yr.—First Wisconsin National Bank of Madison	21,869.11	20,492.96
CORPORATE BONDS (At Cost)		
\$3,000 United Gas Pipeline Co. 5%—3/1/78 (market value 6/30/77—\$2,970)	_____	2,419.62
Total Cash and Investments	<u>\$36,477.26</u>	<u>\$35,440.81</u>

NOTES TO FINANCIAL STATEMENTS, June 30, 1978 and 1977

NOTE 1—ACCOUNTING POLICIES

Financial statements are prepared on the basis of cash receipts and disbursements. Revenue is recognized when received and expenses are recognized when paid.

NOTE 2—LINE OF BUSINESS

The association is a nonprofit association. Its purpose is to provide publications and services to its members in the professional field of industrial relations.

NOTE 3—RETIREMENT PLAN

The association has a retirement annuity contract covering the executive assistant. The amount of funding in 1978 and 1977 was \$2,669 and \$2,518, respectively. These amounts are treated as additional compensation to the executive assistant.

NOTE 4—TAX EXEMPT ORGANIZATION

The association is exempt from income tax under Section 501 (c)(3) of the Internal Revenue Code.



## ALPHABETIC LIST OF AUTHORS

Aaron, Henry .....	46	Killingsworth, Charles C. ....	1
Alfino, Anthony P. ....	120	Kingston, Jerry L. ....	39
Aram, John D. ....	299	LaVan, Helen .....	291
Baderschneider, Jean .....	162	Layng, W. John. ....	250
Barclay, Lizabeth A. ....	96	Leahy, William .....	280
Becker, Brian E. ....	125	Lewin, David .....	172
Beller, Andrea H. ....	317	Martin, James E. ....	96
Biasatti, Lawrence L. ....	96	Martin, Philip .....	149
Borjas, George J. ....	320	Mattila, J. Peter. ....	134
Borus, Michael E. ....	180	Mitchell, Daniel J. B. ....	264
Burgess, Paul L. ....	39	Olson, Craig A. ....	111
Cook, Robert F. ....	208	Oppenheimer, Margaret ....	291
Dillingham, Alan E. ....	165	Parnes, Herbert S. ....	176
Dworkin, James B. ....	87	Pestillo, Peter J. ....	233
Feuille, Peter .....	87	Prosten, Richard .....	240
Fineshriber, Phyllis H. ....	35	Pursell, Donald E. ....	141
Flaim, Paul O. ....	188	Raskin, A. H. ....	223
Fleming, R. W. ....	14	Roberts, Markley .....	83
Friedman, Barry L. ....	71	Roomkin, Myron .....	212
Friedman, Marvin .....	276	Rose, Joseph B. ....	103
Fullerton, Howard N., Jr. ...	188	Rubinfeld, Stephen .....	314
Gandz, Jeffrey .....	167	Saks, Daniel H. ....	79
Hamermesh, Daniel S. ....	180	Salipante, Paul F., Jr. ....	229
Hausman, Leonard J. ....	71	Salsburg, Sidney W. ....	271
Heaton, Cris .....	149	Schramm, Carl J. ....	158
Heckman, James J. ....	320	Sheifer, Victor J. ....	257
Hills, Stephen M. ....	125	Singer-Sandler, Paula .....	308
Hollister, Robinson G. ....	57	Todd, John .....	46
Hoover, Jack .....	280	Torrence, William D. ....	141
Horn, Robert Neil. ....	170	Vroman, Wayne .....	24
Hotz, V. Joseph. ....	332	Wurzburg, Gregory K. ....	201
Juris, Hervey A. ....	212		

*Also in the*

*Industrial Relations Research Association Series*

**THE NEXT TWENTY-FIVE YEARS OF INDUSTRIAL RELATIONS**

*Edited by* Gerald G. Somers. Twenty-Fifth Anniversary Volume (1973)  
206 pages \$6.00

**ORGANIZATIONAL BEHAVIOR RESEARCH AND ISSUES**

*Edited by* George Strauss, Raymond E. Miles, Charles C. Snow, and  
Arnold S. Tannenbaum (1974)  
236 pages \$6.00

**COLLECTIVE BARGAINING AND PRODUCTIVITY**

*Edited by* Gerald Somers, Arvid Anderson, Malcolm Denise, and  
Leonard Sayles (1975)  
194 pages \$6.00

**FEDERAL POLICY AND WORKER STATUS SINCE THE THIRTIES**

*Edited by* Joseph P. Goldberg, Eileen Ahern, William Haber,  
and Rudolph A. Oswald (1976)  
269 pages \$7.50

**EQUAL RIGHTS AND INDUSTRIAL RELATIONS**

*Edited by* Leonard J. Hausman, Orley Ashenfelter, Bayard  
Rustin, Richard F. Schubert, and Donald Slaiman (1977)  
281 pages \$7.50

**PUBLIC-SECTOR BARGAINING**

*Edited by* Benjamin Aaron, Joseph R. Grodin, and James L.  
Stern (1978)  
315 pages \$12.50

(Available in hard cover from Bureau of National Affairs, Inc.,  
1231—25th Street, N.W., Washington, D.C. 20037)

**MEMBERSHIP DIRECTORY 1979**

(in process for 1979 publication)

Book orders and requests for prices and order forms for other IRRA publi-  
cations (including Proceedings of the Annual and Spring Meetings and  
Membership Directories) should be sent to the IRRA office.

**INDUSTRIAL RELATIONS RESEARCH ASSOCIATION**  
7226 Social Science Building, University of Wisconsin  
Madison, Wisconsin 53706 U.S.A.

**IRRA  
SERIES**

Thirty-  
First  
Annual  
Proceed-  
ings  
Chicago

Unemploy-  
ment

Labor  
Manage-  
ment  
Relations

Labor  
Markets

Disserta-  
tions

Employ-  
ment  
Policy

Union  
Organizing

Wages  
and the  
CPI

Civil  
Rights

Labor  
Economics