

**INDUSTRIAL RELATIONS
RESEARCH ASSOCIATION SERIES**

**Proceedings of the Twenty-Eighth
Annual Winter Meeting**

**DECEMBER 28-30, 1975
DALLAS**

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EDITED BY JAMES L. STERN AND BARBARA D. DENNIS

PROCEEDINGS OF THE TWENTY-EIGHTH ANNUAL WINTER MEETING.
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PREFACE

Reflecting the diverse interests of the membership, the program of the Association's Twenty-Eighth Annual Winter Meeting, at the Dallas Convention Center, offered sessions on current topics—ranging from urban labor markets in less developed countries, rural labor markets in the U.S., public service employment, and employee compensation, to unemployment insurance, adjustment assistance for import-impacted workers, and collective bargaining in the federal service and in the universities.

In the presidential address, Gerald G. Somers discussed collective bargaining and the social-economic contract, pointing directions that unions and managements, in their contract relationship, might move in solving some of today's critical social problems.

An innovation for IRRA meetings was the first day's series of informal workshops during which practitioners and academicians exchanged views on the impact of productivity on labor-management relations, public sector labor relations problems, mediation and arbitration, collective bargaining and equal employment, and the teaching of industrial relations. Again, two sessions were devoted to Contributed Papers by young scholars who had not previously appeared on IRRA programs. The review panel for the Contributed Papers sessions, chaired by Thomas H. Patten, Jr., and Irving Bernstein, was composed of Jean McKelvey, Michael L. Moore, Collette Moser, Arthur Saltzman, and Betty V. Schneider.

The Association is grateful to Gerald Somers for arranging the program, to Donald L. Caruth for handling the local arrangements, and to the authors of papers and the discussants for their cooperation in preparing their manuscripts for publication. As in so many past years, Betty Gulesserian's help with the arrangements, the planning of the program, and the preparation of the Proceedings was invaluable.

James L. Stern
Barbara D. Dennis
Co-editors

Madison, Wisconsin
February 1976

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 4,000 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.

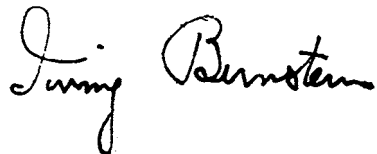
Membership dues cover publications for the calendar year, January 1 through December 31, and entitle members to the *Proceedings of the Annual Winter Meeting*, *Proceedings of the Annual Spring Meeting*, a special research volume (*Membership Directory-Handbook* every six years), and quarterly issues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

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Sincerely yours,



IRRA President 1976

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NEW DEVELOPMENTS IN LABOR MARKET DYNAMICS (With the American Economic Association) Edward Kalachek, Chairperson

A Simulation Model of the Demographic Composition of Employment, Unemployment, and Labor Force Participation	CHARLES C. HOLT, RALPH E. SMITH, RICHARD S. TOIKKA, AND WILLIAM J. SCANLON
The Stability of Racial Unemployment Differentials	ROBERT J. FLANAGAN
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December 28, 1975

Productivity: Impact on Labor-Management Relations

John Popular, FMCS, Chairperson

Panel: Joseph Bania, FMCS, Buffalo

George Siroli, United Steelworkers of America

John H. Coleman, Consolidated Aluminum Corporation

William Batt and Ed Weinberg, National Commission on
Productivity and Work Quality

Walter J. Gershenfeld, Temple University

Should Arbitration Decisions Be Published?

James C. McBrearty, University of Arizona, Chairperson

Panel: Mario F. Bognanno, University of Minnesota

L. Lawrence Schultz, FMCS

James J. Sherman, South Florida University

Michael J. Jedel, Georgia State University

Employment Problems in the Public Sector

Helena LaVan, DePaul University, Chairperson

Panel: "Employee Attitude Change in the Dismantling of a Federal
Agency," Richard Babcock, DePaul University

"Survey Research on Mid-Career Change in the Armed Forces,"
Robert Wilcox, Oakton Community College, and Mary Ann
Lawson, USDL, Region 5

"Manpower Needs in the Criminal Justice System," Harold Wool,
National Planning Association

Is Mediation an Art or a Science?

Carlton F. Wallmark, FMCS, Region 6, Chairperson

Panel: William J. Meagher, FMCS, Region 6

Nancy Connolly Fibish, FMCS

Donald Bennett, ITT Continental Baking Company

Teaching Industrial Relations at the Graduate Level

Jack Stieber, Michigan State University, Chairperson

Panel: Donald Cullen, Cornell University

John C. Shearer, Oklahoma State University

Walter Franke, University of Illinois

Michael Moore, Michigan State University

What Can Practitioners Learn from Research on Public Sector Labor Relations?

Donald L. Caruth, Caruth, Rachel, and Wheeler, Dallas, Chairperson

Panel: Lloyd Bailer, Arbitrator

Robby Collins, Dallas Independent School District

Herb Cooke, Classroom Teachers of Dallas

Pierson Ralph, City of Dallas

Martin Wagner, University of Illinois

The Contribution of Collective Bargaining to Equal Employment

Alice Kidder, North Carolina A&T University, Chairperson

Panel: James N. Adler, Munger, Tolles, Rickershausen, Los Angeles

Eleanor M. Glenn, Service Employees International Union

James E. Jones, Jr., University of Wisconsin—Madison

Ernest Green, Recruitment and Training Program, Inc.

Morag MacLeod Simchak, USDL

PRESIDENTIAL ADDRESS

Collective Bargaining and the Social-Economic Contract

GERALD G. SOMERS
University of Wisconsin—Madison

All those who make presidential addresses must surely examine—either overtly or covertly—earlier presidential addresses. Sometimes it is a desperate search for ideas. Sometimes it is simply an attempt to determine the expected length of the paper. In view of my long association with the IRRA, the temptation to dwell in the past is understandable, and I openly and gratefully acknowledge my study of previous presidential remarks in preparation of my own.

I hope that I have picked up some ideas which I can transmit instructively. It is clear that the papers have declined in length since the pioneering presentations of Ed Witte, Sumner Slichter, and George Taylor at the end of the 1940s. You will be pleased to know that my remarks will be in the more recent tradition of our presidential luncheon addresses, i.e., dessert rather than the main course, a fluffy frosting of philosophy rather than the undigested, and undigestible, results of my latest computer printout.

Voluntarism, Pluralism, and Social Control

There are striking and recurrent themes that run through the papers of the earliest IRRA presidents, and they are echoed later in the addresses to this body by Clark Kerr, John Dunlop, and others: the uniqueness and value of the “free collective bargaining system,” “voluntarism,” “liberal pluralism,” “consent.” The enemy is seen to be imposed public control, the unilateral intervention of “big” government, thwarting the contributions of the “private governments of union and management,” to use a key phrase depicting the pluralist society.

And yet, each writing in his own environmental context saw the need for some social control, whether it be to set the procedural rules of collective bargaining, combat abuses within unions, provide wage stabilization in wartime, or prevent strikes that imperil public health and safety.

The question was, "how to preserve the virtues of free collective bargaining in our pluralist society while ensuring the safety, security and welfare of the larger public?" This key question, raised by the Association's first presidents and repeated by their successors in periods of industrial strife, international conflict, and economic upheaval, emerges once again as the overriding issue of today. Given the inevitable wage pressures and strikes, especially in the public sector, in what Nat Goldfinger last year called "an increasingly difficult economic environment," can we expect "free collective bargaining" to go unscathed or remain unchanged?

The issue is not only a continuing one in the realm of union-management relations, it has troubled political philosophers for centuries. How can the rights and freedoms of individuals and groups of individuals be meshed with the common good of the larger society? It is stated no better than in Rousseau's concept of the social contract, and since it is the text of this sermon, please permit me to quote the familiar passage once more. "Man loses by the social contract," wrote Rousseau, "his *natural* liberty and an unlimited right to all that tempts him. In return he acquires *civil* liberty. . . . We must distinguish between natural liberty, which knows no bounds but the power of the individual, from civil liberty which is limited by the general will."

The founding fathers of the IRRA would not dispute Rousseau. They would surely acknowledge that unspoken agreement which all law abiding citizens, including union and management officials, accept: that in order to live harmoniously in society we give up some individual rights and accept some measure of social control. However, in recognizing the existence of an implicit social contract, within the plant and in the larger economy, the earliest IRRA presidents implied two conditions that have continued to be the hallmarks of the North American collective bargaining "establishment":

1. Social controls imposed on collective bargaining should be adopted with the consent of both unions and management. In the first year of IRRA's existence, Witte felt that "the greatest of all dangers to free collective bargaining is the proneness of both sides to seek the aid of government in giving them the victory in their contests with each other." But, perhaps more relevant for the present situation is the stress of George Taylor on voluntarism even under wartime wage and price controls. Writing in 1950, he noted that "the basic principle of [collective bargaining] will be preserved to a significant extent, however, if the general terms of the wage stabilization program and the manner of its administration are acceptable to or acquiesced in by labor and management." John Dunlop symbolized the continuity of this predominant

industrial relations viewpoint when he stressed the importance of union-management consent in his address to the Association earlier this year on "Wage and Price Controls as Seen by a Controller."

2. A second theme found in much of the traditional literature on industrial relations is the caution against asking too much of collective bargaining. Clark Kerr, in his presentation of 1954, set the tone that other experts have echoed. "The span of control or influence of company and union," he noted, "should not extend beyond the employment relationship itself, except as they may be forced into wider social functions by the inability or unwillingness of other agencies to undertake such functions reasonably adequately." Followers of this view have not always incorporated Kerr's exception. They feel that collective bargaining has enough problems in handling the wages, hours, and working conditions of those in its own unit, without intervening in their private problems and without extending its sphere of action to the formulation of macroeconomic policy.

It will be the main thrust of this paper that consent of the governed is fully in keeping with the concept of a social contract. But implementation of this concept in the conditions of the modern plant and current economy calls for an activist role for collective bargaining—one going beyond its conventional jurisdiction.

The Social Contract and the Troubled Employee

If we accept the notion of a social contract in the industrial establishment as well as in the society as a whole, then two contracts frequently interact, either in a conflicting or cooperative pattern. The formal collective bargaining contract, negotiated by the parties and incorporated in a written document, concentrates on the traditional areas of the employment relationship. However, there is also an in-plant social contract in the Rousseauian sense, that is an unspoken agreement about the conduct of individual workers, union officials, and management in furthering organizational goals. Perhaps this unwritten contract is best exemplified by the adoption of a "work to rule" policy by workers and unions when they wish to punish the company or express their dissatisfaction. Formal provisions of company rules or a collective bargaining agreement, if applied literally under all conditions, might be disastrous for productive efficiency. The unwritten social contract may provide a basis for a more "rational" mode of behavior in the plant community.

Similarly, the concern of workers and management for their fellow employees often extends beyond wages, hours, and working conditions. Frequently, mutual concerns which lie outside of the customary adversary relationship of collective bargaining are centered in special labor-

management committees or letters of understanding. Common in this realm are the joint safety committees, the productivity committees, and, as is discussed further below, union-management committees to assist troubled employees. In a sense, these noncontractual cooperative agreements are a recognition of the broader social contract of the industrial community. However, those who are familiar with so-called nonbargaining agreements between union and management recognize that they can exist in a unionized plant only because of the existence of a collective bargaining relationship. There would be little likelihood of union-management cooperation on safety, productivity, or assistance to troubled employees if the regular grievance machinery were not available to provide an avenue of redress should cooperative efforts threaten job security. Industrial relations scholars may warn against the extension of collective bargaining into the private lives of workers, but there is a growing interest in the quality of working life and the health of employees and their families, fostered by union-management cooperation.

Union-management interest in the quality of working life has drawn most of the headlines and the scholarly attention in recent years. However, union-management programs to assist employees with alcohol, drug, and emotional problems may be even more significant for the concept of a social contract, extending collective bargaining at the local level beyond the limits envisaged by Clark Kerr. Some of the occupational programs to assist these troubled employees are incorporated in the formal collective bargaining contract. Sometimes they are simply embodied in letters of understanding. Of the 600 programs that some say now exist in the country, many are simply "paper" agreements with little substance. But a growing number are effective in aiding the recovery of employees who might not be helped through any other medium. Alcoholics, especially, who might be unwilling to admit their illness and seek treatment outside of the plant, are often led to treatment and rehabilitation through union-management sponsored counselling programs.

Although these programs to assist in the recovery of troubled employees may be couched in terms of improved job performance, their principal effect may be to save employees' lives and to reduce the grief and despair of their families. Thus, they extend into the social realm beyond the limits that many experts have said constitute dangerous ground for collective bargaining. It is an error to think that these programs are not an aspect of collective bargaining. There are many grievance and arbitration cases dealing with alcoholism and drug abuse, Union cooperation in troubled-employee programs would seldom be forthcoming without this collective bargaining protection.

The Social-Economic Contract and the Troubled Economy

There can be little doubt that union members suffer, along with other workers, from the currently high rates of unemployment and inflation. Whereas there has been a general tendency in the past to blame collective bargaining for these economic ills, there is little justification for doing so in the last couple of years. Even union contracts, with a few exceptions, have lagged seriously behind the inflationary price rise; and the unusually high rates of unemployment can seldom be traced to specific negotiations. There may well have been some justification in Nat Goldfinger's lament last year that collective bargaining was beset by ills inflicted upon it by forces beyond its control.

However, even if collective bargaining cannot be blamed for our troubled economy, there is reason to think it could play a larger role in reducing the difficulties. It might be too harsh to tell the bargainers, "If you are not part of the solution, you are part of the problem." However, given the powerful role played by collective bargaining in our economic system and the detrimental impact of "stagflation" on the welfare of workers, one might hope for a more activist role.

Just as collective bargaining is extending beyond its customary sphere to interact with the larger social contract within the plant, so we can expect an interaction between collective bargaining and the larger social-economic contract in society as a whole. The term "social contract" in the economic sphere has been given a bad name by notable failures in Britain and elsewhere. But we should not be turned away from an important concept because of terminology. As Rousseau would have stressed, our present economic society can survive only if the "private governments" of unions and corporations recognize their responsibilities as partners in the unwritten social contract. In the economic sphere, that broader social contract is in essence a plan to avoid the excesses of unemployment and inflation while furthering an equitable distribution of income and a healthy environment. Legislation to achieve such social-economic planning has recently had prominent sponsors. The word "planning" may be even more hated than "social contract" in the American context. And yet, there is growing public support for policies by any name which reduce the economic excesses of recent years.

Strikes and wage pressures in the public sector have already caused considerable alarm, even among those who long thought of themselves as friends of collective bargaining. In a recent meeting of liberal economists, there was a general view that the problems of New York were exacerbated by municipal unions and that the near bankruptcy was needed to show municipal employees that limits existed in the public sector as well as in the private. Public opinion is likely to veer further in

this direction in the next few years. If strikes in the private sector also increase substantially in the coming year, as seems probable, collective bargaining will come under further public criticism.

In keeping with the views of the IRRA's founders and with industrial relations scholars writing since their time, any national plan or social-economic contract to achieve our cherished goals will require the consent of unions and management. In participating in a national plan, as partners in a social contract, they would be essentially extending collective bargaining into a new sphere. Unions could not be expected to give up their Rousseauian "rights" without some quid pro quo. The policies which they would consent to accept as part of a social-economic contract must hold promise of benefits to their members and their institutions. Similar considerations apply to the cooperation of management. Without the consent of these key actors in the economic sphere, the social contract is doomed to failure.

Needless to say, this type of participation in a social contract or a national plan may require changes in institutions as well as attitudes. Many in my audience will consider the whole idea to be fanciful. However, there are encouraging signs of the extension of union-management relationships beyond their customary bounds, and not only at the plant level. The formation and functioning of a high level national Labor-Management Committee, coordinated by Secretary John Dunlop and contributing to the development of national policy, is clearly a move in the direction espoused here. The committee functioning in the construction industry is also a case in point. Given the serious consequences of inaction—economic hardship, public wrath over industrial conflict, and the possibility of unilateral legislative controls—the alternative suggested above may seem to be a more attractive development.

The Role of the IRRA

The underpinnings of such a revolutionary extension of union-management relations will require study and expertise. John R. Commons, whom some consider to be the father of our discipline, wrote many decades ago of the need for social experimentation. He and his students at Wisconsin launched a series of studies, linked to policy-making bodies, which he hoped would lay the groundwork for innovative solutions to our social-economic problems. The Industrial Relations Research Association is uniquely constituted to provide the basis for new departures in collective bargaining. It is uniquely qualified for this task because it was deliberately fashioned by its founders to combine the talents of academic, union, management, and government experts. Research investigators are better able to keep their studies rooted in reality because of

their continuing contact with practitioners in the field. Practitioners are in a position to experiment with some of the ideas flowing from the studies of academic investigators.

As an economist, I cannot accept the stinging attack on the profession made in last year's presidential address. At the same time, I cannot fully accept Walter Heller's ringing endorsement made at last year's meeting of the American Economic Association. There is a growing gulf between the research of economists and the scholarly needs of an extension of collective bargaining into the realm of social planning. In Ed Witte's first presidential address of 1948, he noted that in the latest classification of members of the American Economic Association more listed "labor" as their first interest than any other specialty within economics. The decline from this dizzying height has been precipitous. At latest count, the proportion of articles dealing with unions and collective bargaining in the three major economics journals had fallen to less than 1 percent. The quantitative thrust in economics has led to a bypassing of those areas, like labor, that do not readily lend themselves to quantification.

Nonetheless, a number of the younger members of our own discipline, if industrial relations may now be graced with such a designation, have increasingly turned to econometric analysis of collective bargaining. When combined with other methodological approaches, through the interaction of a number of related disciplines, the research results can be fruitful.

As Ed Witte also noted in his first presidential address, the cross-fertilization between investigators with differing approaches and points of view is one of the major objectives of the IRRA. I have every confidence that the Association will continue to perform this function, continue to adapt and experiment. In so doing, it can contribute to the imaginative departures in collective bargaining required by the next quarter-century, departures as far reaching as those that have occurred since the Association's founding more than a quarter of a century ago.

I. URBAN LABOR MARKETS IN LESS DEVELOPED COUNTRIES

The Urban Labor Market in Sudan: Some Implications for Current Theorizing

SUBBIAH KANNAPPAN*
Michigan State University

The unemployment problem in the urban areas of developing economies has spawned gloomy assessments of fact and even gloomier models and theories of what lies in store. The functioning of Sudanese urban labor markets is worth examining on this score. Available information does not support the view of a gross malfunctioning of the urban labor markets—in terms of consequences for either unemployment or received theory which one normally employs to interpret labor market phenomena.

Much of the information as regards urban labor markets in Sudan pertains to Greater Khartoum and even that is limited in desirable detail.¹ Khartoum is, however, of disproportionate importance in the Sudanese urban economy and represents a great concentration of government activities, modern industrial and commercial investment, and education and other public services. The fact that it is not typical will if anything strengthen this paper as the other rapidly growing centers constitute less structured and more flexible labor markets.

* The insights reported here were gathered during my tenure in the Sudan as a member of the Comprehensive Employment Strategy Mission, organized by the International Labor Office/United Nations Development Program in 1975. Particular appreciation is due to the International Institute of Labor Studies and the ILO World Employment Program for making possible this unique experience in an undeveloped area; of course neither of these, nor the Mission, is responsible for the views presented here.

¹ The most recent and comprehensive source of information on the Sudanese economy is the set of technical papers prepared in connection with the work of the United Nations Inter-Agency Team organized by the ILO earlier this year. Since the consolidated report has not been publicly released yet, the references here are to individual technical papers (referred to as Technical Papers), including my "Urban Labor Market Issues in an Employment Strategy for the Sudan," International Institute for Labor Studies, Geneva, March 1975.

This paper will develop a few central themes. It will show the relationship of the regulated segment with the rest of the Khartoum urban labor market and beyond. The institutional components, such as hiring criteria, the wage structure, the employment exchanges, unions, and relevant wage legislation are among the items which will be considered. These will help us understand observed rates of unemployment, which are low, and migration into Khartoum, which is relatively high and possibly accelerating.

Regulated Employment in Khartoum and the Sudanese Economy

By regulated employment we refer to a durable employment relationship governed by formal wage and service conditions binding, nominally at any rate, on both employers and workers. This is the case with most employment in government and public services, with large-scale private industry and commerce, and with industries or occupations subject to a minimum wage decreed by legislation or collective agreements.²

Regulated employment of this type constitutes a small proportion of the Sudanese urban economy. It should be emphasized again that available data are meagre and, despite rapid recent strides, useful mainly to establish some benchmarks. Three things stand out. Regulated employment in Khartoum affects a relatively small proportion, say 20 to 30 percent, of the urban labor force.³ Even when we take the milder extension of regulation represented by minimum wage laws or collective bargaining, the proportion of the urban labor force covered is relatively small. Finally, it should be noted that there is a blurred borderline between regulated and unregulated employment and this enhances a flexible adaptation with the rest of the economy.

As mentioned earlier, employment data are scarce and we also have difficulty obtaining metropolitan area breakdowns. I treat the entire Khartoum province as the relevant metropolitan area labor market rather than the more restricted three towns. Interviews confirmed that much of regulated employment in commerce and industry in the country as a whole, and within the province, was concentrated in these townships. For Khartoum, a liberal interpretation of the scope of regulated em-

² We shy away from such terms as "formal" or "modern" sector to describe this category because our purpose is to focus on the consequences of regulation. We also avoid the ambiguity of these other terms.

³ See my paper, already cited. This was derived from an estimated urban population of 876,000 and labor force of 313,000. The higher labor force participation rates yielded by the Comprehensive Employment Strategy Mission Survey of Khartoum in 1974 would place this latter total at 370,000. The CESM Survey was confined to the Three Towns of Kharoum and excluded the rest of the province.

ployment would yield a total of 100,000 workers, roughly 25 to 30 percent of the labor force. Somewhere around 60,000 of these may be estimated to be in public administration and related services.

A problem in determining labor force status, a reflection of deliberate practice than of cavalier statistics, is posed by the large numbers with a relatively tenuous employment nexus. This is due to the widespread practice of hiring temporary and casual workers. Estimates as to their number vary as does opinion as to the security of their employment status.⁴ More on this point later. Absenteeism and turnover appear to be significant and may account for some of this fringe around "permanent" employment. Varying production requirements may provide another possible explanation. Yet another possibility is that some of these are in stabilized or disguised permanent employment on inferior terms—the employers firing and rehiring the same workers to insure an interruption in their service and to evade the legal requirements to grant "permanency" after a stipulated period. Whatever the explanation, it is clear that there exists around the core of "permanent" employees in regulated employment an undefined number whose tenure and perhaps rates of remuneration are flexible. This is certainly the case where the work is subcontracted as seems to be the case in certain major areas of economic activity, notably public construction.

Most union activity is in regulated employment, although precise data are lacking. Our main interest is in union activity in public and private sector enterprises. Elsewhere in government employment, wage regulation appears to follow practices in public personnel administration, with a pattern of discrete changes, across-the-board increases, and maintenance of customary differentials as among different grades and ranks. Unions agitate, of course, and industrial relations tensions encourage such consideration; but the labor movement is not strong enough to force the government, and these practices predate the emergence of effective unionism and cover ununionized employees as well.

Union activity in regulated employment is of negligible account in enterprises employing 100 or less workers, and virtually nonexistent in units employing less than 30 and, of course, outside regulated employment. There is a high degree of unionization in public sector units, regardless of size, and this includes the Sudan railways. Overall, the average degree of unionization must be considered to be rather low. However, collective bargaining is by no means the major means of

⁴ Thus an estimate placed nearly 40 percent of public sector employees totaling 22,000 as temporary. Another estimated 33,000 in manufacturing employment and 31,000 as temporary.

securing wage gains which have been the result mainly of government intervention.

Available evidence suggests that this has on the whole been of a modest nature. This will be illustrated with reference to a minimum wage law passed in late 1974. The law was the first major revision in several years and followed sharp inflationary pressures, particularly since the end of 1973. It was deemed effective immediately for public sector units. Set at £16.50 per month, this was *below* the average wage paid in public sector enterprises of all size categories. In private sector units, although there was greater variability of wages with respect to size, the impact was certainly minimal. It is estimated that at most it will benefit 11,000 workers, assuming the law is enforced and that money wages would not have gone up anyway in the context of inflation.

There have been attempts more recently to rationalize wage structures, extending government wage administrations to public sector units. Concern has also been expressed that the minimum wage may become the key wage rate for the entire economy, inviting periodic revisions which would include all higher ranks in government as well as unskilled rates and other differentials elsewhere. Of course, there is much that is wrong with government pay practices, but whether this will also incorporate such a disastrous incomes policy it is too early to say.

Hiring Criteria in Regulated Employment and the Process of Migration

New employment in government enterprises and in the larger private units is contingent upon educational qualifications even at the lowest grades. A primary school background is now required for the lowest level blue-collar employment. There is provision for step increments, which seem more or less automatic, but promotion possibilities to higher grades are limited. These constitute ports of entry for persons with additional schooling and possibly technical qualifications. This pattern is repeated for still higher grades in the supervisory and managerial ranks, the last being reserved for college graduates.

It is against this background that one must view the migrant and his prospects in the Khartoum urban labor market. It is this background again which is relevant for an understanding of the broader Khartoum urban labor market and the incidence of unemployment therein.

We referred earlier to the increased migration into Khartoum. However, the drawing-card is not the prospect of employment in the regulated sector, but opportunities outside of this. The limited number of jobs

and educational criteria for new hiring effectively preclude most migrants. What is more interesting for the migrant and quantitatively more significant is what happens outside. And it is precisely here that our knowledge is limited and close to being nonexistent on key aspects.

In Khartoum itself, opportunities outside of regulated employment exist in the following areas: low wage employment, both of a stable and casual nature; self-employment of a service-providing variety; and self-employed entrepreneurship.⁵ There is also a category, not clearly enumerated, of mendicants and other "welfare" recipients (the old, infirm, maimed, etc.) maintained by private transfers.

Available information suggests that the rate of growth of urbanization in Khartoum is greater than that of the general population, but that growth has been sluggish in regulated employment. The "informal" or small-scale self-employed sector (generally employing not more than two or three workers) has been providing jobs at a rate roughly commensurate to the general rate of growth of Khartoum. The bulk of the new entrants, mostly migrants, must be finding their livelihood in low-wage employment or such self-enterprise. However, contrary to the general mythology and euphoria, entrepreneurship is by no means unlimited. Low-wage and casual employment, petty hawking, and self-employment of a service-providing variety must be the major sectors into which the new entrants are—for the most part effectively—absorbed.

One partial indicator we have as to the effectiveness of the labor market is the general unemployment rate. Taken at infrequent intervals with varying coverage and definitions, the statistic has limited use as an indication of either secular trends or variation in economic conditions. It does serve, however, to illustrate whether a chronic situation of "queueing up" is beginning to develop. Estimated at around 5 percent of the labor force, this does not appear to be the case given the adjustment and information problems one must expect in an urban system as undeveloped as Khartoum. Other data confirm this point indirectly; most male migrants found jobs within short periods of time as follows: with no waiting, 51.1 percent; less than 6 months, 30.5 percent; 6 months to 1 year, 7.4 percent; 1 to 2 years, 3.4 percent; more than 2 years, 1.6 percent; and still waiting 4.3 percent. Persons with higher education did significantly better, and those with secondary education did somewhat worse; also the tendency to "still wait" (after two years)

⁵ Employment in small-scale self-enterprises, most of them without paid employment, was estimated at around 50,000 to 60,000 in the Three Towns. See Technical Paper 13, "The Informal Sector in Urban Areas."

seemed stronger for these two categories.⁶ As opposed to the difficulty experienced initially by persons with no education, persons in the higher-educated category experienced difficulties as follows. Waiting periods were longest for those entering government and education as compared to agriculture, transport, and industry. They were also the shortest for medicine, engineering, and science.⁷

The functioning of employment exchanges supports these observations indirectly. There are few offices for the country as a whole, and they are severely understaffed. They are not equipped to assess labor market conditions, employer requirements, or worker qualifications. In terms of actual performance, too, their record is weak. During the last quarter of 1973, for instance, 12,000 workers in the Sudan registered as looking for work, and of these only 1,000 were placed. In Khartoum province, the relevant numbers were 6,395 and 485, respectively.

Given such a poor record, it is nevertheless interesting to speculate why people bother to register and why the Manpower Act of 1974 gave such sweeping screening authority over new recruitment by any establishment employing 10 or more workers. Employers interviewed indicated that the employment exchanges were unable to meet their demand for casual or temporary workers. Employment exchange officials agreed that the bulk of the registrants were looking for permanent jobs in regulated employment. A nonrandom poll of those waiting at the Khartoum employment exchange, by means of interpreters, confirmed this point. Of even greater interest is the resistance to the new legislation by the railways which had, following the tradition of railway authorities in other British-administered territories, established its own welfare system, including preferential hiring of relatives of the employed. The Railway and Labor Ministries were at loggerheads over the requirements of the new law. Clearly the issue was who should be controlling the allocation of the scarce number of well-paying jobs in regulated employment! However, as an indicator of general unemployment, the employment exchange figures were of no particular relevance. This was strikingly confirmed in Atbara, the headquarters of the Sudan railways, where attempts to estimate unemployment by means of employment exchange figures yielded an estimate several times that provided by the 1973 Census.

None of this is to paint a rosy picture of the Khartoum urban labor

⁶ Mohamed El-Amad Galal-el-Din, *Internal Migration in the Sudan Since World War II, With Special Reference to Migration to Greater Khartoum*, Ph.D. dissertation, London School of Economics, 1973, Table 11.3.

⁷ B. C. Sanyal and El Sammani A. Yacoub, *Higher Education and Employment of Graduates: The Case of the Sudan* (Paris: UNESCO, International Institute of Educational Planning, forthcoming 1975), pp. 168-170.

market. Observers have been concerned with prevailing rural-urban wage differentials and public sector pay and hiring practices. There is much that is wrong in the latter, particularly the mechanistic wage and salary administration which predetermines a great deal at the time of hiring and assigns few rewards based on performance. Hiring rates and criteria have also been criticized on the grounds of being impossibly high. Rural-urban money wage differentials appear to be large and on the surface unjustified. At the same time, caution is warranted as we know relatively little about the wage structure as a whole, and there is some evidence that earnings outside regulated employment are not necessarily low. For instance, the Sudanese £16.50 set as minimum wage in regulated employment seems by no means to be outrageous or conspicuous given some earnings data we have seen for workers in general or in self-employment. The hiring criteria also deserve careful examination not merely for the reason that employers insist on these, but because education and earnings seem well associated in the general urban economy, in sectors where demand irrationality as expressed by public sector labor pricing is not dominant. Much the same thing needs to be repeated as regards prevailing rural-urban wage differentials. Nor are they as large as those observed, say, in India.

The thrust of this argument is not to minimize the need for rational government wage policies but to point to the more important factors of urban investment and growth in stimulating migration into urban areas. The dynamic rate at which the informal sector self-employed enterprises have been growing, and the fact that their principal demand comes from other households, provides one clue to the developing sources of urban labor demand. Employment outside of this category and of regulated employment has probably been increasing at a more rapid rate than the urban population. At the same time, none of the available evidence points to a secular worsening of open unemployment. What appears to be taking place is a rapid mobility of human resources to areas of increased productivity and growing demand. This is perhaps even more strikingly confirmed when we look at the growth of other urban centers, where the growth rates are significantly higher and government wage policies are of relative inconsequence.

Such mobility is good and on the whole healthy for the Sudanese economy. However, there is evidence of regional imbalance in this mobility, particularly from the undeveloped South, and there is a need for balanced development priorities to correct this inequity. The existing migratory flows can also be eased by providing better labor market services: for instance, nearly two-thirds of the unemployed seem to be first-time entrants with limited knowledge as to their alternatives. There

is a good bit of related evidence emphasizing the problems of the new entrants. Surely this is of greater importance for effective manpower utilization than the rationing function the employment exchanges are supposed to control. Although we have argued that the regulated labor market does not impede flexible adjustment in the urban economy as a whole, this is not to deny the need for rationality and greater productivity here. These will be important because of the investment and development expenditures involved, and especially if they are to serve as growth foci for an employment-oriented strategy. However, the migration and growth of the Khartoum urban economy is better viewed as a response to developing opportunities there than as a response to public sector or institutionally determined high wage pressures in the urban economy. And by the same token, unemployment is seen more as a manifestation of the difficulties of adjustment and information than as a consequence of rationing of high wage opportunities.

Finally, the above analysis has implications for the prospects of alleviating urban poverty. If the regulated sector is thin and successful self-employment limited, there is no practical means of alleviating urban poverty, while holding unemployment in check, without raising rural incomes. The encouragement of the "informal" sector, advocated in so many analyses, would help those with the requisite entrepreneurial ability and contracts. The encouragement of the regulated sector will help those who can meet the relevant hiring criteria and overcome whatever rationing devices are in force. Even the development of urban wage employment on a more comprehensive and large scale cannot eliminate urban poverty—to the extent that this is a relative concept applicable to the majority of the urban labor force—for the inflow of labor will limit any advantage the wage-earners enjoy outside of regulated employment. Efforts to weaken or even break down the barriers of entrepreneurship and high wage employment in urban areas, where these are simply rationing devices, are to be welcome; but one should not overlook the subtle contributions to productivity of skills, education, and the like, even where these reflect only attributes developed in ascriptive association nor overestimate the consequences of making the relevant urban labor markets more perfect. Neither an LDC version of minority capitalism, focused on latent entrepreneurial talents, nor an urban (ghetto) job development program, focusing on the urban disadvantaged worker, holds much prospects for many, if not most, LDC urban areas. The real source of urban poverty is in rural areas.

Labor Markets and Work Force Management in Thailand*

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Labor turnover rates reflect the underlying socioeconomic forces that determine labor mobility. In modern firms of Thailand, these are extremely low by international comparison. The annual separation rates in most Thai firms are lower than 15 percent. In the United States, the annual separation rates run upward of 50 percent. If there is anything surprising about the U. S. figures, however, it is that labor turnover is not higher, given the standards of behavior implicit in the popular belief that Americans are free and mobile and that theirs is the land of "opportunity." In Japan, in contrast, "lifetime commitment" is said to be the norm due in large measure to the legacy of Japanese feudalism emphasizing a strong bond of loyalty between employers and workers. Interestingly enough, the annual separation rates in Japanese industry have rarely been below 20 percent since the end of the Second World War and recently increased to around 30 percent. If America's is a mobile, individualistic employment system with annual separation rates of 50 to 60 percent, and Japan's a feudalistic lifetime-commitment system with rates half as high as America's, what would one say about the Thai employment system with separation rates below 15 percent? No one has yet offered a convenient label for the Thai system. Nor do we have one to offer. Our interest is in the analysis of this fascinating aspect of employment in Thailand.

Explananda and Explanators

In addition to being generally low by international comparison, labor turnover rates in Thailand's modern sector vary from firm to firm. Thus we have two *explananda* (propositions to be explained) for reflections and analyses. In the form of questions, they are: (1) Why are

* The labor market research on which this paper is based has been supported by a grant from the Midwest Universities Consortium for International Activities (MUCIA).

labor turnover rates generally lower in Thailand's modern sector than in other countries? (2) Why are they higher in some firms than in others in Thailand? A number of explanatory factors or variables ("explanators") may be suggested for each *explanandum*. These "explanators" should originate in the behavior and decision of the human actors involved: workers and managers. The behavioral ultimates as the source of "explanators" may be postulated thus: (1) a worker's calculation as to what or how much he or she gains or loses by leaving the present employer, and (2) an employer's calculation as to what or how much he or she gains or loses by dismissing a worker.

The worker's calculation involves an assessment of prospects of future gains, which are conditional upon staying with the same employer, and of the state of the general labor markets, which determines the worth of the best alternative employment opportunity. The employer's calculation also involves a given worker's place in the whole structure of the work force and a careful evaluation of direct and indirect effects of removing a worker upon the efficiency of the work force. Moreover, a work force as an organized structure of jobs, functions, and positions derives its optimal content from the type of technology that the firm has adopted, the kind, quality, and amount of its product, and the kind and extent of the market in which it sells the product. To a large extent, workers and employers are subject to common external constraints. Therefore, there is bound to be an area of overlap between their respective calculations: e.g., the relationship between the prospective gains a worker can expect from staying with the employer and the latter's cost of fitting a new worker into the work force upon the resignation of an old-timer.

The first *explanandum* then becomes fairly easy to explain. Workers employed in large modern firms of Thailand have gone through agonizing personal experiences in fighting overwhelming odds to secure their jobs, since a job opening in any one of these firms attracts 30 or more applicants in response to a hiring notice posted at the factory gate. Therefore, it is perfectly rational for these workers to assume that similar jobs, not to speak of better ones, are extremely scarce and that the loss of a job means a long period of unemployment or irregular employment in smaller traditional enterprises at lower wages and under poorer working conditions. This is, of course, a familiar story of economic dualism in less developed countries. Thailand's economic structure and general labor market condition produce a strong incentive for a worker to stay on his job in a large modern firm as long as possible. In addition, staying with the firm is in many cases a prerequisite for wage increases, nonwage benefits, and promotions.

The Second Explanandum: Interfirm Differences in Labor Turnover Rates

We now turn to the second question as to why different rates obtain in different firms. If Thailand's economic dualism, with superior employment conditions offered by the modern firm, is a part of the explanation for the first *explanandum*, the same logic would lead one to speculate that labor turnover rates are lower in some modern firms than in others because employment conditions are better in the former than in the latter. The diversity of labor turnover rates should therefore be associated with a similar diversity in indicators of employment conditions. We have generated serviceable data for this purpose through questionnaires and interviews. Quantitative indicators correlated with labor turnover rates at least at a somewhat generous "significance level" of 10 percent are enumerated below. (The numbers are correlation coefficients and the asterisks attached to them indicate "significance levels"; * for 10 percent, ** for 5 percent, and *** for 1 percent. The sample size is 33.)

- | | |
|---|------------|
| 1. The size class of the firm (1 for fewer than 100 workers, up to 5, for more than 1,000 workers) | -0.2787* |
| 2. The ratio of the number of workers to the number of foremen and assistant foremen | +0.3013** |
| 3. The logarithm of the above ratio | +0.3483** |
| 4. Wages for unskilled workers | -0.2394* |
| 5. Wages for semiskilled workers | -0.2761* |
| 6. Wages for skilled workers | -0.3456** |
| 7. The dummy variable indicating firms with (=1) and those without (=0) a personnel office | -0.4765*** |
| 8. The dummy variable indicating firms with (=1) and those without (=0) a consultative machinery with employees (or a labor union—in only one firm) | -0.2500* |
| 9. The dummy variable for firms considered by interviewers as having "good" employee relations ("good" = 1, all others = 0) | -0.3912** |
| 10. The dummy variable for firms considered by interviewers as having "positive" attitudes toward employees ("positive" = 1, all others = 0) | -0.4917*** |
| 11. An index of management quality (sum of 5 dummy variables including the preceding three; neither of the remaining two was correlated with labor turnover rates even at the 10 percent level) | -0.5406*** |
| 12. The dummy variable for nationality of owner- | |

ship or control (Euro-American = 1, all others = 0)	-0.2464*
13. The dummy variable for nationality of ownership or control (Thai = 1, all others = 0)	+0.2434*

These 13 "significant" correlations suggest a syndrome of factors that one would have expected anywhere; i.e., labor turnover rates tend to be lower in larger (presumably better managed) firms where wages are higher and industrial relations are better. The weak, but rather fascinating, correlations between dummies standing for nationality of ownership or control and labor turnover rates suggest that being a European or American firm in Thailand is associated with lower labor turnover rates than otherwise, while being an indigenous (Thai) firm tends to mean higher labor turnover rates. Another dummy of the same kind, with Japanese = 1 and all others = 0, is not "significantly" correlated with labor turnover rates. The implications of the three nationality dummies in relation to labor turnover rates may warrant some comments. Excluding two Hong Kong subsidiaries, the 31 firms are distributed by "nationality" as shown in Table 1; 13 Thai firms, 12 Japanese, and 6 Euro-American ("farang").

It is interesting that the Japanese firms in Thailand manage to work themselves into an ambiguous middle ground between Thai and "farang" firms. The principal variable, labor turnover rate, exhibits a neat order; highest (11.5 percent) in Thai firms, middle (6.9 percent) in Japanese, and lowest (2.8 percent) in "farang." With few exceptions, many other variables in Table 1 tend to put Japanese firms between Thai and "farang" wherever descending or ascending order of the variable is a priori expected.

The figures in parentheses, as explained in a footnote to the table, indicate correlation coefficients between a "nationality" dummy and the variable heading the relevant column. On the whole, being a Japanese firm in Thailand does not "predict" whether labor turnover rates are high or low. Two relatively strong characteristics of Japanese firms are that they are younger (Column 3) (perhaps as compared with Thai firms) and that they are in industries employing relatively more male workers (while Thai firms are in industries employing relatively more female workers). In contrast, being a "farang" firm in Thailand means generally lower turnover rates, shorter history (in fact, even shorter on the average than Japanese firms) (Column 3), a smaller number of workers per foreman (Column 6), and higher wages (Columns 7-9).

Being a Thai firm in Thailand means lower wages, higher labor turnover, more females in the work force, and more workers per foreman. Correlation of wages with nationality is weaker for skilled workers, and

TABLE I
Labor Turnover¹ Rates and Related Aspects of Work Forces in Thailand's Manufacturing Firms by Ownership Type, 1975

(1) Ownership type & number of firms ^a	(2) Labor turnover rate per annum ^b (%)	(3) Years of operation as of July 1975	(4) Workers per firm ^c (persons)	(5) Female workers as % of all workers	(6) Workers per foreman or assistant foreman ^d (persons)	(8) Wages and salaries ^e			(10) Foreman, per month (Baht)
						(7) Unskilled, per diem (Baht)	Semi-skilled per diem (Baht)	(9) Skilled, per diem (Baht)	
Thai (13)	11.5	15.4	740	53.8	28	26	35	52	2,304
Japanese (12)	(+0.24) *	(+0.43) ***	(+0.03)	(+0.25) *	(-0.29) **	(-0.36) **	(-0.34) **	(-0.17)	(+0.04)
	6.9	9.9	678	31.3	20	30	41	56	2,115
Euro- American (6)	(-0.10)	(-0.23) *	(-0.01)	(-0.31) **	(-0.04)	(+0.03)	(0.11)	(+0.06)	(-0.15)
	2.8	8.5	217	38.5	11	36	48	64	2,487
Average (33)	(-0.25) *	(-0.25) *	(-0.22)	(-0.09)	(-0.27) *	(+0.49) ***	(0.41) ***	(+0.29) **	(+0.14)
	8.3	11.9	669	44.0	21	29	39	55	2,260

Sources: Questionnaire returns and interview results, undertaken in 1975 by Chirayu Isarangkun and Koji Taira.

^a The total (33) includes subsidiaries of two Hong Kong firms which are not shown here.

^b Refers to "separation rates."

^c Refers to "permanent" and "probationary" blue-collar workers in factories.

^d Ratio of the number of workers as in (4) to the number of foremen and assistant foremen (not shown here separately).

^e The daily wages include estimates of daily equivalents of piece rates (in one Thai factory), hourly rates multiplied by eight (in two Euro-American firms), or monthly rates divided by 26 (in several Japanese and Euro-American firms). Foremen's monthly salaries include estimates of monthly equivalents of hourly rates multiplied by eight and then by 26 (in one Euro-American firm) and daily rates multiplied by 26 (in two Thai firms).

Note: The figures in parentheses in Columns 2-10 are correlation coefficients between dummy variable for a given ownership type (e.g., Thai=1, all others=0) and the characteristic mentioned for a given column (e.g., turnover rates). One asterisk indicates significance of correlation at 10 percent, two asterisks at 5 percent, and three asterisks at 1 percent.

disappears with respect to foremen. Foremen's salaries show only small variations by nationality of firm. The "farang" still pay higher salaries to foreman than do the others, but the "international" differences are smaller in this respect than in the case of unskilled wages. The neat ascending order of pay from Thai, through Japanese, to "farang" firms is broken in the case of foremen's salaries (Column 10); i.e., foremen in Japanese firms are paid lower wages than in Thai firms. This may be due in part to the problem of how the Japanese firms perceive the word "foreman." Foremanship is not embodied in a single living person in a Japanese firm. Rather, it is shared by a class of individuals appropriately structured by titles separating them from ordinary workers. This may have given rise to lower average "foreman salaries" in Japanese firms than in other firms.

By dividing the Table 1 figures in Column 10 by those in Column 7, one gets the following foreman-unskilled differentials: 88.6 for Thai firms, 70.5 for Japanese, and 69.1 for "farang." This is a neat descending order in perfect association with a similar order of labor turnover rates by nationality. In "farang" firms, the internal differentials perhaps do not matter, because the salaries are absolutely higher than in other firms. "Farang" firms pay higher salaries to foremen due in part to their policy of not promoting ordinary workers to foremanship, which necessitates hiring qualified persons from outside. The Japanese and Thai firms tend to promote workers internally and perhaps can get away with paying internally promoted foremen somewhat less than they would pay externally recruited foremen, so long as internal differentials are good enough to "honor" the foremen.

However interesting the nationality factor may be, the dimension that can be cut along the nationality factor is only a subset of the total pattern of work force management. The correlation between this factor and labor turnover rates is barely acceptable. In fact, it can be rejected by a significance test of ordinary rigor, 5 percent. Many of our multiple regression experiments indicate that in most cases the tenuous significance of this factor washes out in the presence of one additional factor. Two more factors decidedly render the nationality factor inoperative. If R^2 is any guide, we would attribute no more than 5 or 6 percent of importance to this factor as an "explanator" for the second *explanandum*: why labor turnover rates vary from firm to firm in Thailand. After all, no country has a monopoly on good or bad management. At the same time, the implied absence of any strong preference on the part of Thai workers in favor of Thai firms for their employers testifies to the internationally neutral rationality of the Thai in general.

Conclusion

As a society that has demonstrated its independence, resilience, and creativity in the face of Western and Japanese challenge for imperial hegemony, Thailand has generated a substantial cultural infrastructure of a strong national identity, widely shared social conscience, and common rules and procedures for maintaining the integrity of society. In the micro-economic context of industrial relations, this infrastructure implies social minimum standards of wages and working conditions as constraints on managerial policies together with social minimum prerequisites of attitudes, outlook, ability, and work habits for workers seeking employment. Thailand's political processes are constantly articulating and formalizing these implicit social minima as a policy instrument by which to regulate entries of employers, managers, and workers into the modern sector. These "social partners" who have met basic common standards and joined the coveted modern sector tend to develop an implicit bond of mutual commitment despite occasional conflicts of interest. The existence of a modern sector visibly differentiated from the rest of the society explains in part the unusually high degree of work force stability in Thai firms. Within the modern sector, however, in so far as there are interfirm differences in goals and performance, the labor turnover rate as a partial expression of a firm's performance in the utilization of labor resources is expected to vary with the qualities of management reflected in a number of indicators. Despite the abundance of esoteric and seemingly nonrational trappings for unsuspecting tourists in Thailand, known as the "land of smiles," what prevails there is an unmistakable knack for "cool calculation" as some astute observers like Ruth Benedict pointed out long ago.

The Impact of Institutional Intervention on Industrial Wages in Mexico

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Institutional intervention in labor markets for purposes of wage determination is widespread among developing countries. The effectiveness of intervention, however, is conceded to vary widely among countries if effectiveness is taken to mean the ability to alter the wages paid from those that would be paid in the absence of intervention. Recent years have seen a growing interest in the implications such intervention may have for the level of employment in the affected sectors. Concern with lagging employment growth in the modern sector has prompted studies to determine what contribution, if any, distortions in the price of labor may have made to this lag. One of the difficulties to be faced in assessing the impact of intervention lies in the development of applicable criteria for identifying distortions where they exist. Ideally, measurement of a distortion requires a careful specification of qualitative characteristics of various classes of affected workers as well as the definition of the opportunity cost of each such class. Practically, however, rarely are data available adequate to this purpose. Perforce, we turn to less-than-ideal information or casual empiricism to reach conclusions about the effectiveness of intervention. In this paper we review the course of wage relationships in Mexico with the objective of assessing the impact of institutional intervention on industrial wages in that country.

The legal framework of Mexico provides for extensive intervention by the state in the determination of wages, both through a complex system of legal minimum wages and a mediating role in collective bargaining disputes. Since minimum wage regulation might be expected to have more pervasive effects than collective bargaining, we consider these regulations first.

Minimum wage regulation has been implemented in Mexico since 1934. Currently, minimum wages are revised every other year by 111 regional boards which define a general nonagricultural and an agricultural minimum wage for each zone.¹ In addition, the regional wage boards have the authority to establish occupational wage minima for

¹ In response to the accelerated rate of inflation, interim adjustments have been made beginning in September 1973.

unorganized workers, and 65 such minima have been set for the current biennium. The earliest minimum wages established in the 1930s appear to have departed considerably from the market wage. This can be surmised from the subsequent sharp decline in the real value of the minimum wage which continued until about 1944 and was accompanied by an equivalent decline in the real wage of unskilled labor in the large-plant segment of the manufacturing sector.² Thereafter, the actual real wage remained relatively stable, although the real minimum wage continued to decline until 1951. By then, it appears that the legal minimum had fallen below the market level of wages in manufacturing employment. From that point on, both the minimum wage and actual unskilled earnings began to climb, regaining their 1940 real levels in 1964 and 1962, respectively.³

A pair of studies of the impact of minimum wage regulations on actual unskilled workers' earnings in Mexico have been reported in recent years. One, by J. Isbister, concludes that, over the 1950-64 period, "minimum regulations do not appear to have significantly affected the earnings of unskilled workers."⁴ The increases in real earnings during the 1950s are attributed to market forces rather than to minimum wages. Since significant increases in agricultural productivity were occurring over the 1940-60 period, these should have led to an increase in the reservation price of rural labor and be reflected in the course of urban unskilled wages. By the early 1960s, however, the gap between legal minimum wages and actual average unskilled earnings in industry had closed in several major urban centers, suggesting that many workers' earnings had sunk below the legal minimum. In 1964 the ratio of average unskilled industrial wages to the legal minimum in 12 urban centers was less than 1 in 6 of these and was between 1 and 1.1 in all the others.⁵ Since the occupational data upon which Isbister relied were drawn from the largest firms in each area, firms which also tend to be the highest-wage employers and least likely to evade the payment of

² While students of Mexico agree that real wages fell during the decade of the 1940s, there is less agreement about the precise extent of the decline. Stilianos Perrakis estimates that, while the real minimum wage fell by one-half between 1940 and 1951, the average unskilled real wage in large manufacturing plants fell by only 25 percent. "The Labor Surplus Model and Wage Behavior in Mexico," *Industrial Relations*, vol. 11 (February 1972), p. 88. Using a different deflator, Clark W. Reynolds shows a 27 percent decline between 1934 and 1944 and constancy in the real minimum wage until 1950. *The Mexican Economy* (New Haven: Yale University Press, 1970), pp. 85-86.

³ Perrakis, p. 88; John Isbister, "Urban Employment and Wages in a Developing Economy: The Case of Mexico," *Economic Development and Cultural Change*, vol. 20 (October 1971), pp. 26-27.

⁴ Isbister, p. 37.

⁵ Isbister, Table 5, p. 38.

legal minima, one could well conclude that the legal minimum had surpassed the market price of unskilled labor and was exerting an effective pressure on wage payments of at least some employers.

An analysis of unskilled earnings in the middle 1960s by S. Perrakis on a regional and industry basis concluded that for industries typically characterized by small employment units, ". . . the minimum wage is indeed an opportunity wage."⁶ In the case of industries dominated by large plants, little association was found to exist between regional differences in minimum wages and unskilled labor earnings, leading Perrakis to conclude that legal minima have had little impact on wages in large establishments. However, this judgment may overlook other ways in which minimum wage regulation may have a bearing on wages paid in the large-plant sector, as we shall see below.

An alternative approach to an assessment of the impact of minimum wage regulation on earnings is to trace the course of wage differentials among industries of firms of different sizes. One might expect that an aggressive minimum wage policy would tend to push up wages in small establishments or low-wage industries faster than in larger firms and high-wage industries, thus compressing differentials. Conversely, minimum wages which approximate the market level of unskilled wages or lie below it would have no visible effect on differentials, and the course of the latter would be determined by market forces or other forms of institutional intervention. The accelerated pace of minimum wage increases of the 1960s, which increased urban minima by 152 percent in money and 92 percent in real terms, was accompanied by a narrowing of the wage differential between the smallest industrial establishments and those with up to 500 employees. However, earnings rose most rapidly in the largest establishments, resulting in an overall widening of the wage structure of firms classified by size. This widening tendency can also be observed in the interindustry wage structure; the coefficient of variation increased by over 40 percent over the decade.

While the minimum wage may have been below or near the market wage for unskilled labor prior to 1960, subsequent increases appear to have raised it substantially in relation to the market wage. This can be inferred from an increasing ratio of minimum to average wages in the small-plant sector. Whereas in the smallest firms average payroll per worker was 138 percent of the minimum in 1960, by 1970 it had fallen to 115 percent. In establishments with 6-25 employees, average total compensation was 113 percent greater than the minimum in 1960, but only 46 percent greater in 1970, suggesting an increasingly effective

⁶Perrakis, p. 85.

TABLE 1

Changes in Payroll Costs per Employee and in Employment in the Industrial Sector of Mexico, 1960-1970, by Size of Establishment

Number of Employees	Average Annual Payroll Per Employee (pesos)		Percent Change	Employment ^a		Percent Change
	1960	1970		1960	1970	
1-5	4,974	10,494 ^b	110.9	117,983	107,016	-9.3
6-25	7,709	13,232	71.6	89,111	165,189	85.4
26-100	10,182	18,136	78.1	179,695	303,472	68.9
101-500	11,838	23,758	100.7	280,892	510,807	81.9
Over 500	12,876	30,423	136.3	233,937	402,800	72.2
TOTAL	10,807	22,152	105.0	971,609	1,581,247	62.7
Average legal minimum wage ^c	3,610	9,092	152.0			

^a Included in employment figures are unpaid workers.

^b The 1970 average payroll per employee represents an estimate only. We have not yet been able to separate out unpaid from total employment in order to allocate accurately payroll expenses over only the paid workers. Therefore, we have arrived at the 1970 estimate for this stratum by applying the 1960 proportion of total employment accounted for by paid employees.

^c The minimum wage is the simple arithmetic average of the 111 urban zone minimum wages.

Source: Secretaría de Industria y Comercio, *Censo Industrial*, 1960 and 1970; Comisión Nacional de los Salarios Mínimos, *Salarios Mínimos 1974-75*.

minimum wage. Even in the large-plant sector, the minimum wage appears to have begun exerting an independent effect on unskilled wages. While, on average, unskilled earnings exceeded the legal minimum by margins ranging from 22 to 34 percent in six major urban centers examined, a significant number of industries reported unskilled wages below or within 5 percent of the legal minimum.⁷ If actual wages lie in such close proximity to the minimum in the high-wage sector, it is reasonable to expect that the minimum has reached a level above the market supply price of unskilled labor to most other sectors of the economy.

That the legal minima, both urban and rural, lie well above the market price of unskilled labor can also be inferred from the income data (for 1969) reported by the 1970 population Census in spite of several difficulties posed by the form in which these are presented. Space limitations do not permit a detailed identification of the limitations of the data for our purposes. However, the results reported here are based on comparisons of reported monthly earnings with the *lowest* urban and rural minimum wages prevailing in each of six states, a comparison which errs heavily on the side of understating the proportion of income re-

⁷ The six industrial centers include the Federal District (Mexico City), Monterrey, Guadalajara, Puebla, Torreón, and the State of Mexico.

ipients actually earning less than the legal minimum.⁸ The most striking observation is the consistency with which median earnings in agriculture lie below even the lowest rural minimum wage of each state. In the most extreme case of the six states examined, Oaxaca, median monthly earnings were less than one-half the lowest legal rural minimum. In Michoacán and Guanajuato, median earnings lay between 60 and 66 percent of the minimum, while the gap was narrower in the remaining three states.

With respect to the nonagricultural sectors, it can be inferred that substantial proportions of income recipients earn less than the legal minimum or that there is a heavy concentration in the neighborhood of the minimum. For example, in Mexico City, while estimated median earnings of all income earners lay well above the monthly legal minimum of 847.50 pesos in 1969, 17 and 31 percent of income recipients in commerce and services, respectively, reported earnings of less than 600 pesos. (All money sums are quoted in Mexican pesos.) Approximately half of the income recipients employed in these and in the manufacturing and construction sectors earned less than 1,000 pesos. In Michoacán, between a third and a half of the income recipients in the four nonagricultural sectors earned less than 500 pesos a month, an amount which lay well below even the lowest nonagricultural minimum wage within the state of 570 pesos. If we could add to these those income recipients in zones with higher minima, ranging up to 720 pesos per month, the proportions actually receiving less than the applicable minima would be substantially increased. For the country as a whole, the average urban minimum wage amounted to 706 pesos per month in 1969. This was approximately 16 percent above the median income of just over 600 pesos per income recipient recorded by the Census. It seems safe to conclude that the poorest sectors of Mexican society remain untouched by the legal minima and that these are pegged at levels which surpass the earnings of most of the working population.

Even if it can be shown that minimum wages appear to be high relative to the earnings of large groups of workers, this does not lead to the unambiguous conclusion that minimum wages are an independent and effective source of pressure on wages actually paid. For one, both the available wage data and the opinion of informed observers indicate that legal minima are widely evaded. Furthermore, where unskilled wages lie near or above the legal minimum it might be argued that the actual payments represent the market wage for workers possessing superior quality characteristics demanded by employers. In the context

⁸ The states surveyed are the Federal District, Chihuahua, Oaxaca, Guanajuato, Jalisco, and Michoacán.

of an expanding industrial sector, supply inelasticities of "high quality" labor could yield "high" and rising unskilled wages in the modern, large-plant sector even though the supply of less qualified labor is perfectly elastic at a lower wage.

Unfortunately, it is not possible to test rigorously the relevance of such a hypothesis to the widening tendency observed during the 1960s in the interindustry wage structure and in differentials among firms of different sizes. It should first be noted that disparate rates of increase cannot be explained by changes in occupational differentials within the industrial sector, for these remained relatively stable, at least within the large-plant sector for which data are available. An alternative hypothesis that changing differentials were associated with differences in the rates of expansion among industries found little support in the data. We found no significant correlation between the rates of change in average wages and employment. Nor could we find any suggestion of general shortages of qualified workers for entry-level industrial jobs either in the literature or in interviews with Labor Secretariate and other officials in Mexico.

A basis does exist for arguing that institutional intervention has played a significant role in determining the wages paid in at least the smallest and largest plant-size classes. In the case of the smallest firms, which are likely to employ largely handicraft production methods and relatively unsophisticated labor skills, the vigorous increase in minimum wages may explain the high rate of wage advance there (though one would also expect the extent of evasion also to be greater there). In the case of the large-plant, high-wage sector, the regulation of minimum wages by itself does not provide a sufficient basis for explaining a rate of increase in average wages which exceeded that of any other plant-size class and came close to equaling the rate of increase in the minimum wage itself. However, the combination of minimum wage regulation and collective bargaining does offer a plausible hypothesis for explaining the course of wages in this sector.

Trade unions in Mexico are highly developed and have been accorded institutional recognition within the structure of the official political party, the Partido Revolucionario Institucional. However, it is quite apparent that the trade union movement possesses very limited bargaining power independent of government support and encouragement. The ability of unions to win generous wage settlements has been due to the intervention of government in the collective bargaining process through the Labor Secretariate's boards of conciliation and arbitration. The government determines the appropriate limits within which collectively bargained wages can be determined, and these are

promulgated by the boards. In recent years, the permissible wage adjustment has approximated the proportional change in the legal minimum wage. Obviously, once the government guidelines have become known, there is little to be gained by either unions or managements from holding out for more favorable terms.⁹ The prevalence of trade union organization and collective bargaining in the large-plant sector thus provides an institutional mechanism for generalizing the rate of minimum wage increases within it. The results to be expected from such a mechanism could very well be consistent with the phenomena we have already observed. The relative constancy of occupational differentials within this sector is one obvious possible consequence of blanket increases to workers in the large-plant sector, particularly if individual occupational wage rates have already been pushed above the market level. Furthermore, this mechanism could also be a contributing factor to the observation by Perrakis of a lack of correspondence of unskilled wages in large plants to regional differences in minimum wages. While such wages may move in parallel fashion with minimum wages, there would be no reason to expect that differences in unskilled wages among regions would conform to the structure of minimum wages; the present relationship of the former to the minimum wage would be accidental, depending rather on their relationship at some time in the past when the practice of tying collective bargaining settlements to changes in the minimum wage was adopted. It would be ironic indeed if it were to be found that the greatest impact of minimum wage administration falls on the highest-wage industrial worker groups rather than on the lowest.

While limitations of space do not permit a full review of the evidence with respect to the implications of the rates of change in wages for the growth of employment, a few observations can be made. In crude terms, industrial employment increased rapidly during the 1940s and 1950s when wages in real terms were either falling or stable. The percentage increases were 86 and 50, respectively. The rate of increase declines to 40 percent during the 1960-70 interval.¹⁰ More significant is the relationship between employment and output growth. Isbister reported a gross output elasticity of employment of .49 for the 1950-60 decade.¹¹ According to our calculations, the employment-output re-

⁹For a more detailed account of the role of the boards, see Richard U. Miller, "Labor Legislation and Mexican Industrial Relations," *Industrial Relations*, vol. 7 (February 1968), p. 178.

¹⁰These changes were calculated from population census data though the figure used for 1940 is a revised estimate made by Banco de México. Secretaría de Industria y Comercio, Dirección General de Estadística, *Censo General de Población*, 1940, 1950, 1960, and 1970.

¹¹Isbister, pp. 31-33.

lationship appears to have deteriorated during the 1960s. For the decade as a whole, the output elasticity of employment was .31. Most of the decline appears to have occurred during the latter half of the decade, for the elasticity for 1965-70 is estimated at about .23. To what extent this decline represents a response to the accelerated rate of wage change cannot be determined here, though the work of several authors suggests a relatively high degree of sensitivity of employment to wage changes. From a regression of employment changes on output and real wage changes for 1963-67, Isbister derives a significant wage elasticity of employment of $-.51$.¹² Using a larger and more complete set of data derived from the industrial censuses of 1960 and 1965, Eriksson finds a higher degree of sensitivity of employment to wage changes; the regression which was comparable to that of Isbister yielded a coefficient for the wage term of $-.87$.¹³ Results consistent with these have also been reported by Witte who concludes that the distortions in the prices of labor and capital flowing from public policy decisions have led to significant economies in the employment of labor.¹⁴

In summary, the rate of change in real wages has shown wide fluctuations over the past 40 years in Mexico. While it is quite possible that industrial wages responded largely to market forces over most of the 1940-60 period, it seems less likely that market forces suffice to explain the accelerated pace of wage increase since then. The evidence reviewed here makes difficult the rejection of the hypothesis that institutional intervention has become increasingly effective in influencing the course of wages in the industrial sector, although its impact does appear to be spread very unevenly over the various industries and sizes of establishments. The principal vehicle of this intervention has been the administration of minimum wages. The rapid increases since 1960 have outdistanced by a considerable margin increases in wages and incomes generally, and the minima appear to lie well above the median income of all recipients of earned incomes. Whether collective bargaining represented an independent source of wage distortion prior to 1960 cannot be determined from information at our disposal. Since then, however, the rate of change in minimum wages has been extended to the organized sector and has probably contributed to the observed increases in wage dispersion among firms of different sizes and among industries.

¹² Isbister, p. 34.

¹³ John R. Eriksson, "Wage Changes and Employment Growth in Latin American Industry," Research Memorandum no. 36, mimeo (Williamstown, Mass.: Center for Development Economics, Williams College, June 1970).

¹⁴ Ann Dryden Witte, "Employment in the Manufacturing Sector of Developing Economies," Ph.D. dissertation, North Carolina State University, 1971, pp. 83-84, 180-181.

DISCUSSION

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A casual look at some crude evidence would suggest that detailed study of the workings of labor markets is enjoying a renaissance that is probably overdue. Thus, today's panel recognizes work being done in this area, as will a similar session at the International Industrial Relations Association Congress next September. Of course, more empirical work is being done than is represented by today's panelists, chairman, and discussants: the ILO (especially through its employment missions), the World Bank in its interests in poverty, and the African Rural Employment Research Network (operating out of Addis Ababa and East Lansing) are a few other names to remember. Theoretical work is also becoming more refined, in respect both of developed countries (the "intuitively" obvious but not very comprehensible* Phillips Curve is being replaced by urns and searchers) and of the LDCs, where we have moved from the simple world of Lewis through Todaro and Harris to the theoretical formulations of today's authors.

From these studies, perhaps one very general proposition can be defended. Though the level of underemployment may be high, the level of open unemployment is usually quite low, suggesting that in some broad sense these labor markets work quite—perhaps surprisingly—well. This conclusion is buttressed by Kannappan's data which suggest a mean waiting time for new migrants to Khartoum to find jobs of two or three months, although over half have no wait at all.

This central observation is subject to some modifications, none very new. First, job-seekers in these LDC labor markets seem to behave much the way Gladys Palmer and many other subsequent writers have suggested for the MDCs: people take the first job that is offered, there is considerable reliance on informal sources of information (relatives and friends in the plant), and so on. Second, employers act in a variety of ways that may perhaps be cost-effective for them, but may have important, sometimes detrimental, side effects. Many have suggested these effects for the MDC case; Kannappan and Taira have observed unrealistic hiring criteria and phobia of turnover (and their impacts)

* In the sense that a stable relationship for the period 1860–1950 was mystifying. If you don't agree, consider the following dramatic changes: rise and fall of the gold system, from few, weak unions to strong ones, and the change in the state's involvement in the economy and the labor market.

in LDCs. Third, governments do (or attempt to do) funny things to the labor market, such as imposing minimum wages or statutory permanent employment, in LDCs as well as MDCs. Gregory has examined the impacts of one such policy in Mexico: minimum wages clearly have more consequences than simply to raise a few workers' earnings. The fourth qualification to the general proposition then follows in part from the first three: labor markets in LDCs, like those in MDCs, appear to be structured, stratified, segmented, dualized, balkanized, or characterized by noncompeting groups.

As I said, there is little in this quadruply-qualified proposition that is new: Cairnes observed the role of noncompeting groups a century ago. Moreover, the classification "MDC vs. LDC" does not seem at first glance to make much difference to the findings or analysis. Why then is this subject area so important? Why do I and many others call for a further proliferation of case studies of the LDCs?

The most obvious reason, of course, is that many of the previous studies are sadly deficient in the kind of information labor market analysts (especially economists) need. Specifically, very few of them contain the kind of detailed data on wages and employments, and the other critical aspects of labor market *structures, processes, and outcomes*.

But there must be more important reasons: after all, a call for improved information must rest on the fact or assumption that the new data will be useful. And these data would be useful.

In the first place, they would give us the chance to build better models of how labor market structures and processes generate various constellations of outcomes (wage structures and the like) and how those outcomes feed back upon the structures and processes. Thus, we should be able to produce models accounting for more than just dichotomies (e.g., modern vs. traditional sector). Far more important, we should be able to take steps in the direction of dynamizing current theorizing about labor markets. Currently popular dual labor market models (particularly for the MDCs) have a curiously static quality, perhaps as if the authors were looking at one frame of a motion picture film. Comparative data should help us understand the interrelations among the three aspects of labor markets that I have emphasized.

Second, improved information should allow us to take an expanded view of the roles that various groups, interests, or classes play in different labor markets conditioned by widely varying social and economic environments. Concretely, since much of our interest focuses on the efficiency and /or segmentation of the labor market, *who* erects (willfully) or generates (perhaps unwittingly) *what kinds* of labor market barricades at various levels of economic development, modernization,

educational development, labor market tightness, integration with the world economy, etc.?

It should be clear that the interest of various persons or groups in putting up, and the latitude of their ability to put up, barriers to competition in the labor market will depend on just such a long string of variables. In addition, those interests and abilities will not remain constant over time. Certain groups that profoundly structure the LDC labor markets in many places (such as "castes" and "tribes") might lose this power in a tight labor market. On the other hand, a long-run loose labor market may lead to institutionalization of such forces, e.g., through control of government machinery and jobs.

Employers' interests in practices that may serve to structure the labor market can be expected to vary widely in different environments. Certainly Kannappan has described a situation of credentialism in Khartoum far more severe than anything charged for the U.S.; however, such practices are certainly consistent with excess supplies of various kinds of workers. Isarangkun and Taira's paper substantiates the point that different kinds of employers act in different ways, consistent with their own interest.

Governments also have a variety of interests in structuring the labor market, e.g., to pay off their supporters or defuse potentially hostile groups, perhaps the middle class or urban workers. As part of these strategies, they may make grants of economic power to trade unions in return for support.

Except for the last case mentioned, and in a limited number of industries particularly those involving "heavy" transport (railroads and ports come to mind), unions may well have an interest but very little latitude to structure the market for their own benefit, although this should depend on the nature of the underemployment in the LDC economy.

Finally, we should consider the role of the individual who, by voting with his or her feet to be with friends and relatives, co-religionists or tribesmen, fellow-men or sister-women, imparts a considerable amount of structure to the labor market.

Out of all this should come some appreciation of the total impact of labor market barriers in various times and situations and, importantly, *of the changing importance of the different sources of labor market structuring.*

The preceding comments serve to indicate why these papers are analytically important and where some of their points fit in a broader scheme. Speaking personally, as Kannappan has no doubt recognized by now, many of them are a reaction—thoughtful, I hope—to an IILS

seminar which he and I attended earlier this year in Geneva. There we were informed (as some people might put it, by a *real* economist, not a labor economist) that skilled work (and therefore skill differentials) in the U.S. were created out of a homogeneous mass of undifferentiated jobs by an employer plot around 1900, with the purpose of splitting the labor movement. Although most labor economists might find that this proposition runs into some difficulty with the facts, my main point is that the sort of comparative work being discussed today will (1) give us a better perspective on the structuring of our own labor market, (2) emphasize the diversity of groups and interests seeking to impose structure on the labor market, and (3) be part of a major move toward a more dynamic and more realistic theory of labor markets.

DISCUSSION

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The study of urban labor markets has acquired a new significance for both planners and practitioners in LDCs, because the processes of urbanization and industrialization have become highly interdependent. The inflow of rural workers, which accounts for most of the growth in urban populations, coupled with the fact that major efforts at industrial development are taking place primarily in urban areas has complicated the planning process. Decisions pertaining to either industrialization or urbanization thus have had vast consequences for the other. For example, an awareness of the growing pressures on urban areas in India led the planners to make a determined effort at shifting the planned industrial development in the public sector to predominantly rural areas. On the other hand, an absence of such national guidelines have resulted in a major urban crisis in Japan. Nonetheless, a major proportion of the national industrial labor force in LDCs continues to reside in urban areas, and it is their performance that will, in the final analysis, determine the success of industrialization. Thus, a study of the urban labor markets as reflected in the attitudes and labor market behavior of urban industrial workers has become a focus of research in recent decades. Isarankun and Taira's paper on "Labor Markets and Work Force Management in Thailand" attempts to determine what makes an industrial labor force committed, disciplined, and professional.

Using the turnover rates as a dependent variable, they conclude that labor turnover rates are a function of numerous variables including styles of management, wages, presence of personnel departments, job security, nationality of the firms, size of the firm, employee attitudes, perception of employee relations, and labor unions. The compatibility of style of management with the Thai culture emerges as an important variable. However, the effect of other variables establishes a rational economic behavior among the Thai workers as reflected by the labor turnover rates. Although this is a very useful approach to the study of labor turnover, it does not take into account certain demographic characteristics among the workers, such as age, education, occupational level, training, marital status, and others that have proven to be critical in the studies on labor mobility. Labor turnover rates are intrinsic to the concept of mobility, and hence the use of demographic characteristics in explaining labor turnover rates may provide a more complete

explanation. The paper makes some useful contribution toward our understanding of the broader Thai context in which industrialization is taking place and how management styles compatible with a given culture tend to be more effective. Their use of anecdotal evidence in this regard is most interesting and suggests a need for empirical studies that would aim to measure the effect of cultural compatibility of management style on work-force management.

DISCUSSION

NOAH M. MELTZ

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There has been a renewed concern about the impact of minimum wages and, with this in mind, I was particularly interested to read Peter Gregory's paper on developments in Mexico. His data do suggest that the large increase in the minimum wage raised the average payroll per employee for workers in the smallest firms and compressed differentials for all but the largest firms. Gregory's explanation of the greater wage increases for the largest firms also seems reasonable. If the government has permitted wage adjustments for large firms that have approximated the proportional change in the legal minimum wage, then the results are not surprising. Perhaps some of the payroll increase in firms employing between 101 and 500 persons also results from this factor. It would help to explain the much larger increase in average payroll expenditures per employee in the medium-sized firms as compared with that for the two groupings of smaller firms.

There are two points that are not clear in the paper and that could affect the implications which Gregory has drawn from the data. The first concerns the specifics of the minimum wage legislation. In both Canada and the United States, minimum wage legislation requires a minimum rate per hour. In his paper Peter Gregory does not indicate what the law requires.¹ In Table 1 he presents an annual average legal minimum wage, while later in discussing a study of the 1970 Census data he refers to a monthly legal minimum. The question I would raise is, what rate applies to part-time or temporary workers? We are told that ". . . 17 and 31 percent of income recipients in commerce and services respectively reported earnings of less than 600 . . ." (pesos per month) compared with the monthly legal minimum of 847.50 pesos in 1969. In Canada and the United States, these industries tend to have a higher percentage of part-time workers. Seasonal as well as part-time work occurs in agriculture, another sector where Gregory finds the actual being below the legal minimum. The incidence of short duration work could be an important factor in explaining the below-minimum earnings as well as the author's reference to evasion.

¹I understand that the law sets a minimum rate per day. Peter Gregory estimated the monthly and annual minimums by taking the daily rate and multiplying by the average number of work days per month or per year.

The second point concerns the implications of the increase in the minimum wage for employment growth. The data do show that the smallest firms, which had a sizable increase in average payroll per person and were affected the most by the increase in the minimum wage, also experienced a decrease in employment. On the other hand the largest firms, which showed an even greater increase in their payroll per person, grew more than the overall average employment increase. In order to fully examine the impact of minimum wages, information is needed on unemployment as well as employment. Theory suggests that, in the absence of the economy of high wages effect, an increase in minimum wages will result in an increase in the number of unemployed. Such data would have helped to put the issue of a lag in employment growth rates in more perspective, assuming, of course, that appropriate data are available.

While information on these points would have added to the presentation, the paper is itself a very interesting and useful analysis.

II. CONTRIBUTED PAPERS: ORGANIZATIONS AND PERSONNEL

The Use of Positive Reinforcement to Reduce the Costs Associated with Employee Absenteeism*

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A recent review of traditional attempts to influence employee attendance patterns concluded that most efforts have focused on either descriptive control or discipline (punishment) control.¹ Descriptive control merely attempts to identify those factors associated with different levels of absenteeism. While Johnson and Peterson felt that an understanding of the factors influencing absenteeism was interesting, such an understanding did little to help a manager reduce his department's (or company's) absenteeism rate. They went on to note that while it is often possible to influence behavior (such as employee attendance) through the systematic application of punishment, an approach relying upon punishment can precipitate a variety of dysfunctional consequences, e.g., employee anxiety, negative attitudes toward the punishing agent (often the first-line supervisor), etc. Johnson and Peterson conclude by arguing for the application of positive reinforcement ideas as an approach to control employee absenteeism, and they provide an outline for the development of a Positive Reinforcement System (PRS).

* A manuscript reporting on the first eleven months of this study is scheduled to appear in *Personnel Journal*.

** The authors wish to thank Georgia J. Schmitt for her assistance during the study.

¹R. D. Johnson and T. O. Peterson, "Absenteeism or Attendance, Which Is Industry's Problem?" *Personnel Journal* 54 (November 1975) pp. 568-72.

Behavioral Principles Behind the PRS

The Positive Reinforcement System (PRS) discussed by Johnson and Peterson² is based upon the principles of operant conditioning and the work of B. F. Skinner³ and makes use of two very basic principles: (1) people are more likely to repeat behaviors that have been followed by rewarding consequences; (2) by providing the proper rewards, it's possible to influence the frequency of occurrence of a person's behavior. If the employee perceives positive consequences from staying home or away from work (e.g., sick-pay benefits), then the frequency of this behavior (absenteeism from work) will likely increase. Alternatively, if a positive reinforcer or reward is perceived as a consequence of coming to work, then the subsequent frequency of attendance behavior should increase.

Another important consideration when developing a reward system is that it is not necessary or always possible to reward a person every time he (she) behaves in a desired manner. It is often more feasible to administer rewards on an intermittent basis after a series of performances, the number of which varies from the granting of one reward to the next. This means of administering rewards is at the heart of all gambling devices and lottery systems. Behavioral research has shown that this means or schedule of administering rewards can produce very high, rapid, and constant rates of desired behavior.⁴ Research has indicated that the manner in which a given reward or incentive is administered (e.g., intermittently) is as strong a determinant of the effectiveness of the reward as is the value or any other attribute of the reward or incentive. The remainder of this article will deal with the background, implementation, and results of a pilot program utilizing a lottery reward system (in the PRS framework) designed to increase the frequency of occurrence of the desired behavior—work attendance.

Organizational Setting

An electronics manufacturing firm founded in 1949 for the purpose of manufacturing and marketing automatic fire alarm systems was the setting for the study. In recent years, the company's product line has been expanded to include sophisticated security systems as well as fire detection and alarm systems. As a result of the complexity of the product line, assemblers as well as the production and engineering personnel

² Johnson and Peterson.

³ B. F. Skinner, *Contingencies of Reinforcement: A Theoretical Analysis*, (New York: Appleton-Century-Croft, 1969).

⁴ G. S. Reynolds, *A Primer of Operant Conditioning* (Glenview, Ill.: Scott, Foresman, and Company, 1968).

are required to be highly skilled in their respective fields. The total work force at the plant remains relatively stable at 120 full-time employees.

A number of events led to the firm's decision to initiate a program designed to control employee absenteeism. The industrial relations manager of the company had become increasingly concerned over the growing absenteeism problem within the organization. An investigation of the problem disclosed that an increasing rate of employees were receiving sick-leave benefits under the company's short-term disability insurance program. In addition, employee tardiness was becoming a problem. This increased absenteeism and tardiness was causing a drain on company resources and disrupting the normal work flow. Upon analyzing the situation, it was concluded that a program should be initiated to reward the desired behavior (prompt and regular employee attendance).

Development and Introduction of the PRS

In order to reward work attendance behavior at the electronics plant, a program was initiated under which employees could qualify for a monthly drawing providing they had perfect attendance and punctuality records for the month. Thus, eligibility for the monthly drawing was contingent upon the emission of the desired behavior—work attendance. All absences of any kind, whether illness, medical appointments, vacation periods, etc., precluded employees eligibility for the month in which the absence occurred. This policy eliminated any need for decisions on the merits of individual instances of absenteeism—if you were not at work, you were not eligible for the monthly drawing. In addition, tardiness of one minute or fraction thereof disqualified an employee from participating in the monthly drawing.

The program was described in a company bulletin. The employees chosen to participate in the program consisted of those classified in the nonexempt category, such as hourly or weekly salaried personnel. This category included 80 employees and comprised approximately 66 percent of the total organization's work force. Those employees eligible for the program included both production and office personnel.

The lottery was conducted on the last work-day of each month. A drawing was held in which a winner was selected at random from a basket containing the names of all employees who had maintained perfect attendance and punctuality records for that month. A \$10 cash prize was awarded to the winner of each monthly lottery. In addition to the monthly monetary prize, the names of all employees who qualified were listed on the plant bulletin board. Thus, in addition to

TABLE 1
 Comparison of Sick-Leave Expenditures Before and After the Introduction of a
 Positive Reinforcement System

Months	Prior Monthly Costs (\$)	Post Monthly Costs (\$)	Prior Costs-Post Costs (\$)
September	553	935	-382
October	755	562	193
November	1088	315	773
December	563	576	- 13
January	1209	737	472
February	1075	585	490
March	1136	746	390
April	1394	775	619
May	826	596	230
June	814	767	47
July	755	469	286
August	690	670	20
TOTAL	\$10858	\$7733	\$3125

monetary rewards, social reinforcement in the form of recognition was also utilized.

The lottery-reward system introduced in the electronics firm combines elements of fixed interval and variable-ratio schedules of reinforcement. In order to assess the impact of such a reward system on company costs, prior and post data were gathered concerning monthly sick-leave expenditures. Comparisons were made between sick-leave expenditures for the first year of the program as contrasted with the same type expenditures for the year prior to the initiation of the Positive Reinforcement System.

Results

The results of the study are shown in Table 1. The monthly sick-leave costs are summarized from September through August for both the prior and post time periods. The data analysis demonstrates the impact that a reward system can have on absenteeism costs. In comparing the cost figures for the 12 months prior to the initiation of the reward system to the costs incurred after initiation of the program, a reduction in monthly expenditures is evident with the exception of September and December.

The data reveal that the average monthly savings after the introduction of the PRS amounted to \$260.⁵ This reflects a 28.8 percent decrease in total sick-leave expenses when contrasted with the previous 12-month period. During the same period, absenteeism was reduced

⁵ For the statistically inclined, a *t*-test for related measures shows this difference to be statistically significant at $\alpha < .01$.

from an average monthly level of 3.3 percent to 1.95 percent. The 41 percent reduction in level of absenteeism is especially impressive when considering that the beginning absenteeism rate (3.3 percent) was not unusually high.

In evaluating the effectiveness of any new program, a cost-benefit analysis can reveal the net monetary gain (or loss) accruing to the organization as a result of the program. Total benefits in the form of reduced sick-leave expenditures for the company during the 12-month duration of the reward system amounted to over \$3,100. Such savings were obtained at a total program cost of \$120. Thus, from a cost-benefit standpoint, the results from the pilot study would strongly support the hypothesis that a lottery-based work-attendance reward system can be a powerful supplement to an organization's compensation system.

Discussion

Absenteeism continues to be one of the most visible behavior problems in American industry. Not only does worker absenteeism have an adverse impact on production costs, but sick-pay benefits alone may cost industry over \$15 billion annually.⁶ The failure of traditional methods to control the rate of absenteeism illustrates the need for the development of behaviorally based approaches, such as suggested in this research.

The initial results of this study indicate the potential benefits from utilizing the lottery reward system to reduce employee absenteeism and its accompanying costs. Certain changes, however, *might* render increased benefits from this positive reinforcement technique. Under the lottery-reward system it would be quite feasible to change the reinforcer or the magnitude of the reinforcer (the dollar reward) and/or the schedule for the administration of the reinforcer. Systematic empirical analysis would ultimately be required to determine the actual impact of any changes upon employee-attendance patterns and the associated costs. It does seem reasonable to speculate, however, that the beneficial aspects of the lottery method could be enhanced by administering different reinforcers or reinforcers of varying magnitudes under different schedules of reinforcement.

The method utilized in this pilot study to reduce the rate of absenteeism is a relatively new approach⁷ built on a solid theoretical and empirical foundation concerning the influence of human behavior.

⁶ A. J. Gemmel, "Personnel and Line Management: Partners in Absentee Control," *Personnel Journal* 52 (February 1973), pp. 113-15.

⁷ See E. Pedalino and V. U. Gamboa, "Behavior Modification and Absenteeism: Intervention In One Industrial Setting," *Journal of Applied Psychology* 59 (December 1974), pp. 694-98. Also R. D. Johnson and J. A. Wallin, "Employee Attendance: An Operant Conditioning Intervention in a Field Setting," unpublished paper.

This paper has dealt only with work attendance, but the same approach can be applied to other areas of managerial concern such as safety or accident rates, production rates, sales quotas, etc. Thus the specific rewards, the specific type of program, and the specific behavior to be rewarded could vary widely depending upon organizational needs.

A few closing thoughts are in order. The systematic application of basic reinforcement ideas within the organizational setting is not to be viewed as the new "solution" to organizational problems. However, if efforts are made to carefully utilize positive reinforcement approaches in selected situations, vary satisfying consequences are possible—satisfying for the organization *and* satisfying for the employees. If enough care is taken in the use of what is known about reinforcement principles, they can become an effective organizational tool without becoming the new organizational fad.

An awareness of the potential impact of positive reinforcement suggests a total management philosophy emphasizing desired behaviors rather than concentrating upon the less desirable behaviors. The PRS approach, while not so new to some enlightened managers, is totally new to many managers—those managers who spend all of their time punishing employees who exhibit undesirable behavior. Do we concentrate on absenteeism or attendance—undesired behaviors or desired behaviors? The systematic application of positive reinforcement will not lead a manager to a utopia, but it may enable that manager to increase the frequency of occurrence of some organizationally meaningful behaviors on the part of his subordinates.

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Organizational Behavior and Theoretical Models of Industrial Relations

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We have yet to decide in industrial relations whether we are engaged in a multidisciplinary conversation with each conversant firmly tied to his or her discipline or if, alternatively, we have more in common than a roughly comparable language. Is there a common body of theoretical knowledge in industrial relations that is broad enough to provide answers to the questions we find important and yet narrow enough to be manageable? The theory cannot encompass all that could be said if psychology, economics, sociology, political science, and history were applied to the all-encompassing term, industrialism. A theory that includes all variables for consideration is no theory at all and provides little help for our finite understanding since its mere size is too overwhelming. However, I believe we are close to a synthesis of ideas if we can but fix a common focus for our work. The outline of the synthesis I see developing is the objective of this paper.

The Current State of Industrial Relations Theory

The study of collective action in industrial relations is shifting from economists to sociologists and yet in the transition the focus on industrial relations questions has been blurred. Perhaps the focus was never as clear as we would have liked. Commons comments wryly in the introduction to his *Institutional Economics* that some readers of his first drafts of the book remarked that “they could not understand my theories nor what I was driving at, and that my theories were so personal to myself that perhaps nobody could understand them . . .” [2, p. 1]. Insight can often be had, however, by returning to the basic arguments of earlier works and reinterpreting them with the help of time’s perspective.

Commons, for example, makes the transaction the “ultimate unit of economic investigation” and defines it as “a unit of transfer of legal control.” The collective control of a group of individual transactions was seen to be the basis for the study of “institutional economics” [2, pp. 4, 6]. Commons appears to anticipate the importance that open-systems theorists in organizational behavior would place on the interaction be-

tween organizations and their environments. But his framework, even if combined with work of scholars such as the Webbs, Tannenbaum, Perlman, etc., is probably not adequate to incorporate the developments that have occurred recently in the social sciences, and that can be applied to the nebulous area we call industrial relations.

The question is thus raised of how to delimit and define the appropriate boundaries for the study of industrial relations. Some open-systems theorists posit that organizations tend to entropy (i.e., to break apart or run down) unless specific action is undertaken to prevent it, (e.g., [8, p. 19]). Industrial relations, however, should assume that organizations tend to break apart according to quite predictable patterns and then are reintegrated according to a new set of rules.¹ Industrial relations researchers should be able to identify cleavages within the organization, outline the conditions under which a break in its structure is apt to occur, and analyze the processes that transpire as it is reintegrated again. In short, industrial relations is the study of the processes by which organizations arrest or transform their tendency to break apart under the exigencies of industrialism.²

Using the above definition for the boundaries of our study, how well have researchers done in presenting an integrated theory of industrial relations? Undoubtedly one of the most serious attempts at providing an industrial relations framework is John Dunlop's *Industrial Relations Systems* [4]. Dunlop describes the "industrial relations system" as a web of rules and outlines the variety of inputs to the system from the economic, political, social, and historical environment in which the system operates. The output of the system is a set of rules and regulations binding labor and management into a relationship.

The problem with Dunlop's framework is that it is static. It can be argued that the web of rules is not the ultimate outcome of the system but rather that the web of rules seeks to guarantee the existence of a psychological and social contract³ that either prevents the organization from splitting or assists in the reintegration of the organization once a split has occurred. The social-psychological contract is the objective of the system. With the social-psychological contract at the

¹Traditionally the split has been between management and labor, defined through the certification procedure. With the move toward unionization of white-collar and public employees, identifying one main cleavage in organizations is difficult. Nevertheless, we assume that the certification procedure can pinpoint an organization's most important cleavages and that viable bargaining units can be welded together in the process.

²Using Barbash's definition of industrialism as having these features: technology, scale, cost discipline, a disciplined work force, organization, and a labor force which exists under conditions of uncertainty and governed by the state (Jack Barbash, Lectures, University of Wisconsin, 1971).

³See [13, p. 11] for further discussion of the **psychological contract**.

nexus of the system, research in the disciplines sharing the study of industrial relations can focus on the dynamics of the processes affecting the contractual arrangement.

To date, the dynamics we seek to understand have been studied by a variety of disciplines. Organizational behavior studies the dynamics of job performance, job satisfaction, and turnover, economics the dynamics of wage determination and prices, political science the dynamics of power relationships, and psychology the dynamics of leadership. One area, the dynamics of the collective bargaining process, has remained of major concern to students of industrial relations, regardless of discipline. Yet most of these areas tend to remain the province of their own disciplines with little concerted effort at integration.⁴

If we turn to radical analysis of industrial society, we do find a complete set of theories explaining the dynamics of the industrial relations system. Radical analysis extends the idea of an inherent cleavage in organizations to society as a whole. The demands of capitalism are seen to split the social structure into two opposing classes and the reintegration of the structure cannot occur until an extensive and possibly violent transformation of society is brought about. The alienation of the worker from the work to be performed, the necessary tendency of capitalism to increase its scale and mechanization, and the eventual vulnerability of the system to collective action set in motion a dynamic process that leads to the replacement of capitalism with an alternative form of industrial organization less prone to the same social and psychological contradictions. Many western scholars have rejected the radical explanation, but neither a coherent set of alternative hypotheses for the dynamics of the system nor a theoretical structure that might include the radical explanation as one of the possible positions within a broader theoretical framework has been proposed. A logical place to search is the field of organizational behavior, but are the questions asked the ones most important to us?

A Brief Overview of Theories of Organizational Behavior and Their Implications for Industrial Relations

Early work in organizational behavior was directed at the structure of organizations. The Weberian bureaucratic model led to studies of levels within the organization, the span of control for supervision, and more recently an emphasis on the size of the organization as a key variable in understanding the collective behavior of organizations [19,

⁴Walton and McKersie's distinction between distributive and integrative bargaining is a good example of a useful model that has not been sufficiently incorporated into a more general framework of industrial relations theory [17].

5, 1]. The structuralist approach originally was closely associated with the school of classical management where organizations were viewed as collectivities with specific and measurable goals. Classical management theorists (Taylor, in particular) stressed efficiency as the overriding objective of business concerns.

Softening the outlook of classical management has been the perspective of human relations, which modified the goal of efficiency to include the "human needs" of the work force. The unitary goal of the enterprise was not abandoned, however. If the work force were properly managed, cooperation could be achieved and efficiency more readily attained by using the tools of human relations. The school has had a considerable and vocal following, but the view has not been without its critics, the most recent break being two-fold.

On the one hand, theorists began to view organizations as possessing multiple goals eroding the earlier axiom of mutual cooperation adopted by the human relations school. The study of conflict resolution among competing goals and an organization's capability to pursue conflicting goals sequentially was a natural outgrowth [3, 14]. On the other hand, theorists who presently appear predominant began to view the organization as an open system, almost an organic entity which exists by bargaining for resources through exchanges with the environment. Organizational effectiveness is judged more in reference to the survival of the organization than in terms of how adequately its goals are met [16, 9, 8].

If we select from these traditions, where should we draw the elements of industrial relations theory? We should examine carefully the implications of a shift in outlook that views organizations as goal-directed to one that views them as open systems. Complete acceptance of the latter view without also seeing organizations as goal-directed may cause us to leap across the orientation that would provide us the best theoretical framework. We need to recognize the organization's environment, but if reference to goals is abandoned, how do we explain the regular splits in organizations between those who direct and those who are directed?

Does not an open-systems approach tempt us to believe that bargaining relationships between organizations and among subunits of an organization are much the same kind? From an industrial relations perspective, they are quite distinct. Commons characterizes an organization (a "going concern") as comprised of three types of transactions. He defines the going concern as a "joint expectation of beneficial bargaining, managerial, and rationing transactions, kept together by 'working rules'" [2, p. 58]. The bargaining relationship occurs when

two or more sellers and two or more buyers are parties to a transaction, all of whom are treated as equals under the law. In managerial transactions "an individual or hierarchy of individuals [gives] orders which the inferiors must obey" and in rationing transactions a collective (trade union, board of directors, legislature, cartel) "prorates among inferiors the burdens and benefits of the concern" [2, p. 59].

One need not accept Commons' typology as ideal. But the fact that a distinction is made is important. A key factor distinguishing the many different kinds of interactions an organization can have is the degree of convergence or divergence of a whole set of goals and the power that the convergence of goals implies for each of the parties in relation to the other. A fundamental divergence of goals can cause the organization to split, but a whole series of other coincident goals may be just as powerful a force toward reintegration. In summary, organizational behavior has yet to differentiate adequately among the kinds of bargaining activity carried out by organizations and to investigate how the convergence or divergence of goals has differential effects on the various kinds of bargaining relationships.⁵

The perspectives of organizations as goal-directed and as open systems can be combined, but how should we treat the variables that comprise our models? Many of the variables used in models of organizational behavior need to be scrutinized for a dichotomy of methods by which the construct being measured may be achieved. For example, the degree of participation in decision-making processes often serves as an important variable in models of organizational behavior. Yet for industrial relations, a considerable difference exists between direct, individual participation of an organization's members in decision-making and the indirect, collective, and often times highly codified participation of a trade union in the organization's affairs. Neither type of participation should be slighted to obtain a global measure of participation, but whether or not the organization's structure has split will determine the measures of participation that can be used and their comparability with measures from other organizations.

The Emerging Outline of Principles of Industrial Relations

Given the above cautions, we must uncover relationships that will yield a set of nonstatic principles underlying the industrial relations

⁵ Galbraith comments that though the contract is one of the most essential mechanisms for assuring coordination within the planning sector of the modern industrial economy, its importance has been overlooked by economists also. Galbraith refers to the "web of contracts" as "one of the most remarkable and also one of the most curiously unremarked features of the planning sector" [7, p. 127].

system. Recent work by Alan Fox [6] combined with other work in the area of organizational behavior can provide a good beginning.

We have assumed that industrialism establishes forces that lead to a tendency for organizations to split apart. Industrialism is too encompassing a term to derive testable propositions, however. We can substitute the term technology for industrialism, but two serious obstacles still confront us. The term technology itself is imprecise and begs definition. Secondly, studies of the influence of technology on organizations seem to make structural variables the dependent variables of many of their models—hierarchy, centralization, participation—variables which are not differentiated to reflect the dual tendencies of organizations divided among competing groups, and variables [mentioned above] which do not describe underlying dynamic forces.

For resolving the first problem, we have a variety of definitions of technology to choose from. Writers in the tradition of Woodward or Thompson would define technology as the degree of mechanization [20, p. 36] or the amount of technical knowledge required by the job [16, pp. 15–17]. But Perrow describes technology broadly as “the actions that an individual performs on an object, with or without the aid of tools or mechanical devices, in order to make some change in that object” [12, pp. 195–96]. Perrow collapses Woodward’s typology to a scale with a range from routine to nonroutine technologies.

The second problem is central to devising a conception of the dynamic underlying a system of industrial relationships. Fox, though focusing on the British inflationary crisis, outlines an industrial dynamic in which he adopts a scale comparable to the routine/nonroutine classification of technology used by followers of Perrow, but the scale also reflects the roles of individuals within an organization. The dimension Fox uses is discretion, and greater or lesser degrees of discretion are related to a high and low trust dynamic within the organization subject to constraints of tradition, power, and ideology.

The written contract for Fox represents an extremely low trust relationship within an organization and signals the end of a dynamic set in motion by a reduction of discretion introduced in response to the demands of technology and the need to produce efficiently. Fox adopts the earlier definition of both Zand and Deutsch which defines trusting behavior among individuals as “consisting of actions that (a) increase one’s vulnerability, (b) to another whose behavior is not under one’s control. . .” and accepts Zand’s extension to institutional trust as “not a global feeling of warmth or affection, but the conscious regulation of one’s dependence on another. . .” [6, p. 66; 21, p. 230]. Changes in technology, growth of the firm, and instability of markets which re-

quire flexibility in work assignments and relatively short training periods lead to a desire to specialize or reduce discretion. High discretion in work assignment implies job security for an individual since it is also associated with a longer period of training and socialization, making it costly to replace the individual occupants of high discretion work roles. As discretion is reduced in work roles, however, the survival of the organization and the survival of an individual's position in the organization are not closely linked and collective action is the means of assuring that the close relationship be restored.

But Fox observes, drawing on research in small-group behavior, that high and low trust behavior are each mutually reinforcing. Fox claims that the findings based on small groups can be extended to larger institutions: ". . . differing degrees of trust are perceived as being embodied in the rules, roles, and relations which some men impose on, or seek to get accepted by, others" [6, pp. 67-68]. In other words, a change in the discretion of work roles in an organization does not involve a one-time change in either the structure or the attitudes of individual members of an organization. Rather, a cycle of mutually reinforcing attitudes is established that continues until it is more costly for one group to continue the cycle than to maintain the status quo [6, pp. 104-105].

Fox views a high discretion-high trust dynamic as symmetrical to the low discretion-low trust dynamic outlined. An upward spiral of institutional trust can be initiated through job redesign and enlargement of discretion which can be expected to evoke a reciprocating institutional response. Through the mutually reinforcing cycle of trust, relaxation of restrictions on both parties would exceed the one-time response of one group to a relaxation of limits on discretion initiated by the other.

In either of the cycles, the process can be arrested through the exercise of power, through the force of strongly coincident goals held by all members of the organization, or through the influence of strongly divergent goals among two or more groups which continue to be maintained in spite of any enlarged degree of discretion. Fox cites the Israeli kibbutz as an example of the second constraint. The third constraint could prevent the upward spiral of trust if the ideological position of one group were such that enlarged discretion would not lead to higher trust because changes within the larger society were deemed more important than creation of a reciprocal climate of trust in any one organization.

Important for the study of industrial relations is the focus of Fox's thinking. At the center of his system is Schein's concept of a "psycho-

logical contract" [6, p. 76; 13, p. 11]. The nature of the contract is revealed to the participants through the way work is structured in the organization, the methods of control, and the kinds of authority and reward systems utilized. Minor adjustments in the treatment of employees (the level of lighting, etc.) may do little to alter the institutionalized trust (or lack of it) within the organization:

This explains why the characteristic top management exhortation to rank and file employees to "trust the company" is often received with cynicism. In the very way it structures work, authority, and rewards it excludes them from its own high-discretion, high-trust fellowship, yet asks them to submit to its discretion in handling their interests and destinies. In other words: "We do not trust you, but we ask you nevertheless to trust us." [6, p. 76].

But we should also raise questions about Fox's basic framework. First, the trust dynamic that Fox outlines may not be symmetrical. One of the important Keynesian insights lay in the recognition that the pricing system outlined by classical economists was not symmetrical. In the industrial relations system, we have effectively institutionalized what is for Fox a low point in the trust-distrust continuum. Legal structures, tradition, and, perhaps most importantly, the politics of an organization formally divided between labor and management may provide strong "institutional rigidities" in the dynamics of trust.

Second, certain preconditions may be necessary before the low discretion-low trust dynamic can be converted to one of higher discretion and higher trust. The definition of trusting behavior implies that at least the first step in the process be taken unilaterally since actions of trust "increase one's vulnerability." In other words some uncertainty will exist regarding the benefit of the action to the party taking the first step. If the economic climate in which the organization survives is unstable, the likelihood of that initial step may be decreased. Researchers need to establish the preconditions that will affect the probability that a shift in the direction of enlarged discretion will occur and the variables that determine whether the initial steps will be converted into the dynamic Fox proposes.

Finally, we should question whether the leap from small-group analyses of trust can be made so readily to the more macro level of "institutionalized trust." Fox has used previous studies and reinterpreted the data in light of his theoretical framework. We now need to devise direct tests of the dynamics that may be involved in the establishment of trust within institutions.

Fox's framework is provocative. His explanation is dynamic, and

though his formulation is open to question, he provides a possible focus for our work that has before been lacking. His work joined with the work of others in the field of organizational behavior, furthermore, has the potential for providing a firmer basis for our study—a set of general propositions to explain the organizational relationships that fall within the area we know as industrial relations.

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Toward an Empirical Merger: Sociological and Economic Conceptions of Strike Activity¹

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Studies by sociologists indicate renewed interest in the causes of industrial strike activity and the application of multivariate analysis to an area that sociologists had previously approached largely through the use of case studies. For economists, this reorientation by their social science colleagues is probably welcomed. However, the assumptions made, theories tested, and variables examined have thus far only infrequently overlapped. This paper is designed to examine this tendency to speak past one another and to provide an illustration of the efficacy of a combined approach.

The economists' theory of strikes is typified by the Ashenfelter and Johnson² "alternative" bargaining model on which much research has been built.³ Though the model includes union politics and collective bargaining processes, the causal basis of the occurrence of strikes is viewed to be largely economic.

A crucial element of this theory is the expectation level of the workers regarding minimal acceptable contract terms. These expectations are based on the availability of institutional supports such as strike benefits and welfare payments to strikers and on the condition of the labor market. The model assumes that these support mechanisms are relatively stable over time and that the real cause of variations in strike patterns is the state of the economy. Rees⁴ points out that business prosperity gives certain advantages to unions in terms of lower risk of job loss, rising wages, and business's desire to profit from an expanding market. As a result, unemployment rates, GNP, wage in-

¹ I would like to acknowledge the comments that Thomas Kochan contributed to an earlier version of this paper.

² Orley Ashenfelter and George E. Johnson, "Unionism, Relative Wages, and Labor Quality in U.S. Manufacturing Industries," *International Economic Review*, vol. 13 (Oct. 1972), pp. 488-507.

³ Jack W. Skeels, "Measures of U.S. Strike Activity," *Industrial and Labor Relations Review*, vol. 24 (July 1971), pp. 515-25; William D. Walsh, "Economic Conditions and Strike Activity in Canada," *Industrial Relations*, vol. 14 (Feb. 1975), pp. 45-54.

⁴ Albert Rees, "Industrial Conflict and Business Fluctuations," *Journal of Political Economy*, vol. 60 (Oct. 1952), pp. 371-82.

creases, and price increases are used to explain changes in the rates of strike activity. Union power is also seen as a product of similar economic conditions; any relationship between measures such as union membership or size of union and strikes is considered spurious.

However, recent sociological analyses have regarded industrial conflict as a specific manifestation of collective behavior. Central concern is with conditions which facilitate workers in mobilizing to express grievances through strike activity. Though conditions that promote the mobilization of workers are sometimes economic, they are also organizational and political. Regardless of the institutionalization of collective bargaining, strikes retain some basic elements of social movement collective behavior. There is a need for rapid mobilization of a relatively large number of participants, a well-developed system of communication, a favorable political climate, and the ability to sustain activity over some length of time. These elements may be analyzed as products of organizational characteristics as well as economic conditions.

Obviously, economists and sociologists alike acknowledge the importance of unions in the analysis, but there are differences in the size, composition, and location of unions in various industries which cannot easily be ignored, yet which are not included in most economic analyses (perhaps because of the units of analysis selected). Several sociological studies⁵ have chosen to examine plant size, degree of unionization, and union size in predicting interindustry differences in strike rates. The three variables are interpreted in terms of worker concentration of dissatisfaction and available participants, "mobilization potential," and "threat potential." Degree of unionization (mobilization potential) indicates the ability of the unionized workers to control the activity of workers in an industry. In highly unionized industries, particularly with large unions, the organized workers will have a greater ability to obtain external support through knowledge of welfare rules, local politics, and strike funds. Union size is called "threat potential" since a larger organization will give the organized workers greater flexibility and effectiveness in choosing tactics. Large unions are more likely to have internal factionalism which will also influence their willingness to call a strike. Plant size is important since it describes the concentration of workers who are available for organization by unions and because there is a general assumption that large plants increase the level of worker alienation. This organizational approach in slighting eco-

⁵ David W. Britt and Omer Galle, "Structural Antecedents of the Shape of Strikes: A Comparative Analysis," *American Sociological Review*, vol. 39 (Oct. 1974), pp. 642-51; Edward Shorter and Charles Tilly, *Strikes in France 1880 to 1968* (Cambridge: Cambridge University Press, 1974).

conomic variables has proceeded on the assumption that organizational capability for collective action is the most crucial element in explaining variations in strike frequencies.

Strike activity is not simply a matter of total man-days lost, but involves the number of strikes, number of participants in each strike, and man-days lost in each strike. These dimensions have often been used in economic analysis, but sociologists derive them from work on collective violence which suggests that a particular episode of collective action is only fully understood in terms of the number of participants and the length of time spent in the action.

However, there have been attempts at combining the alternative approaches. Skeels⁶ considered political variables along with economic ones in his analysis of strike activity and found an increase in strike participation and frequency when a government sympathetic to labor was in power. Shorter and Tilly⁷ found that organizational factors account for variation in strike rates independent of economic conditions. Snyder⁸ finds that under industrial relations systems in which the principles of collective bargaining are well established (institutionalized), economic variables are in fact the best predictors of strike variation; but when collective bargaining is poorly established, such as in Italy, France, and pre-World War II U.S., organizational and political factors dominate. Applying economic models such as Ashenfelter and Johnson's to countries with different industrial relations systems may be quite unreasonable.

Still another dimension may be added in this trend toward integrative approaches. Little attention has been paid to the actual structure of bargaining in these studies, yet the importance of national versus local or single versus multiple plant negotiations to the bargaining relationship has been recognized. Kochan and Block⁹ found that contracts bargained with single employers had provisions regarding pay supplements, fringe benefits, and equity that were much more favorable to the workers than did contracts negotiated with employer associations. Within the single-employer contracts, those contracts referring to a single work site were weaker with regard to working conditions and job security issues than were multiplant contracts.

Bargaining structure belongs to both the economic and the organi-

⁶ Skeels, pp. 518-25.

⁷ Shorter and Tilly.

⁸ David Snyder, "Institutional Setting and Industrial Conflict: Comparative Analysis of France, Italy and the United States," *American Sociological Review*, vol. 40 (June 1975), pp. 259-78.

⁹ Thomas A. Kochan and Richard Block, "An Interindustry Analysis of Bargaining Outcomes: Preliminary Evidence from 2-Digit Industries," Working Paper, Cornell University, January 1975.

zational approach, yet has been adequately employed by neither. The structure of bargaining presumably parallels the product markets in the industry involved, and Kerr and Siegel¹⁰ pointed out that market structure and bargaining structure would be important in determining an industry's propensity to strike. From an organizational viewpoint, national unions have greater resources, flexibility, and perhaps greater skill in negotiations. Bargains covering a large number of plant sites or a large number of workers are likely to lead the parties to see greater extremes of potential losses and gains in both economic and symbolic terms. We might then expect a greater level of conflict in areas where multiple-plant or multiple-employer bargaining takes place.

To illustrate the integrative use of bargaining structure, a sociological study of industrial conflict¹¹ was reanalyzed and bargaining structure variables were added. The central hypothesis is that the earlier study represents only a partial specification of the factors predicting the frequency, breadth, and duration of strike activity across industries and that the results would be modified by the addition of bargaining structure variables.

The original study used data for the years 1967–1969 in a cross-sectional analysis of 28 industrial categories including both manufacturing and nonmanufacturing industries. The public employee category used is excluded here due to the legal and structural differences in public employment, warranting its separation from private sector industries.

Their model dealt with four independent and three dependent measures of strike activity. Number of workers in the industry, degree of unionization, average union size, and average plant size for each industry are used to predict the frequency (number of work stops), breadth (number of workers involved per work stop), and duration (number of man days idle per worker involved) of strikes. The results of their study are replicated closely and the coefficients appear in Table 1, column 1.

They conclude that the degree of organization of the work force makes a great difference in determining the shape of strikes (strongly affecting all three dimensions: frequency and breadth—positive, duration—negative), but the actual size of unions appears to affect only frequency (positive). Plant size reinforces the effects of unionization in producing a pattern of broad but short strikes (frequency, duration—negative; breadth—positive).

¹⁰ Clark Kerr and Abraham Siegel, "The Interindustry Propensity to Strike: An International Comparison," in *Industrial Conflict*, eds. Arthur Kornhauser, Robert Dubin, and Arthur M. Ross (New York: McGraw-Hill, 1954).

¹¹ Britt and Galle.

TABLE 1
 Reanalysis of the Britt-Galle Model of Industrial Conflict, N = 27^a

	Strike Dimensions								
	Frequency			Breadth			Duration		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
X ₁ ^b	.235 ^c	.098	.177	.038	-.291	-.102	-.486	-.621	-.323
X ₂	.252*	.055	.150	.380	.259	.428	-.413	-.526	-.375
X ₃	.441*	.447*	.565*	-.066	-.343	-.167	.109	.047	.099
X ₄	-.293*	-.184	-.163	.451*	.378*	.387*	-.190	-.161	-.235
X ₅		.375*	.411*		-.404*	-.370*		.062	.051
X ₆		.304			.479			.242	
X ₇			.146			.138			-.228
R ²	.562*	.705*	.691*	.370*	.567*	.516*	.201	.220	.227

* p < .05.

X₁ = number of workers; X₂ = degree of unionization; X₃ = average union size; X₄ = average plant size; X₅ = percent of contracts covering 2000 workers or less; X₆ = percent of multiemployer contracts; X₇ = percent single-firm multiplant contracts.

^a These data were originally presented in a path analytic model but are presented in standardized regression form here for simplicity and comparison.

^b Data sources: Strike Rates, and Unionization 1968, 1969, 1970, Bureau of Labor Statistics Bulletins #1646, 1687, 1727, Plant Size 1969, 1971 Department of Commerce, County Business Patterns, U.S. Summary CPB-80-1: Contract data, Bureau of Labor Statistics, 1973, "Characteristics of Agreements Covering 1000 Workers or More, July 1, 1972," U.S. Department of Labor Bulletin #1784, Washington: U.S. Government Printing Office.

^c Due to the effects of small sample size on the standard error of the estimate, some relatively large coefficients are not significant at the .05 level. All coefficients larger than .20 are discussed as substantively meaningful to the analysis.

In applying bargaining structure variables to the analysis, we specify two dimensions. The first is the locus of bargaining. Are the contracts covering single plants, multiple plants owned by the same firm, or several employers? In the multiemployer and even the multiplant single-employer situation, the union may meet greater resistance than in the single-plant case. The cost of settlement appears to be magnified because it involves several locations, and employer resistance leading to a strike may have the effect of reducing the ultimate contract settlement terms. Multiple locations and ownerships mean that more complex issues must be worked out, and individual locations concerned with specific problems may complicate the negotiations. The greater symbolism involved may make informal negotiations more difficult. We expect multiple-site negotiations to result in an increase in the frequency, breadth, and duration of strikes.

The second dimension is "worker contract density." An industry with numerous contracts would have the potential for a great many more strikes. However, the number of participants in strikes would depend on whether the numerous contracts covered large numbers of workers or were each quite small. A hypothesis regarding duration is more ambiguous. Several researchers have argued that unions can max-

imize gains when they can produce frequent, broad, but short strikes. A contract structure with numerous small contracts would inhibit the production of this pattern, since individual bargaining units have less flexibility due to a smaller resource base (workers, funds, skill, etc.) and fewer workers. We hypothesize a weak negative effect on duration when the number of relatively small contracts is high.

However, the major concern here is with the manner in which the addition of bargaining structure variables alters the Britt and Galle formulation. The locus of bargaining dimension was measured by the percentage of all contracts that involved multiple employers and also by the percent of contracts which were multiplant but single employer. The density measure is the proportion of all contracts that cover less than 2,000 workers.

Following Britt and Galle, standardized regression coefficients were used. The results of the regression analysis are presented in Table 1, columns 2 and 3. (Zero-order correlations are available on request.) Among the independent variables there is a strong correlation between average union size and the proportion of multiemployer contracts, which presents a problem of multicollinearity. As a result, a second set of equations was run in which percent multiplant contracts was substituted for the multiemployer measure. For each dependent measure, three equations are presented. Column 2 uses the modified analysis with the multiemployer variable, and the third the substitution of the multiplant for the multiemployer measure.

Comparison between equation 1 and the two alternatives provides several noticeable changes with the addition of bargaining structure. First, on the frequency and breadth dimensions, the explained variance in the new models is increased considerably over the old formulation. Second, the coefficients appear to be quite unstable. If Britt and Galle's criterion of substantive significance is used (.20) as a benchmark, examination of the changes in results is simplified.

On the frequency models, the contract variable is statistically significant and the multiemployer bargaining coefficient is .30. At the same time, the coefficients for size and work force and degree of unionization are reduced from above .20 to below .10. The plant-size coefficient which was statistically significant is now smaller than $-.20$. In the third frequency model these same changes occur, though the multiplant variable is weaker than percent multiemployer.

The models examining strike breadth also show substantial change. The multiple R^2 increases from .37 to .57 from model 1 to model 2. The contract density variable has a significant coefficient, and the relationship (as predicted) is negative. Multiemployer bargaining pro-

duces a strong positive effect; plant and degree of unionization produce positive coefficients. However, average union size and work force size have much stronger negative coefficients than in model 1. When multiplant bargaining is included, the effect of average union size is not as strong, suggesting that the correlation between average union size and multiemployer bargaining may have distorted the result. Substituting the multiplant measure also reduces the coefficient for size of work force, and the multiplant variable itself has a weak positive relationship to breadth.

The three duration models are unsuccessful in explaining strike length. There is little increase in explained variance and small change in the regression coefficients. Size of work force, degree of unionization, and plant size remain negative in all equations, while average union size and contract density have no effect. Multiemployer and multiplant variables have opposite signs, with multiemployer bargaining increasing strike duration and multiplant bargaining reducing it.

The contract density and multiemployer variables were also examined by adding them to the original model in step-wise fashion. The resulting steps show that the large changes in the multiple R^2 are attributable to the contract density dimension. However, the changes in the beta weights of the original variables did not occur until the multiemployer bargaining variable was added. Contract density seems to operate as a somewhat independent element of the bargaining environment, while the locus of bargaining is related to several of the organizational measures used previously.

The findings regarding both variables are suggestive for the sociologist of collective behavior. Contract density provides an estimate of the number and size of potential dispute locations which has obvious usefulness in collective behavior research. Conceptually, locus of bargaining is related to the dimensions of union strength in the original formulation. It measures the aggregation of bargaining power at specific locations and conveys information about union organization. It may also influence both the threat potential and mobilization potential. The multiemployer variable had a positive effect on duration, suggesting that the confrontations involving organized employers and unions are longer. Such reasoning supports earlier arguments that these conflicts are both economically and symbolically complex. When the multiplant variable is substituted, the relationship becomes negative. Perhaps single employers are less willing to take the costs of lengthy strikes. The frequent, broad, but short pattern seems more easily achieved in single-employer relationships.

Regardless of the specific results, the addition of bargaining struc-

ture supplements the purely organizational model. It both improves predictive power and alters the strength of the original variables. However, many sociologists are both unlikely to realize that the data are available and equally unlikely to go looking for them. Likewise, numerous economic models have discounted the value of union-strength data. A synthesis is in order.¹²

We need not look very far for the simplest of theories that would lead us to consider both points of view. When we assume that union leaders are making political calculations and that the decision to strike rests on the level of the minimal acceptable increase in contract provisions, we need only add that the union (and management) will attempt to estimate the probability that either will succeed in negotiations or a strike. Surely both economic and organizational factors enter that calculation. What resources are available? How long a strike can each party take and how much cost can each inflict? These cannot possibly be economic questions alone.

¹²The synthesis eventually must include economic variables such as wage changes and unemployment rather than just organizational variables and bargaining structure. However, the present concern is simply showing that the perspectives of both sides need to be examined. Economic variables could be collected for these same industrial categories and the model would be modified further.

DISCUSSION

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Since there is no apparent commonality among the four papers, I will deal with each one separately. In addition, I have chosen to focus my comments on potential limitations, rather than strengths, of the papers.

England and Farkash found two groups of workers (which they label Work for Pay and Work for Self Expression) on the basis of the correlation between ratings of 27 job characteristics on two dimensions—Job Provides and Importance. Workers for whom there were relatively low correlations were placed in the Work for Pay group because assumedly there was little relationship between what they saw their jobs providing and what was important to them. An alternative explanation for the low correlations is that some workers did not differentiate across the items (e.g., by giving mostly a rating of “4” for both Job Provides and Importance). This restriction of range would cause low correlations, despite the fact that the respondents were indicating a strong relationship between what their jobs provide and what is important.

The Job Provides items were then used to predict overall job satisfaction for each group. Assumedly, different items should predict satisfaction between the two groups, and in fact to an extent this is what happened. These results, however, should be interpreted very cautiously. In the first place, only a one-item measure of overall job satisfaction was used, thus raising questions of the measure’s reliability. Second, restriction of range may account for some of the difference between the two groups in the items that predict overall satisfaction. For example, the authors report that the mean responses to the “pay,” “safe and healthy workplace,” and “physical conditions” items were significantly greater for the Work for Self Expression group than the Work for Pay group. If these high means were accompanied by relatively low standard deviations (neither is reported) in the Work for Self Expression group, this would tend to inhibit these items from predicting overall satisfaction. Finally, it is important to note that both “chance to improve occupational skills” and “chance to develop abilities” predicted satisfaction in the Work for Pay group. This suggests that the label for this group may be misnomer.

Wallin and Johnson report the results of a lottery system approach to the reduction of employee absenteeism. Using a before-after ex-

perimental group only design, they found that the benefits (reduction in sick leave expenditures) of the program far exceeded the costs (monthly lottery payments). Despite these promising results, there are several troublesome aspects of their study.

The most troublesome is that the experimental design used greatly limits our ability to attribute the observed changes to the program. Use of an ABA design, in which the effects of introducing and then removing the program are measured, would have facilitated causal interpretation. Not surprisingly, however, it is difficult to obtain organization approval for such a design, particularly if the organization feels that the introduced program is working. In addition, use of a comparison or control group would be helpful. This would permit an assessment of trend in absenteeism as an alternative explanation for any changes in the experimental group.

Ignoring design limitations, it is difficult to specify exactly why changes occurred. Since the program used both monetary (lottery system) and social (posting eligible employees' names) reinforcement, there is a complete confounding of effects. Even if it was just the lottery system that influenced absenteeism, however, it is impossible to determine precisely what system characteristics were responsible. Was it playing the lottery per se, or in addition the cash prize? While such issues may be of little concern to an organization, they are important from a theoretical standpoint.

The total cost of the program may be understated, since the administrative costs of designing, implementing, and monitoring the system were not taken into account.

Finally, it is interesting to speculate about employees' reactions to the requirement of perfect attendance and no tardiness in order to be eligible for the lottery in a given month. In part, eligibility is determined by factors beyond employees' own control (e.g., illness), and, this may cause a certain amount of hostility to the system.

Stern's results suggest that incorporation of bargaining structure variables into regression models enhances the predictability of strike activity across industries. While intuitively this makes sense, economists may remain unimpressed with such "organizational" variables because bargaining structures may primarily be a function of economic forces.

From a technical standpoint, it would have been useful if Stern had tested whether or not the inclusion of the bargaining structure variables resulted in significantly more variance explained in strike activity. Also, there appears to be a rather carefree examination of regression coefficients across regression equations. For example, Stern notes the apparent instability of the coefficient for "degree of unionization" once the structure variables are entered into the equation. Cer-

tainly this is to be expected under circumstances of a small sample size ($n = 27$) and intercorrelated independent variables. From a hypothesis-testing standpoint, it is probably more important to be concerned with changes in sign, rather than magnitude, of regression coefficients. Using this criterion, the regression coefficients presented are quite stable.

At a more general level, conceptualizations of strike activity determinants seem to be developed primarily on the basis of available measures. For example, measures of plant size are available, so people go to elaborate lengths to include plant size in a conceptual framework. Yet it seems likely that it is not plant size per se, but variables associated with it that cause strike activity. To illustrate the conceptualization problem further, consider the fact that the intercorrelations among strike frequency, breadth, and duration are quite low. This would seem to suggest that each is caused by a different set of variables. Yet many studies (including Stern's) attempt to predict all three with the *same* set of independent variables. In short, there is a need for greater conceptualization of strike activity determinants and conceptualization that is not constrained by considerations of measure availability.

Hills attempts to integrate the field of organizational behavior into an IR theory framework. In any theoretical framework, the central focus should be on a specification of what causes dependent variables to change. In an eclectic field like IR, such a focus leads to two interrelated problems that must be confronted and dealt with. First, what are the dependent variables? There are clearly numerous possible dependent variables, and thus one must provide some justification for the appropriateness and importance of the chosen variable(s). Second, what is the level or unit of analysis? Here, one can vary from the societal all the way down to the individual level, and choice of level strongly influences choice of the dependent variable.

Hills does not adequately deal with these two problems. He initially implies that the dependent variable is "the processes by which organizations arrest or transform their tendency to break apart. . . ." No justification is provided for the choice of this variable, and a specific definition of the crucial phrase "break apart" is not given. By implication, the level of analysis is the organization. Later on, Hills seems to suggest that the dependent variable is the "psychological contract" and the level of analysis is now the individual within the organization. Such imprecisions detract from the development of understandable, useful IR theory.

Note: The paper on "The Generality of Distinction Between Work-for-Pay Individuals and Work-for-Self Expression Individuals," by George W. England and Alexander Farkash, University of Minnesota, also presented at this session, will be published elsewhere.

III. CONTRIBUTED PAPERS: GENERAL

The Potential of Inverse Seniority as an Approach to the Conflict Between Seniority and Equal Employment Opportunity*

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The current recession has threatened recent employment gains by members of traditionally disadvantaged groups. In instances where female and minority employees have been disproportionately laid off, they have challenged the seniority system, generating a legal battle between the seniority principle and the policy goal of equal employment opportunity. Meanwhile, collective bargaining approaches to this problem have been largely overlooked. Inverse seniority is one such approach which allows senior workers to choose temporary layoff, thus enabling more junior workers to retain their jobs.

Economic Dimensions of the Conflict

One clear lesson of federal manpower policy in the sixties was that training programs for the disadvantaged are not enough: enhanced opportunities for stable employment and promotion are also required. In the absence of demand-side intervention, manpower training programs often returned disadvantaged workers to unsatisfactory jobs.¹ As a result, by the mid-1960s it became apparent that demand-side programs, such as *affirmative action*, would be necessary to break the

* The research on which this paper was based was partially supported by a grant from the Sloan Foundation. For a discussion of inverse seniority and its relationship to public policy, see the authors' "Inverse Seniority: Timely Answer to the Layoff Dilemma?" *Harvard Business Review* (September-October 1975).

¹ This insight is closely associated with the dual labor market hypothesis. See Peter Doeringer and Michael Piore, *Internal Labor Markets and Manpower Analysis* (Lexington, Mass.: D.C. Heath and Co., 1971), ch. 8.

hiring and promotion impasse. Some analysts have concluded that considerable progress was made in minority employment as a result of these programs and the extended period of economic prosperity.²

The unexpectedly sharp decline in economic activity, which began in the fourth quarter of 1973, resulted in widespread layoffs in many sectors, and was widely perceived as a threat to the employment gains experienced by women and minorities during the 1960s. As layoffs conducted according to conventional seniority rules deepened and spread, it was feared that women, blacks, and other members of disadvantaged groups would be forced disproportionately into the ranks of the unemployed.

Quantitative evidence on the extent of the impact of the current recession on the relative labor market position of disadvantaged groups is limited. In a recent memorandum, the Bureau of Labor Statistics (BLS) presented data on changes in the race and sex composition of job-losers between the last cyclical peak (the fourth quarter of 1973) and the first quarter of 1975.³ It would appear from these data that the disparate impact of the recession upon black workers, especially black male workers, has been substantial.⁴ It is not possible to demonstrate a similar effect with regard to white female workers in the aggregate. However, anecdotal evidence contained in press accounts and the facts of the various "layoff" cases pending in the courts make it clear that the recession has also had a disparate impact upon women in numerous specific instances. A reduction-in-force at one auto assembly plant, for example, resulted in the furlough of 46.2 percent of the 4,025 male production workers, and 100 percent of the 441 female production workers.⁵

Legal Aspects of the Conflict⁶

Prior to the onset of the current recession, the courts have had to deal with a variety of issues involving seniority and discrimination. In

² See, for example, Richard B. Freeman, "Changes in the Labor Market for Black Americans, 1948-72," *Brookings Papers*, 1973: 1, pp. 67-120.

³ For the full text of the BLS memorandum, see *Bureau of National Affairs (BNA) Daily Labor Report*, No. 79, April 23, 1975, p. E1.

⁴ The BLS appears to take comfort in the fact that the *ratio* of black to white job-losers has not increased during the current recession. Their error is similar to that of interpreting the near-constancy of the black/white unemployment rate ratio over the business cycle as evidence of the absence of a disproportionate impact of cyclical downturns on blacks. See Freeman, pp. 76-77, for a discussion of this point.

⁵ These are the facts of *Bales v. General Motors Corp.*, No. C-74-1806 AJZ, January 27, 1975 (N.D. Calif. 1975).

⁶ For a more expanded discussion see "Laying Off Employees Pursuant to a Seniority System," *BNA Reporter FEP*, February 22, 1975, Vol. 88, No. 15; Arthur B. Smith, Jr., "The Impact on Collective Bargaining of Equal Employment Opportunity Remedies," *Industrial and Labor Relations Review*, vol. 28 (April 1975); and Alfred W. and Ruth G. Blumrosen, "Layoff or Work Sharing: The Civil Rights Act of 1964 in the Recession of 1975," *Employee Relations Law Journal*, vol. 1 (Summer 1975), p. 2.

1968 in *Quarles v. Philip Morris, Inc.*,⁷ a departmental seniority system was invalidated on the grounds that it "had its genesis in racial discrimination" (blacks had been excluded from some departments and the rules were such that transfer to another department involved loss of accumulated seniority). However, the Civil Rights Act itself specifically protects "bona fide" seniority systems and rules out the use of so-called reverse discrimination. So, for example, in *Papermakers Local 189 v. United States* (1969),⁸ the appeals court agreed with the *Quarles* decision but made clear that it was not appropriate to create "fictional seniority" for newly hired blacks as a remedy for past discrimination in the hiring or promotion of other blacks.

More recently several seniority-based layoff cases have been decided at the appeals court level. In *Waters v. Wisconsin Steel*⁹ the court reversed the lower court and upheld a seniority system which was alleged to be discriminatory. The basis for this claim was that a layoff under this system had had a disproportionate effect on blacks, as a result of the fact that significant numbers of blacks had only begun to be hired relatively recently. The Seventh Circuit Court rejected this claim and added that "to hold otherwise would be tantamount to shackling white employees with a burden of past discrimination created not by them but by their employer."

Another case which has been decided at the appeals court level is *Jersey Central Power & Light v. IBEW*.¹⁰ The case originated when the employer went to court to seek a declaratory judgment on the apparent conflict between its collectively bargained agreement to lay off in reverse order of seniority and a conciliation agreement signed with EEOC which bound it to use its "best efforts" to increase its percentages of women and minority employees. The lower court favored the conciliation agreement and interpreted it to require that the proportion of women and minority workers not be reduced by the layoff. This decision was reversed on appeal, with a strongly worded ruling, reaffirming the priority of seniority in such cases.

The layoff dispute has now reached the Supreme Court, which will hear *Franks v. Bowman* during the fall term, 1975.¹¹ In this case, the issue is narrowly posed: the plaintiffs argue that they had been refused jobs in the past because of racial discrimination by a specific employer. They were subsequently hired and have now been laid off. They main-

⁷ 279 F. Supp. 505, 1 FEP Cases 260, 67 LRRM 2098 (E.D. Va. 1968).

⁸ 416 F. 2d 980, 1 FEP Cases 875, 71 LRRM 3070 (CA5, 1969).

⁹ 502 F. 2d 1309, 8 FEP Cases 577 (CA7, 1974).

¹⁰ 8 FEP Cases 690, 959 (D.N.J. 1974), vacated and remanded 9 FEP Cases 117 (CA3, 1975).

¹¹ *Wall St. Journal*, "Justices to Weigh Retroactive Seniority for Workers Once Not Hired Due to Race," March 25, 1975.

tain that were it not for the prior act of discrimination in hiring, directed specifically against them, they would have accumulated sufficient seniority to have withstood this layoff. This could be a significant case, since if the Supreme Court rules against the plaintiffs, the seniority system will have prevailed in the legal conflict. If the court rules for the plaintiffs, the door may remain open to challenge seniority-based layoffs which have a disproportionate effect upon female and minority employees.

Inverse Seniority

Any final decision from the courts may be a long time in coming and, whatever decision is eventually reached, there will still be a need for creative approaches to this difficult problem. One approach to resolving the dilemma could be the concept of *inverse seniority*. Inverse seniority would permit senior workers to elect temporary layoff at the time of a reduction in force without jeopardizing their long-term job security, in the place of junior workers who would normally be laid off. While on layoff the senior workers would receive some compensation, usually more than just the amount provided by state unemployment compensation. Where female and minority workers tend to be clustered in the junior ranks, this practice allows for keeping on more of them than in the standard procedure.

Compensation of senior workers while on layoff could be handled in either of two ways. If permitted under state unemployment benefits rules, their layoff pay could consist of unemployment compensation, augmented by separate payment from a supplementary unemployment benefits fund maintained by their employer. Or else, the company could pay the entire layoff compensation from the SUB fund, or from a separate fund maintained especially for this purpose.¹² The manner in which the compensation is handled is an extremely important issue since it may determine whether inverse seniority is economically feasible. Clearly such an arrangement has to provide a level of financial benefits which makes electing layoff reasonably attractive for senior workers without imposing excessive cost on the company. The fact that several inverse seniority plans have already been negotiated for reasons other than the conflict between equal opportunity and seniority suggests that the concept is indeed feasible.

¹²The issue of whether or not layoff pay for senior workers is drawn from the SUB fund is important. If a reduction-in-force is large and lengthy and payments to senior workers electing layoff are drawn from the SUB fund, the fund may become depleted by the time the senior workers return from voluntary leave and junior workers are laid off. With a separate "inverse seniority" fund, by contrast, plans to preserve the jobs of junior minority and female workers do not result instead in depriving them of SUB.

Collective Bargaining History

Writing in the late fifties, Slichter, Healy, and Livernash noted the existence of limited forms of inverse seniority in certain collective bargaining contracts.¹³ They predicted that this practice would become more important, on the basis of its connection with the then-new supplementary unemployment benefits (SUB) and related income security plans. These authors foresaw that temporary layoff might become financially acceptable to senior employees, particularly those whose retention would otherwise involve downward bumping and reductions in job classification and pay.

Though formal inverse seniority layoff plans did not exist at the time, the practice of inverse seniority layoffs did, albeit in rare cases and extremely limited forms. For example, the auto companies found that they had to allow inverse seniority layoff, or a form of it, for members of the skilled trades who would quit rather than be bumped down to assembly line jobs. In the steel industry, negotiation of SUB plans starting in 1956 gave some senior employees the desire to establish inverse seniority.¹⁴

In 1972, the BLS reported that 87 agreements (24 percent of a sample of 364 contracts studied) included some form of inverse seniority, such as allowing senior workers to decline their rights to be retained in the event of force reductions, usually without jeopardizing recall rights.¹⁵ Our analysis of these contracts showed that comprehensive inverse seniority plans are, however, quite rare. They exist only in the agricultural implements and construction equipment industry, and to a lesser extent the rubber industry. In Exhibit 1 examples of these and other inverse seniority plans are described.

Inverse Seniority in the Agricultural Implements and Construction Equipment Industries

In these industries, two key factors underlay the establishment of inverse seniority. The first was supplementary unemployment benefits, and the second was complex job structures. After the UAW had succeeded in negotiating SUB, a company was in the situation of having to pay some laidoff workers anyway, and it made relatively little dif-

¹³ Sumner H. Slichter, James J. Healy, and E. Robert Livernash, *The Impact of Collective Bargaining on Management* (Washington: The Brookings Institution, 1960), pp. 176-77.

¹⁴ Beverly K. Schaeffer, "Experience with Supplementary Unemployment Benefits: A Case Study of the Atlantic Steel Company," *Industrial and Labor Relations Review*, vol. 22 (October 1968).

¹⁵ U.S. Dept. of Labor, Bureau of Labor Statistics, "Layoff, Recall and Work-sharing Procedures," Bulletin 1425-13, pp. 44-47. For a summary, see Winston L. Tillery, "Layoff and Recall Provisions in Major Agreements," *Monthly Labor Review* (July 1971).

EXHIBIT I

Inverse Seniority Plans in Current Contracts

A. *Deere & Co., Caterpillar Tractor Co., International Harvester Co., Mack Trucks, Inc. and United Auto Workers*

"The purpose of this plan is to establish a fund for the payment of benefits to an employee, if any, in a seniority classification in which the work force is being reduced who has ten or more years of seniority and who in the event of the need to lay off out of the plant employees with one or more years of seniority, elects to be placed on optional layoff" (from 1973 Deere-UAW contract, Appendix E. 1. 1A).

Funding is from a new optional leave fund or from expanded SUB fund. Maximum leave is thirteen weeks with a minimum of four to eight weeks. Weekly benefits are set at or near weekly disability benefit levels (i.e., about 2/3 annual pay). No utilization of state unemployment compensation. Workers retain right of recall to equivalent level job.

B. *B.F. Goodrich, Dayton Tire and Rubber, and United Rubberworkers*

Same initial requirements as above, but agreement is "deemed to be in conformance with . . . SUB Agreement," i.e., payment is State Unemployment Compensation plus company SUB. Recall: only to worker's own classification unless he specifies otherwise in writing; after one year, normal recall.

C. *Goodyear, Firestone, and United Rubberworkers*

Agreement in principle to permit optional layoff of senior employees during personnel reduction which would otherwise result in the layoff of employees with one or more years of seniority. Details left to local negotiations. SUB deemed to apply.

D. *Wheeling-Pittsburgh Steel and Steelworkers*

Local union and management empowered to explore election of layoff for "senior employees displaced from their jobs during temporary reduction in operations."

E. *Union Carbide and International Association of Machinists*

"An employee who is due to be cut back to the laborer-building service classification may be (voluntarily) laid off instead." (He loses recall rights for the labor-building service classification, but retains right of recall to his own classification.)

F. *Honeywell and Teamsters*

"Any employee in grade 8 or higher who is to be downgraded two or more labor grades . . . may elect layoff in lieu. . ." Recall rights retained.

ference in terms of direct cost whether this was paid to junior workers or senior workers. However, it made quite a difference to the senior workers who saw junior people having the benefit of periodic "paid leaves." As a result, senior workers began to press the union to bargain for inverse seniority, and this demand was brought to the bargaining table in the 1960s.

The second major factor was that these industries have unusually complex job structures—as many as 150 different job classifications in one plant of a company where we interviewed for this study. This meant that conventional layoffs were complicated and costly operations, because of all the reshuffling that had to go on to maintain seniority. Further, the union succeeded in negotiating "income security benefits" in some firms, which meant that a senior worker who was "bumped"

down to a lower paying job would continue to be paid at his previous rate for up to two years. All this greatly reduced the companies' reasons for resisting the inverse seniority demand.

Thus the first extensive inverse seniority plan was established in one company in 1967. The agreement was deceptively simple: senior workers could elect layoff when there was a reduction-in-force in their job classification, and they would collect unemployment compensation plus SUB for up to one year. When a short time later the company had extensive layoffs, a series of problems emerged. The negotiations for inverse seniority had overlooked a provision in the contract allowing for 18 months SUB coverage for workers "laid off out of line of seniority." This increased the senior workers' paid leave to as much as a year and a half. Meanwhile, workers with less than a year's seniority who would not have been eligible for SUB were able to stay at work long enough to become eligible for it. Thus, in order to make permanent reductions in force, the company found itself paying far more than it had expected, and eventually the SUB fund was exhausted.

The first layoff under the new plan also created difficulties for the senior workers who elected layoff. They found that they had to report weekly to both the company and to a state employment office to receive their unemployment compensation and SUB checks. They were not free to use their time as they pleased, and many felt some stigma was attached to the idea of layoff after many years of work in the same company and community. There were objections, too, from the State Employment Security office because these recipients of unemployment compensation obviously had rights to jobs they could have retained.

This led to extensive revisions in the 1970 agreement, and the new format was also implemented in other companies in the industry in 1973. Under present agreements employees with less than a year's seniority (i.e., those not immediately eligible for SUB) are laid off first. Employees with ten or more years of seniority who are in job classifications that are to be further reduced may then opt for layoff for up to 13 weeks, during which time they receive benefits of about two-thirds of normal earnings. The benefits of the plan are lower than SUB, but there are several new features of the optional-leave system that favor the workers. Workers do not have to report each week to an unemployment office. Their benefits are mailed to them. Workers on optional leave can, if they so wish, take other jobs without giving up their benefits. Finally, a worker can continue on optional leave (but without benefits) beyond the 13-week period.

Limits and Potential

In their present form, inverse seniority provisions generally provide

little benefit to the junior employee. The stipulation that all employees with less than one year's seniority must be released before the inverse seniority option is available is a great drawback. If this restriction were removed, however, inverse seniority would provide protection to the newly hired worker. In a period of temporary curtailment of work, the junior employee might continue to work through the layoff period, gaining experience and seniority. In a situation where the reduction-in-force is permanent, the use of inverse seniority might provide a grace period during which the junior employee can continue to work while seeking other employment.

There appear to be three primary factors which facilitate the adoption of inverse seniority. Those firms which face cyclical demand, or have technological or economic reasons for temporary shutdowns, and which handle these situations by reductions-in-force, are likely to find opportunities for the application of the inverse seniority concept. Secondly, industries with complex internal labor market structures, necessitating much reshuffling during conventional layoffs, and those which have a relatively high proportion of skilled workers, may find specific benefits from inverse seniority plans. Thirdly, companies which have supplementary unemployment benefits (SUB) or guaranteed annual wage (GAW) plans are most likely to be immediately open to such schemes because the financial inducement for senior workers to elect layoff can be provided without significant additional cost to the company.¹⁶

Cost undoubtedly is a limiting factor in the application of inverse seniority, especially in plans where the one-year threshold is removed. It has not been the purpose of this paper to examine the cost issue, but it is possible that the cost burdens of such plans would become too great to be borne solely by employers, and some form of public participation may be needed. This, and a number of other areas, require further research.

Despite the fact that it does not represent a universal panacea for the seniority/equal employment opportunity conflict, inverse seniority has the merit of being a practice that has evolved out of collective bargaining and is not court-imposed. In certain situations, it could preserve the jobs of junior minority and female workers without dismantling the seniority system or penalizing senior white male co-workers. There seems every reason to encourage further experimentation with and exploration of this concept.

¹⁶ It should be noted that SUB plans are highly concentrated in manufacturing industries, and within them 80 percent of workers covered are in primary metals, transportation equipment, machinery, rubber, and plastics. From U.S. Dept of Labor, BLS, "Characteristics of Agreements Covering 1000 Workers or More," July 1, 1973, Bulletin 1822 (1974), Table 69, p. 62.

The Effects of Educational Attainment on Labor Market Experiences*

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After discussing the relationship between job openings anticipated to develop between 1972 and 1985 and level of educational attainment, the *Occupational Outlook Handbook* stated: "In summary, young people who have acquired skills or good basic education will have a better chance of interesting work, good wages and steady employment. Getting as much education and training as one's abilities and circumstances permit should therefore be a top priority for today's youth."¹

Today's high school graduate is, however, confronted with conflicting opinions concerning the amount of post-secondary education needed to secure meaningful employment. The student is exposed to data indicating there is a positive relationship between level of educational attainment and lifetime earnings and an inverse relationship between education and unemployment.² However, most high school students are aware of the downturn in the labor market which has affected employment opportunities for graduates from certain types of four-year college programs.³ Further, the students may know that eight out of ten jobs that are expected to develop by 1985 will likely require less than a four-year college degree.⁴

In view of the labor market changes that are anticipated by 1985,

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¹ U.S. Department of Labor, *Occupational Outlook Handbook* (Washington: U.S. Government Printing Office, 1974), p. 22.

² Ibid.

³ U.S. Department of Labor, *Manpower Report of the President* (Washington: U.S. Government Printing Office, 1972), pp. 190-215.

⁴ Edwin Harris, "Tomorrow's Job: The View from Now," *Manpower*, vol. 6 (September 1974), p. 23.

the importance of continuing one's education past high school cannot be overemphasized. Additional information is needed, however, concerning the labor market implications of obtaining differing amounts of post-secondary education. The purpose of this article is to help alleviate this informational deficiency by identifying systematic differences, in terms of labor market experiences, among workers with differing levels of educational attainment. Specifically, the study compares the labor market activities of two groups of community college alumni who graduated from engineering/technology programs. One group did not obtain bachelor's degrees following their graduation from two-year college (2YRENG). The other alumni group transferred to and graduated from four-year colleges after the completion of their community college programs (4YRENG).

Data Base and Research Methodology

The data discussed herein were derived from a larger study of two-year college graduates. During the Spring of 1973, questionnaires were mailed to 1773 male alumni who had graduated from four upstate New York two-year colleges.⁵ A response rate of 38.5 percent (or 683 usable questionnaires) was obtained. The relevant sample for this report is 311 alumni from three community college occupationally oriented curricula: electrical, mechanical, and chemical technology. This group includes 238 graduates with terminal two-year degrees and 73 alumni who ultimately received four-year college diplomas.⁶ The remainder of the total sample was composed of business majors who will not be discussed in this paper.

Labor Market Experiences of the Alumni Groups

The data indicated that the 2YRENG alumni and 4YRENG graduates were quite similar with respect to a number of personal characteristics that could affect their labor market experiences. The alumni groups were not significantly different in terms of the following background factors: father's education and occupation, age, marital status, family size, veteran status, number of months in the labor force since two-year college graduation, high school program (e.g., college preparatory, vocational, or general) and self-reported two-year college grades. Therefore, it appears that disparities in their labor market experiences can, to a large degree, be attributed to variations in their level of

⁵ The alumni graduated during 1962, 1963, 1964, 1966, 1968, 1970, and 1971.

⁶ The bulk of this alumni group continued to major in engineering related fields (56.2 percent). Relatively large proportions of the subsample also matriculated in the physical sciences (20.5 percent) and education (15.1 percent).

TABLE 1

Distribution of Alumni Groups by the Occupational Prestige of the Initial Position

Sample	Blue-Collar or Lower Level White-Collar ^a		Management Trainee or Technician		First Level Management or Equivalent Staff Specialist	
	Percent	n	Percent	n	Percent	n
2YRENG	37.2	77	60.9	126	1.9	4
4YRENG	9.3	5	68.5	37	22.2	12

($X^2 = 39.80, **$ d.f. = 2)

^a Lower level white-collar positions are those categorized as being clerical or sales jobs.

educational attainment rather than other differences inherent to the alumni groups.

The examination of the alumni's labor market experiences is divided into two sections. First, the characteristics of the jobs held by the graduates when they initially entered the labor market are discussed.⁷ Then, the situations in which the groups were employed at the time of the survey are described.

INITIAL-EMPLOYMENT SITUATION

The initial-employment situation was described in terms of five variables: two employer characteristics (size and industrial classification) and three job attributes (occupational prestige, functional area, and starting salary).

The major effect educational attainment had on the initial-employment situation was that the 4YRENG graduates were typically employed in positions higher in terms of occupational prestige.⁸ Table 1 demonstrates that the bulk of both alumni groups were initially employed in positions in the "management trainee or technician" category. Nevertheless, a larger proportion of the 2YRENG alumni worked in blue-collar and lower white-collar positions and a smaller proportion in first-level management and or equivalent staff positions in comparison to the 4YRENG graduates.

One would expect that employment in positions higher in occupational prestige would result in higher mean starting salaries for the subsample composed of 4YRENG graduates. Surprisingly, the average

⁷ Most graduates entered the labor market immediately upon graduation from two-year college. Some of these alumni worked full time and continued their studies concurrently. Others, however, deferred entrance into the labor market in order to pursue a four-year college degree.

⁸ Throughout this article, one asterisk (*) will denote that the relationship is significant at the .05 level, while a double asterisk (**) will indicate that the relationship is significant at the .01 level.

starting salary for the 2YRENG alumni—\$5,708—was not significantly lower than that of the 4YRENG subsample—\$5,988—($t = .77$, d.f. = 272; N.S.).

The alumni groups did not differ significantly with respect to any of the other variables descriptive of the initial-employment situation. The largest proportion of graduates in both the 2YRENG and 4YRENG subsamples worked for large organizations, i.e., those employing more than 5000 workers (56.5 percent of the 2YRENG alumni and 59.3 percent of the 4YRENG graduates; $X^2 = .04$, d.f. = 1; N.S.). The concentration of alumni in large companies was influenced by the fact that the bulk of both subsamples was initially employed by manufacturing organizations (54.9 percent of the 2YRENG alumni and 47.8 percent of the 4YRENG graduates; $X^2 = .79$, d.f. = 1; N.S.). The remainder of both alumni groups was widely distributed over a number of different industrial classifications.

Not surprisingly, the 2YRENG alumni and 4YRENG graduates were initially concentrated in three functional areas: engineering, production, and research and development. While the 4YRENG graduates were more likely to be employed in research and development (27.8 percent as compared with 17.5 percent of the 2YRENG alumni) and less likely to be employed in production (33.3 percent as compared with 38.3 percent of the 2YRENG alumni), the differences between these alumni groups were not statistically significant ($X^2 = 4.66$, d.f. = 3; N.S.).

In conclusion, the initial-employment situations for the two-year college graduates with differing levels of educational attainment were quite similar with the exception of one variable important to their long-run labor market success—the occupational prestige of their initial positions. It has been reported that the degree of occupational advancement that individuals can expect is closely related to the location of their entry-level position on the occupational ladder.⁹ Based on this assumption, it is likely that the higher entry-level jobs achieved by the graduates in the 4YRENG subsample will result in a positive relationship between level of educational attainment and future career success.

CURRENT-EMPLOYMENT SITUATION

The basic objective of this section is to discuss the degree to which differences in the level of educational attainment influence the situation in which alumni were employed at the time of the survey. The current-

⁹ U.S. Department of Labor, *Manpower Report of the President* (Washington: U.S. Government Printing Office, 1974), p. 122.

employment situation was examined in terms of six variables: employer size, industrial classification, occupational prestige, functional area, salary, and job satisfaction.

As in the initial-employment situation, both the *2YRENG* and *4YRENG* graduates were concentrated in large organizations (employing more than 5000 individuals) and in firms classified in the manufacturing industry. Within the *2YRENG* subsample, 59.2 percent were employed in large organizations as compared with 55.4 percent of the *4YRENG* graduates ($X^2 = .16$, d.f. = 1; N.S.). Manufacturing firms employed 54.5 percent of the *2YRENG* alumni and 46.4 percent of the *4YRENG* graduates ($X^2 = 1.10$, d.f. = 1; N.S.). Additionally, the alumni groups did not differ with respect to the functional area in which they were currently employed ($X^2 = .23$, d.f. = 3; N.S.). The *2YRENG* and *4YRENG* subsamples were again concentrated in three functional areas: production, engineering, and research and development.

Table 2 presents the distribution of alumni groups by the occupational prestige of the positions in which they were employed at the time of the survey. The data indicate that the previously noted positive relationship between level of educational attainment and occupational prestige persisted in the current-employment situation. The largest proportion of *2YRENG* alumni continued to be employed in the "management trainee/technician" category. Initially, the bulk of the *4YRENG* graduates was also concentrated in this category. In the current-employment situation, however, the largest proportion of *4YRENG* graduates held jobs categorized as being "first level management or equivalent staff specialist" in nature. Furthermore, a comparison of the initial and current jobs indicated that a larger proportion of the *4YRENG* graduates advanced at least one level in the occupational hierarchy, thereby demonstrating greater upward mobility than the *2YRENG* alumni.

Despite the fact that the *4YRENG* graduates tended to be employed

TABLE 2
Distribution of the Alumni Groups by the Occupational Prestige of the Current Position

Sample	Blue Collar or Lower Level White-Collar		Management Trainee or Technician		First Level Management or Equivalent Staff Specialist		Higher Management or Equivalent Staff Specialist	
	Percent	n	Percent	n	Percent	n	Percent	n
<i>2YRENG</i>	20.5	41	45.5	91	30.5	61	3.5	7
<i>4YRENG</i>	7.2	4	21.4	12	57.1	32	14.3	8

$X^2 = 28.32, **$ d.f. = 3)

TABLE 3
Mean Scores on The Job Description Index

Job Dimensions	2YRENG		4YRENG		<i>t</i>
	Mean	S.D.	Mean	S.D.	
The work itself	39.0	10.3	38.4	11.4	.30
Supervision	44.0	12.9	44.0	12.9	.00
Co-workers	43.9	14.4	45.6	10.2	.79
Pay	34.0	13.3	32.4	13.8	.72
Promotions	29.4	17.4	35.5	17.5	2.16*

in positions higher in terms of occupation prestige than were the 2YRENG alumni, the differential between the groups with respect to current compensation was relatively small at the time of the survey. The 4YRENG subsample was earning, on average, \$11,434 per year as compared to \$10,952 for the 2YRENG alumni ($t = .81$, d.f. = 245; N.S.). This income differential widened between the initial- and current-employment situations, but not as much as might be expected given that the 4YRENG alumni have more education and work in positions higher in occupational prestige. To a certain extent this finding can be explained by the fact that the 2YRENG alumni had longer tenure with their current employers than the 4YRENG graduates (71.2 months and 43.8 months, respectively, $t = 1.51$, d.f. = 289; N.S.). Other research has indicated "that length of working experience—and, particularly, length of experience in a specific industry or firm—makes an independent and important contribution to the earnings progression among workers."¹⁰ It appears, therefore, at least for the tenure period subsumed within this study, that seniority diminished the effect education had on income. At some future date (e.g., ten years), however, it is possible the education effect will prevail.

Job satisfaction as measured by the Job Description Index¹¹ was the final characteristic of the current employment situation to be examined. Table 3 presents the mean scores of the 2YRENG and 4YRENG subsamples on the five scales comprising the JDI. The only dimension on which the alumni groups differed significantly concerns the graduates' satisfaction with promotion policies. The data indicate that the 4YRENG graduates were more satisfied with this aspect of their jobs than the 2YRENG alumni. Since the 4YRENG graduates had already experienced greater upward mobility, suggesting that they had been promoted more frequently than the 2YRENG alumni, this finding was not unexpected. Moreover, this difference between the alumni

¹⁰ *Manpower Report of the President* (1974), p. 117.

¹¹ Patricia Cain Smith, et al., *The Measurement of Satisfaction in Work and Retirement* (Chicago: Rand McNally and Company, 1969).

groups could reflect a recognition of the "credentials barrier" that exists in some organizations whereby opportunities for advancement are limited for 2YRENG alumni because the baccalaureate degree is a prerequisite for promotion into managerial positions. Consequently, the 2YRENG alumni may have perceived their organizations' promotional policies as restrictive and, therefore, been less satisfied with this aspect of their jobs than were the 4YRENG graduates who, typically, did not experience such limitations.

Conclusions and Implications

Based on this study, it appears that, at least in the short run, possession of a four-year college degree has had only marginal impact on the labor market success of graduates from community college engineering/technology programs. The only significant differences favoring the 4YRENG graduates were in terms of occupational prestige (both initially and at the time of the study) and satisfaction with promotional opportunities. Possession of a baccalaureate degree did not, however, greatly enhance the alumni's compensation. While the 4YRENG graduates earned higher salaries in both the initial and current work situations, the wage differentials were not statistically significant. It can be concluded, therefore, that the labor market advantages experienced by the four-year college graduates were relatively minor in the short run. In the long run, however, there may be a positive relationship between level of educational attainment and successful labor market performance. A comparison of the initial and current employment situations indicated that the wage differential favoring the 4YRENG graduates widened slightly over time. Furthermore, the 4YRENG graduates demonstrated greater upward mobility than the 2YRENG graduates. It is likely that these advantages will continue to develop particularly since many organizations have established the baccalaureate degree as a prerequisite for promotion into higher management and staff positions. While it is quite possible that there are long-run advantages to receiving a baccalaureate degree, this proposition needs to be tested.

These conclusions have two major implications. First, the findings derived from this study were especially relevant to individuals involved in the guidance process at the high school, two-year, and four-year college levels and to community college alumni considering transferring to a four-year institution. Heretofore, the implications, labor market or otherwise, of receiving various amounts of post-secondary education have not been the subject of intensive investigation. More specifically, the relative advantages and disadvantages of receiving a two-year rather than a four-year degree have not been rigorously examined. To a certain

extent, this situation has been rectified by the research reported herein. Comparisons of similar subsamples of two-year college alumni indicate that there are only slight labor market advantages obtained by the graduates from four-year college programs. It appears, therefore, that it is not necessarily within the self-interest of the community college engineering-technology graduate to transfer to and matriculate in a four-year institution. It must be noted that there may be long-run advantages to graduating from a four-year college particularly since this is likely to lead to faster promotions. This study did not, however, take into consideration the costs of obtaining a four-year college degree and the relationship between these additional expenses and the increment in benefits received as a result of obtaining a bachelor's degree. Consequently, on an investment basis, it is quite possible that the four-year college graduates may not be more successful than those with terminal two-year college degrees even in the long run.

The second major implication of this study was that the career potential of community college graduates with terminal degrees appeared to be somewhat limited relative to their peers with baccalaureate degrees. It is possible that additional education improves the skills an individual contributes to the organization, thereby enhancing one's advancement potential. Alternatively, the relationship between education and measures of occupational success could result from "credential barriers," i.e., a situation in which employers believe:

. . . that better educated workers are easier to train, better disciplined, and more productive, articulate, intellectually curious, flexible, analytical and highly motivated than their lesser educated counterparts . . . despite the fact that the correlation between a worker's education and job performance has not been proved.¹²

The actual reasons for the differences between the alumni groups in terms of labor market experiences cannot be ascertained from the data available in this study. Regardless of the actual causation, employers should fully evaluate the relationship between the level of educational attainment and an individual's contribution to the organization. Unless job performance is clearly enhanced by the possession of a four-year degree, organizations should reevaluate their employment practices and promotional policies affecting two-year college graduates.

There is an obvious need for additional research concerned with the relationship between level of educational attainment and subsequent

¹² Michael E. Carbine, "The Degree Dilemma," *Manpower*, vol. 6 (November 1974), p. 5.

labor market experiences. For example, employer attitudes toward the employment of individuals with differing educational backgrounds needs to be studied. Also, labor market research involving alumni from post-secondary vocational programs and community colleges as well as bachelor and masters degree recipients needs to be continued. Only by conducting this type of research and analyzing the policy implications of the resulting conclusions can the effectiveness of the labor markets for college trained manpower be improved.

OSHA Sanctions: Implications for Public Policy

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In passing the Occupational Safety and Health Act (OSHA) of 1970, Congress recognized that if the law were to be obeyed there had to be effective enforcement mechanisms, including meaningful penalties for violations. The House Report on the act stated that "this measure recognizes that effective enforcement and sanctions are necessary."¹ The need for sanctions to achieve compliance was further emphasized in 1974 by the Assistant Secretary of Labor for Occupational Safety and Health, who contended that "sanctions and unannounced inspections are a major incentive for the employer to examine the workplace and eliminate hazards."²

If OSHA is to achieve its objectives, OSHA sanctions must encourage employers to obey the law. This paper examines, from a decision-theory point of view, the effect on employer behavior of OSHA penalties for first-instance violations. OSHA penalty provisions and administration are discussed, their expected consequences are analyzed, and recommendations for more effective public policy are suggested.

Penalty Provisions of the Act

Penalties are assessed under the act for several types of violations, including nonserious, serious, and willful categories. Conditions classified as "nonserious violations" have a direct and immediate relationship to employee health or safety, but will not generally result in death or serious physical harm. Although penalties can range from \$0 to \$1,000, the mean fine for the period July 1972 through December 1974 was only \$14.99. Of the 591,160 violations cited during this period, 98.53 percent were classified as nonserious.³

¹ H.R. Rep. No. 91-1291, 91st Cong., 2d Sess. 26 (1970).

² Hearings on S. 586, S. 1147, S. 1249, S. 2823, S. 3147, S. 3454, S. 3654 Before the Subcommittee on Labor of the Committee on Labor of the Committee on Labor and Public Welfare of the United States Senate, 93rd Cong., 2nd Sess., 223 (1974).

³ United States Department of Labor, Occupational Safety and Health Administration, *Field Operations Manual*, reprinted in Prentice-Hall, *Personnel Management: Labor Relations Vol. 3* (Englewood Cliffs, N.J., 1974), pp. 70, 354 and 70,501; Bureau of National Affairs, "Current Report," *Occupational Safety and Health Reporter* (Washington: 1974-75), pp. 342, 1311.

“Serious violations” are conditions that would likely result in death or serious physical harm if an employee were injured. Penalties of \$1,000 per violation are assessed, although the amount can be reduced by up to 50 percent at the inspector’s discretion. In fact, the mean fine for the July 1972–December 1974 period was \$618.66 for the 1.22 percent of the cited violations which were classified as serious.⁴

Finally, an employer commits a “willful violation” if he deliberately and knowingly violates the law or regulations, or if he is aware of a hazardous condition and makes no reasonable effort to eliminate it. Penalties of up to \$10,000 can be imposed for each willful violation, although the mean penalty for the July 1972–December 1974 period was only \$866.44. Furthermore, less than .25 percent of the cited violations during this period were classified as willful.⁵

The mere existence of a violation does not necessarily result in a penalty for the offender however. This topic—the probability of being penalized—is examined next.

Uncertainty of Penalties

Whether or not a given condition will result in a penalty is often uncertain, because of administrative shortcomings and nonuniform enforcement. Regulations are often inaccessible, vague, and constantly changing, making it difficult for an employer to know if a situation is or is not a violation (or will remain a violation) of safety standards. There is additional randomness in the enforcement process: discovered violations are sometimes not cited, and even when cited, their classification as to seriousness is not uniform. Space limitations prevent discussion of the extensive evidence available concerning these problems; however a short synopsis is presented.

Although an employer may feel he is (or is not) in violation of a standard, it is difficult for him to make this determination with certainty because regulations are often quite vague, not readily accessible, and constantly changing. As one OSHA official stated, “The problem faced by OSHA was to revise [its initial] standards in a manner that made them . . . easily understood by the employer, and easily located.”⁶ Likewise, a late 1973 *Harvard Business Review* article charged that “some

⁴ U.S. Dept. of Labor, *Field Operations Manual*, pp. 70,353–54, 70,502; and Bureau of National Affairs, *Occupational Safety and Health Reporter*, pp. 342, 1311.

⁵ U.S. Dept. of Labor, *Field Operations Manual*, pp. 70,355, 70,506; and Bureau of National Affairs, *Occupational Safety and Health Reporter*, pp. 342, 1311. This category includes willful, repeat, and imminent danger citations.

⁶ Alexander J. Reis, “An Assessment of Three Years of OSHA: Labor Department View,” in Industrial Relations Research Association, *Proceedings of the Twenty-Seventh Annual Winter Meeting* (San Francisco: December 1974), p. 40.

standards are so unclear that many businessmen are genuinely confused as to what is required."⁷ Inaccessibility of the standards is further demonstrated by the facts that no standard indices were printed by the OSHA Administration for over two years, and standards only recently have been indexed by industry.⁸

These problems are compounded by frequent revisions of the standards, so that a violation today may not be one tomorrow, and vice versa. As one management spokesman has stated, "Business is going slowly with compliance, knowing that as has happened in the past, a new standard or revision will change what needs to be done."⁹ The problem of determining which standards to apply is further compounded by the establishment (and often abandonment) of state safety regulation. State standards often do not approximate federal standards, and there is considerable variation among states. Not only must the multistate employer follow different standards in different states, he must cope with the possibility of being governed by federal standards today, state standards tomorrow, and then by the original (or revised) federal standards the day after.¹⁰

Given that a violation of a currently applicable standard exists, however, the employer may not be cited for it. The Senate Subcommittee on Labor recently concluded that "there seems to be no uniform application of guidelines covering the issuance of citations in [many] circumstances." This assertion was supported by considerable evidence: for example, citation rates for the five target industries varied from 32 percent in one region to 88 percent in another.¹¹

In addition to this substantial randomness in issuing a citation, there is also a great deal of variation in assigning cited violations to the nonserious, serious, and willful categories. For example, a GAO review of OSHA citation reports found "numerous examples in which inspectors have in the aggregate issued both serious and nonserious citations for violations of the same standard."¹² Furthermore, the definition of a

⁷ Fred K. Foulkes, "Learning to Live with OSHA," *Harvard Business Review* (November-December 1973), p. 63.

⁸ "OSHA: Four Years of Frustration," *AFL-CIO American Federationist* (April 1975), p. 12; Reis, p. 41.

⁹ Frank R. Barnako, "An Assessment of Three Years of OSHA: Management View," in Industrial Relations Research Association, *Proceedings of the Twenty-Seventh Annual Winter Meeting* (San Francisco: December 1974), p. 33.

¹⁰ *Ibid.*, pp. 33-35; "Labor Pushes State Drive to Scrap Inferior Occupational Health Plans," *AFL-CIO News*, 29 March 1975.

¹¹ Michael Wood, "An Assessment of Three Years of OSHA: Labor View," in Industrial Relations Research Association, *Proceedings of the Twenty-Seventh Annual Winter Meeting* (San Francisco: December 1974), pp. 45-46; Hearings on S. 586, *supra* note 2, at 978. The target industries are five industries selected for intensive nationwide enforcement because of their high injury rates.

¹² Hearings on S. 586, *supra* note 2, at 996.

willful violation is, as of early 1975, still being debated by the OSHA Review Board and the courts.¹³

Given the aforementioned penalty structure, and the nondeterministic nature of the enforcement process, how can the rational economic employer be expected to behave?

The Compliance Decision

Assume the rational economic employer feels that he is in violation of OSHA. The conditions which could lead to citation can be corrected by installing safety equipment and devices. However, suppose an alternative opportunity is available in which the employer can invest the funds, if he chooses not to correct the conditions. He is faced with a decision problem: Should he correct the conditions, or should he invest the funds in the alternative project? Consider this problem in light of basic decision theory. The alternative actions are: a_1 , correct the conditions; a_2 , invest in the alternative project. The states of nature are the possible future occurrences, which are θ_1 , no inspection occurs; θ_2 , no violation is cited; θ_3 , a nonserious violation is cited; θ_4 , a serious violation is cited; θ_5 , a willful violation is cited. In order to approach this decision problem as one of decision-making under risk, it is necessary to develop the probabilities of occurrence for the five states of nature.

As a result of the small complement of federal and state inspectors, various authorities have estimated that it would take from 10 to 50 years to inspect all workplaces one time.¹⁴ Using the most conservative estimate, an inspection will occur only once every 10 years. Then, in any given year, the probability of inspection is .1. Thus, the probability of no inspection— $P(\theta_1)$ —is .9.

Probabilities for the remaining states of nature (θ_2 through θ_5) are developed from actual inspection outcomes in the July 1972–December 1974 period.¹⁵ Historical probabilities are used because it cannot be assumed that if a violation exists it will be discovered, or cited, or uniformly classified during an inspection. Such an assumption is untenable because, as discussed previously, there is substantial variation in the enforcement process. A violation may or may not be discovered during an inspection. If discovered, it may or may not be cited. Even if cited, it will often be classified according to differing

¹³ Bureau of National Affairs, Occupational Safety and Health Cases, 1 OSHC 1313–1317 (1972); 2 OSHC 1288–1289 (1974); 2 OSHC 1325–1326 (1974).

¹⁴ For example see AFL-CIO Executive Council, *Statement On Occupational Health and Safety*, Bel Harbour, Florida, February 21, 1975.

¹⁵ Unless otherwise noted, data used are cited in previous sections of this paper.

standards, rather than by any deterministic criteria. Under such conditions of uncertainty, the decision-maker would be grossly in error to assume certainty of the existence, discovery, citation, and classification of a violation during an inspection. Better indicators of the actual probabilities can be developed from historical data. These data provide the decision-maker with states-of-nature probabilities which are based upon past OSHA inspections.

Consequently, if the employer is inspected, the probability that no violation will be cited is assumed to be .2589, since 25.89 percent of the establishments have been found to be in compliance in the 137,914 inspections in the period July 1972–December 1974.¹⁶ That is, $P(\theta_2 | \text{inspection}) = .2589$. Of course, this figure includes inspections in which no violation existed as well as inspections in which existing violations were not cited. The ideal probabilities would be based on historical citation data in cases where violations were felt to exist; but since it is obviously impossible to refine probabilities along these lines the probability of .2589 is used. Similar reasoning applies to the other historical probabilities developed in this paper. An individual decision-maker may prefer to modify the probabilities if he feels the evidence in his case justifies it. Historical probabilities are used herein, however, as they provide the most accurate indicators of the true probabilities available.

Continuing, if the employer is inspected, and if a violation is cited, the relevant probabilities are $P(\theta_3 | \text{violation is cited}) = .9853$; $P(\theta_4 | \text{violation is cited}) = .0122$; and $P(\theta_5 | \text{violation is cited}) = .0025$. However, violations have been cited in only 74.11 percent of the inspections, that is, $P(\text{violation is cited} | \text{inspection}) = .7411$. Then for θ_j , where $j = 3, 4, 5$,

$$P(\theta_j | \text{inspection}) = P(\theta_j | \text{violation is cited}) P(\text{violation is cited} | \text{inspection})$$

Thus, $P(\theta_3 | \text{inspection}) = (.9853) (.7411) = .7302$; $P(\theta_4 | \text{inspection}) = (.0122) (.7411) = .0090$; $P(\theta_5 | \text{inspection}) = (.0025) (.7411) = .0019$.

Finally, returning to the expectation of an inspection every 10 years, which yields $P(\text{inspection}) = .1$,

$$P(\theta_j) = P(\theta_j | \text{inspection}) P(\text{inspection}) \quad j = 2, 3, 4, 5$$

Thus, $P(\theta_2) = .2589 (.1) = .02589 \cong .0259$; $P(\theta_3) = .7302 (.1) = .07302 \cong .0730$; $P(\theta_4) = (.0090) (.1) = .0009$; $P(\theta_5) = .0019 (.1) = .00019 \cong .0002$.

¹⁶ Bureau of National Affairs, *Occupational Safety and Health Reporter*, pp. 342, 1311.

Now, all that is necessary to implement the decision process is to define the loss (loss, in this section, is defined as a negative payoff, and not as opportunity loss or regret) for each (a_i, θ_j) . Suppose the employer corrects the conditions. Then each state of nature will result in zero loss—if the conditions are corrected, he will not be cited (or fined) even though he may be inspected. Thus, the losses are

$$l(a_1, \theta_1) = l(a_1, \theta_2) = l(a_1, \theta_3) = l(a_1, \theta_4) = l(a_1, \theta_5) = \$0$$

Suppose that the employer does not correct the conditions—that is, he invests in the alternative project. If he is not inspected, he will not be cited (or fined, assuming a citation will result in a fine). Thus, he has no loss (for the moment, the negative loss—or payoff—resulting from the alternative investment is disregarded). Consequently, $l(a_2, \theta_1) = \$0$. Similarly, if the employer is inspected but no violation is cited, $l(a_2, \theta_2) = \$0$. If a violation is cited, the losses (based on the average fines discussed previously) are $l(a_2, \theta_3) = \$14.99$, $l(a_2, \theta_4) = \$618.66$, and $l(a_2, \theta_5) = \$866.44$. Consequently, the loss table is¹⁷

	θ_1	θ_2	θ_3	θ_4	θ_5
a_1	0	0	0	0	0
a_2	0	0	14.99	618.66	866.44

$$P(\theta_1) = .9 \quad P(\theta_2) = .0259 \quad P(\theta_3) = .0730 \quad P(\theta_4) = .0009 \quad P(\theta_5) = .0002$$

The expected loss for any action, a_i , is

$$E_i(a_i) = \sum_{j=1}^5 P(\theta_j) l(a_i, \theta_j)$$

Thus, the expected losses are

$$\begin{aligned} E_1(a_1) &= .9(0) + .0259(0) + .0730(0) + .0009(0) + .0002(0) \\ &= \$0 \\ E_1(a_2) &= .9(0) + .0259(0) + .0730(14.99) + .0009(618.66) \\ &\quad + .0002(866.44) = \$1.82 \end{aligned}$$

Recall, however, that when the losses for a_2 were developed, the negative loss—or payoff—which results from the alternative investment was ignored. Consequently, if the annual return (a negative loss) from the alternative investment is greater than \$1.82, then the rational economic decision-maker will choose a_2 —invest in the alternative

¹⁷Theoretically, the losses should be expressed in “utils” rather than in terms of dollars. However, due to the difficulty of utility assessment in practice, dollar values are used herein.

project—since this action minimizes expected loss. Thus, if the rate of return on the alternate investment is 10 percent, the amount spent to correct the conditions would have to be less than \$18.20 in order for a_1 to be the optimal decision. That is, if the conditions can be corrected for less than \$18.20, the rational economic employer would correct the conditions; otherwise he would invest the funds elsewhere. Since few unsafe conditions can be corrected for less than \$18.20, it is doubtful that one would ever choose to correct the conditions until being forced to do so.¹⁸

Implications for Public Policy

The purpose of OSHA sanctions is to encourage employers to correct unsafe and unhealthy conditions.¹⁹ Such encouragement will not be provided by the sanctions as long as the opportunity cost of corrections greatly exceeds the expected cost of penalties. Thus, compliance will only be encouraged when $C_c < C_s$, where C_c is the opportunity cost of compliance (e.g., interest lost by investing in safety equipment) and C_s is the expected cost of sanctions. Since $C_s = pf$, where p is the probability that a given violation will be cited and f is the fine level, a change in C_s can be effected by a change in the probability of citation and/or by a change in the amount of the fine.

GENERAL IMPLICATIONS

Although cost of compliance data are not now available, it is clear that the opportunity cost of correcting almost any violation will be far greater than the most likely expected fine—\$1.82. Expected fines of this size almost invite the employer to violate the law, because the discrepancy between compliance costs and fine levels is so great. In fact, low fines give the impression that the government is not taking violations too seriously, making it even more likely that the employer will make his decisions on purely economic grounds.

The obvious implication is to substantially increase the cost of sanctions, C_s , by increasing the fine levels and/or the probability of being fined. For example, recall that the mean fine for nonserious violations (which constitute 98 percent of all violations) is \$14.99, although fines of up to \$1,000 are possible under the current law. There is little doubt that this average should be substantially increased.

Likewise the probability of being cited could well be increased.

¹⁸ Although this analysis considers a simple single-period model, the ineffectiveness of OSHA penalties is even more apparent when a multiperiod situation is examined.

¹⁹ 84 Stat. 1590 (1970), 29 U.S.C. § 651 (1974).

Most employers have less than a .1 probability of being inspected in any given year. Because many true violations discovered by inspectors go uncited, the probability of being cited for a given violation is certainly far less than .10. The probability of citation can be increased by many means, such as increasing the number of inspections, increasing the proportion of discovered violations which are cited, and increasing the skill of the inspectors in discovering violations.

But whether C_s is increased by larger fines or by higher probabilities of being fined, it is of crucial necessity to set C_s at a level greater than C_c . To do this, it is necessary to develop data on the costs of corrections. These data probably could be obtained from the economic impact studies which now are supposed to accompany all new standards.

TRADEOFF BETWEEN FINES AND PROBABILITY

Given that a desirable level of C_s has been determined, it is necessary to consider the appropriate combination of f and p required to yield the desired C_s . Although it is beyond the scope of this paper to develop the optimal combination, a high fine and a low probability of citation is likely to be the most desirable combination because it will be least expensive: high probabilities of citation necessarily require more funds and personnel to enforce the act. The effectiveness of high fines-low probabilities is enhanced by the fact that management is in general risk-averse, so large fines will likely cause compliance even if C_s is somewhat low than C_c . (On the other hand, very high fines might lead to more contested cases and hence higher court costs.)

High fines with low inspection rates could be made more attractive by requiring employers to file self-inspection reports, then auditing these reports on some statistically acceptable basis, perhaps using concepts already developed by the IRS. Self-audits are already provided for in the law, but have never been required by the OSHA Administration.

BASING FINES ON COST OF COMPLIANCE

Currently, fine levels are based on the gravity of the violation rather than on the cost of compliance. Since the objective of the act is to reduce unhealthy and unsafe conditions, fines should be set at levels encouraging employers to comply. These levels are those at which the expected fines are greater than the opportunity costs of compliance, regardless of the gravity of violations. (Modern welfare economics theory dictates a different solution, but it would not be in accordance with the current objective of the act.)

Conclusions

This analysis has indicated that expectancies of being cited for initial safety and health violations, and the fine levels if cited, are so low under OSHA that they are of little value in preventing violations of the act. Those employers who obey the law would do so regardless of the penalties. Employers at whom the sanctions are aimed—those who will correct violations only if it is economically profitable for them to do so—are not being affected. Thus the current sanctions antagonize employers who attempt to obey the law, while having little impact on those employers who will obey the law only if it is economically profitable.

If penalties are to be used at all, they should be set high enough to accomplish their purpose. To achieve this purpose, the expected cost of sanction (C_s) must be greater than the opportunity cost of compliance (C_c) if economically rational employers are to be motivated to correct the violations. This will require data on the cost of compliance, which even the employers themselves have been demanding.

Because C_s is a product of the fine level and the probability of being fined, either the fine level or the probability can be adjusted to achieve a given value of C_s . It is suggested that the most desirable combination is relatively high penalties and relatively low probabilities.

Certainly, substantial increases in fine levels and/or the probability of being cited might, in the absence of other corrections to the act and its administration, cause more harm than good. To be truly effective, all of the matters discussed in this study should be dealt with.

Multilateralism and Faculty Unionism

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Third-party involvement has been regarded as a distinctive characteristic of public-sector bargaining.¹ Research indicates the multilateral character of police, firefighter, public education, and local government bargaining.² In this paper, the definition, types, and incidence of faculty unionism will be discussed.³ It is argued here that multilateralism in faculty bargaining is related to the service and consumer aspects of higher education, and is not particularly related to the public or governmental context of faculty bargaining.

Definitions of Multilateralism

EXTENDED BILATERALISM

According to Kochan, multilateralism is "a process of negotiations in which more than two distinct parties are involved in such a way that a clear dichotomy between employee and management organizations does not exist."⁴ Kochan specifies five multilateral activities: (1) the involvement of management officials who are not part of the formal management negotiating team, (2) the involvement of external community-interest groups, (3) employee representatives discussing bargain-

¹ George Hildebrand, "The Public Sector," in *Frontiers of Collective Bargaining*, eds. John Dunlop and Neil Chamberlain (New York: Harper and Row, 1967), pp. 125-54; Harry J. Wellington and Ralph K. Winter, Jr., *The Unions and the Cities* (Washington: Brookings Institution, 1971) p. 150; and Kenneth McLennan and Michael Moskow, "Multilateral Bargaining in the Public Sector," in *Proceedings of the Twenty-First Annual Winter Meeting, Industrial Relations Research Association*, ed. Gerald Somers (Madison: IRRA, 1968), pp. 31-40.

² Peter Feuille, "Police Labor Relations and Multilateralism," in *Proceedings of the Twenty-Sixth Annual Winter Meeting, Industrial Relations Research Association*, ed. Gerald Somers (Madison: IRRA, 1974) pp. 170-77; Thomas A. Kochan, "A Theory of Multilateral Collective Bargaining in City Governments," *Industrial and Labor Relations Review*, vol. 27 (July 1974), pp. 525-42; Arnold R. Weber, "Paradise Lost: Or Whatever Happened to the Chicago Social Workers?" *Industrial and Labor Relations Review*, vol. 22 (April 1969), pp. 323-38; and Thomas M. Love and George T. Sulzer, "Political Implications of Public Employee Bargaining," *Industrial Relations*, vol. 11 (February 1972), pp. 18-33.

³ Data on incidents of multilateral involvement were collected from personal correspondence with selected respondents; archival sources, such as the *Chronicle of Higher Education*, *Government Employee Relations Report*, *Daily Labor Report*, and several newspapers; and interviews with representatives of faculty organizations, administrations, students and legislative groups.

⁴ Kochan, p. 526.

ing demands with employer officials who are not on the formal management team (end-run bargaining), (4) employer officials overturning or failing to apply agreements reached in negotiations, and (5) elected officials intervening in an attempt to mediate an impasse.⁵

Of these five activities, the second appears to be the only intervention by a "third party." The other activities apparently represent extended bilateral activities of union and management which have also occurred among faculty-union bargaining experiences. An analysis of faculty collective bargaining in New York community colleges indicates a tendency of local boards of trustees to defer bargaining responsibilities to local government officials.⁶ Another study of community college bargaining found the following activities in more than half of the negotiations of six out of seven Illinois-Michigan community college districts: the involvement of local government officials, end-run bargaining pressure by community interest groups (including AFL-CIO "mediation" of disputes), state legislator intervention, and board rejection or unilateral implementation of agreements and nonagreements between union and management teams.⁷ The experiences of public four-year units include the intervention of governors, state legislators, state budgetary authorities, officials of the state higher education system and the local government (all nonmembers of the management negotiating team), and rejection of items of the bargaining agreement by a state legislature.⁸ Local AFL-CIO and community support and involvement have occurred during faculty strikes at private four-year colleges.

More frequent incidents of extended bilateral involvement in public higher education are expected for two reasons. First, financial and administrative control of public higher education is dispersed among state and local governing boards, coordinating agencies, and legislative and executive bodies. Both union and management representatives have difficulty identifying the public higher education management authority on bargainable matters. Second, the appropriate faculty bargaining units for public higher education may not correspond to the negotiating unit boundaries that union and management representatives prefer as optimal

⁵ Kochan, p. 533.

⁶ George W. Angell, "Two-year College Experience," in E.D. Duryea, Robert S. Fisk and Associates, *Faculty Unions and Collective Bargaining* (San Francisco: Jossey-Bass Publishers, 1973), p. 102.

⁷ Bill Aussieker, "Faculty Collective Bargaining in Community Colleges," dissertation, University of California, Berkeley, 1974. In the same study, similar multi'ateral incidents were found in six of seven California community college districts nonunion bargaining relationships. Faculty organization and administration respondents regarded these activities as pressure tactics.

⁸ See J.W. Garbarino, *Faculty Bargaining: Change and Conflict* (New York: McGraw-Hill, 1975), Ch. 4.

for decision-making and bargaining-power considerations. Examples of extended bilateralism, partially the result of power and decision-making considerations, include interaction among union and management representatives and state legislators to guarantee legislative approval of a tentative agreement; consolidated and coordinated bargaining of faculty and nonfaculty groups; pressuring of local faculty organizations and institutional managements by statewide faculty organizations or higher education agencies; and interaction among institutional management and state government executive branch officials to guarantee budgetary or administrative considerations in the event of faculty strikes.

STUDENT INVOLVEMENT

A second definition of multilateralism is primarily based on the work of McLennan and Moskow. According to them, "bargaining is multilateral when more than two groups are involved in the bargaining process."⁹ These authors offer some guidelines to identify third-party involvement. First, these other groups must be in a position to impose a cost—economic, political, or otherwise—on the parties to the agreement. Second, mediation and appeals for restraint without sanctions by third parties do not constitute multilateral bargaining. Third, multilateralism arises from the needs of interest groups, such as users and taxpayers. Fourth, the topics of negotiations should affect the goals of interest groups, pursuit of the goals requires interest-group participation in negotiations, and union and management representatives should perceive this interest-group involvement, though not necessarily its physical presence at the bargaining table.¹⁰

These guidelines suggest that student involvement in the bargaining process, not union or management efforts away from the bargaining table, constitutes multilateral bargaining. Thus, I have defined multilateralism as independent student involvement in the faculty-union bargaining process. This definition is considerably more restrictive than other definitions of multilateralism and obviously omits various bargaining activities that others consider multilateral. By specifying student and not all third-party involvement, the definition avoids the formidable problem of identifying the interests of nonstudent parties in the bargaining process.

⁹ Kenneth McLennan and Michael H. Moskow, "Multilateral Bargaining in the Public Sector," in *Collective Bargaining in Government: Readings and Cases*, eds. J. Joseph Loewenberg and Michael H. Moskow (Englewood Cliffs, N.J.: Prentice-Hall, 1972), pp. 227-28.

¹⁰ McLennan and Moskow, pp. 232-33.

Types and Incidence of Student Involvement

BILATERAL INVOLVEMENT

From 1969 to mid-1975, almost 100 incidents of student involvement with collective bargaining were recorded by the Faculty Unionism Project,¹¹ although some of these incidents were not multilateral. The most frequent types of student involvement with collective bargaining have been student support of faculty-union strikes (29 incidents); student membership, mostly employed graduate students, in student employee, faculty, or nonfaculty unions, and inclusion in employee bargaining units (21 incidents); and student organizations bargaining directly with the college or university administration (17 incidents). These types of student involvement are not multilateral because the bargaining process itself is bilateral. Students are identified as employees, part of a profaculty pressure group, or as bargaining on their own behalf.

MULTILATERAL STUDENT INVOLVEMENT

There have been 30 incidents of multilateral student involvement with faculty collective bargaining. About half of these, some beginning as early as 1969, are continuous student involvement in the faculty-union bargaining relationship. Ten new incidents of student involvement were recorded during 1974; there were six new incidents for 1972 and 1973. For 1969, 1970, 1971, and 1975, two new incidents were recorded each year. Five of six incidents of student involvement at private institutions were in 1974 and 1975.

Student involvement has varied by the degree of formalization and the obligation to reach agreement among the student, faculty-union, and administration parties. Incidents fall into five general types of involvement.¹²

(1) *End-run bargaining*.—The appeal, including lobbying, by students or student representatives to the appropriate governing or legislative body of the institution.

(2) *Consultation and Observation*.—Consultation, including information-sharing, by students or student representatives with faculty-union and management representatives, and student observation of faculty-union and management negotiations.

(3) *Coalition bargaining*.—A bilateral bargaining process in which coalitions are formed in exchange for side payments between the faculty-

¹¹ See fn. 1 for sources of data.

¹² For a review of student involvement of all types, see Bill Aussieker, "Student Involvement with Collective Bargaining," *Journal of Higher Education*, vol. 46 (Sept.-October 1975), pp. 533-47.

TABLE 1
Type of Student Involvement By Control of Institution

	Public	Private
End-run Bargaining	7	—
Consultation and observation	7	3
Coalition bargaining	3	2
Tripartite bargaining	5	—
Collective bargaining	2	1
Total Incidents	24	6

Source: Faculty Unionism Project, Institute of Business and Economic Research, University of California, Berkeley. Data cover the period between 1969 and July 1975.

union or management side and independent student representatives.

(4) *Tripartite bargaining*.—Negotiations among student, faculty, and administration representatives, in which all three are independent parties to the final agreement.

(5) *Collective bargaining*.—Negotiations between student, and administration or faculty-union representatives in a good-faith effort to reach agreement on matters of student interest that fall within the scope of negotiations between faculty union and management.

Incidents of student involvement are not restricted to one type, but at the present time there is no apparent pattern. Table 1 gives some indication of the frequency of incidents for different types of involvement by type of institution. End-run bargaining and consultation/observation are the most frequent types of student involvement and account for more than half of the incidents of multilateral student involvement. The more direct relationship between state legislatures, elected officials, and governing boards of public higher education institutions probably makes end-run bargaining a more viable alternative for students in public schools than for those in private institutions.

Coalition, tripartite, and collective bargaining account for approximately 40 percent of the incidents. However, the inclusion of the incidents of tripartite bargaining is somewhat questionable. These incidents include student involvement only on governance-related matters and, in one case, student involvement was restricted to just one matter within the scope of negotiations. If students failed to ratify the tripartite aspects of the faculty-union-administration agreement, the rest of the faculty-union contract would remain in effect.

INCIDENCE

The more interesting questions concern the relationship between multilateralism and various explanatory factors. Although Kochan's definition of multilateralism is considerably different, he found that

multilateralism varied directly with the extent of conflict among city officials in making bargaining decisions, the vigor of the union's political activities, and the union's use of strike substitutes.¹³ In the context of higher education, I would expect the incidence of multilateralism to vary with public control, faculty strikes, and organizational complexity, i.e., two- or four-year and single or multicampus institutions within the scope of the appropriate bargaining unit.

To test these relationships, a comparison of the incidence of student involvement in a unionized population is needed, but choice of the population unit is troublesome. Since more than one incident of student involvement has occurred at some institutions, the bargaining unit would probably be a better unit of comparison. The use of the bargaining unit would also simplify the accounting of incidents of student involvement at one institution in a multi-institutional bargaining unit or student involvement throughout a multi-institutional bargaining unit. The use of institution would permit discriminating between student involvement at the institution or unit level, but separate incidents at the institution and unit level would complicate matters sufficiently for me to favor the use of the bargaining unit. However, the use of either institution or unit distorts the magnitude of student involvement. The 30 incidents in Table 1 convert into 26 faculty bargaining units with student involvement or about 10 percent of the 237 faculty bargaining units, but these 26 units encompass at least 50 percent of the total unionized faculty.

With these considerations in mind, Table 2 permits comparison of two percentage distributions. For example, 58 percent of the 26 faculty bargaining units with student involvement, compared with 15 percent of all 237 faculty bargaining units, are found in four-year units. A comparison of the significant differences between the sets of percentages in Table 2 indicates that student involvement is disproportionately found in public four-year units, private four-year units, and private four-year multicampus units. A review of the more interesting insignificant differences in Table 2 shows that student involvement is found less than proportionally in public units.

A cursory examination of Table 2 also indicates the possibility of some interaction between the variables. Though complex analysis of the interrelationships is not intended here, five relationships are significant: (1) The only moderately strong bivariate relationship is between four-year units and student involvement ($\chi^2 = 34.31$, $p < .001$, $\phi = .38$). (2) The other significant bivariate relationship is between

¹³ Kochan, p. 525.

TABLE 2
Incidence of Student Involvement Among Faculty Bargaining Units

Organizational Complexity	Type of Control ^a		
	Public	Private	Total
Four-year only units	58/15*	23/15*	81/30*
Four-year single campus	38/10*	15/13	53/23*
Four-year multicampus	19/5*	8/2*	27/7*
Two-year only units	19/66*	—/4	19/70*
Two-year single campus	8/60*	—/4	8/64*
Two-year multicampus	12/6	—/—	12/6
All units	77/81	23/19	100/100

^a Numerators of fractions = percentage of bargaining units with student involvement. Control total = 26.

Denominators = percentage of faculty bargaining units as of July, 1975. Control total = 237.

* Differences between the two sets of percentage distributions are significant $p = .10$.

Source: Faculty Unionism Project: Institute of Business and Economic Research, University of California, Berkeley.

multicampus units and student involvement (chi square = 19.90, $p < .001$, $\phi = .29$). (3) The relationship between public control and student involvement is significant only within the four-year single-campus category (chi square = 6.22, $p < .02$, $\phi = .33$). (4) The relationship between multicampus units and student involvement is significant within the public two-year category (chi square = 3.43, $p < .10$, $\phi = .31$). (5) The relationship between multicampus units and student involvement is also significant within the private four-year category (chi square = 3.43, $p < .10$, $\phi = .31$).

The relationships suggest the existence of more powerful predictors of student involvement, such as the impact of collective bargaining on students. The most observable impact of collective bargaining on students would be faculty strikes and increased tuition and fees. Seven of the 30 incidents of student involvement in Table 1 were precipitated by actual faculty strikes, and another three incidents were precipitated by threatened strikes. In comparison to the population of bargaining units, however, faculty units experiencing strikes is not strongly related to faculty units with student involvement (chi square = 5.68, $p < .02$, $\phi = .16$). A more curious pattern is the relationship among student involvement, unionism, and increased tuition and fees.¹⁴ Tuition and fees

¹⁴ Analysis of this relationship begins with the rather dubious assumption that faculty unions have bargained contracts that resulted in increased costs that have been passed on to the student in the form of increased tuition and fees. Statistical analysis is further limited by the meager number of institutions for which tuition data are available for both periods, but the table below shows the increases in tuition and fees from 1967-68 to 1975-76 for unionized four-year institutions.

have increased significantly more for unionized, public, four-year institutions without student involvement than for those that are unionized and have student involvement. There are no significant differences in the increases of tuition and fees for unionized, private, four-year institutions with student involvement and without student involvement. A possible explanation for the significant differences among public institutions would stress their longer unionization, the earlier impact of unionism on students, and thus the longer effect of student involvement on faculty-union impact.

Conclusion

A variety of multilateral activities have occurred in faculty-union bargaining experiences. One type of multilateralism is identified as extended bilateralism and is probably best understood as the efforts of union and management representatives to alter the bargaining structure for power and decision-making purposes. Extended bilateralism may be the precursor of coordinated and consolidated bargaining by faculty and nonfaculty unions, statewide or regional bargaining, and interinstitutional mutual-aid pacts. These developments may be hastened by increased bilateral student involvement with collective bargaining, such as student-employee unions, and student unions bargaining with administrations.

For multilateral student involvement, the relatively modest number of incidents fall into several types, but these incidents encompass at least half of the unionized faculty. More reliable data, better measurement, and other definitions may alter the incidence of student involvement. In this paper, student involvement was moderately associated with organizational complexity, faculty strikes, and increased tuition and fees. While future research may once again establish the importance of public control in explaining multilateralism, this study found multilateralism more closely related to the service and consumer aspects of higher education than the amorphous nature of public control.

	Public	Private
Unionized institutions with student involvement	\$240 (N = 6)	\$989 (N = 5)
Unionized institutions without student involvement	\$455 (N = 15)	\$1008 (N = 10)
Difference	\$ (215) t = 5.73, p < .001	\$ (19) t = .10

Data Source: College Entrance Examination Board *Student Expenses at Post-secondary Institutions, 1975-76* (Princeton: CEEB, 1976), and College Entrance Examination Board, *The College Handbook, 1967-69* (New York: CEEB, 1967).

DISCUSSION

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The Allen and Gutteridge paper examines the effect of educational attainment—a two-year terminal degree versus a four-year terminal degree—on labor market experience. The study, based on a survey of male alumni from two-year colleges in upstate New York, was motivated by the conflicting evidence regarding the value of post-secondary education in view of predicted labor market changes by 1985. Their conclusions rest on the application of the Chi-square test to contingency tables. The major conclusion is that no significant differences exist between initial salaries and current salaries of the two types of graduates even though the four-year graduates tended to be employed in positions of higher occupational prestige. From this evidence, the authors suggest that labor market advantages experienced by four-year college graduates are relatively minor in the short run. Although they concede that the four-year graduate may have an edge in the long run because of more opportunity for promotion as their data show, they set forth the proposition that such promotions may be the result of a “credentials barrier.” Hence, they call for research on employer attitudes regarding the relationship between educational attainment and an individual’s value to the firm.

Granted that Edwin Harris is correct in saying that eight out of ten jobs expected to develop by 1985 will likely require less than a four-year college degree, I confess to the feeling in reviewing this paper that the authors have an implicit assumption that the purpose of higher education is for training for the first job. Their result regarding the small salary advantage between the two-year and four-year graduates is not surprising. It has support, for example, in a comprehensive regression study by Taubman and Wales who used the NBER-TH sample of 5,000 respondents. In this latter study, net earnings differentials due to some college versus a four-year degree were insignificant for men at about age 33, but by the time they were 45 to 50, the men with the baccalaureate degree were earning 14 percent more than those with some college. Indeed, if Allen and Gutteridge were to use regression analysis, in which they could control for tenure on the job (which they mention as averaging 71.2 months for the two-year graduates and 43.8 months for the four-year graduates) as well as for the other variables they handle, it would be possible to determine with precision why the

salary difference in the current employment situation was not significantly different between the two groups.

Although the authors recognize that a four-year degree may improve labor market possibilities, they assert that the long-run advantage may disappear on an investment basis. This assertion suggests that the authors do not consider the value of nonpecuniary benefits in the college degree. As well, they overlook entirely the consumption aspects of education. Failure to account for these aspects, it seems to me, is a disservice to future workers, especially in view of the discussion now taking place regarding job satisfaction. The authors appear to have an implicit assumption that individuals should decide that their occupational goals have a limited horizon and should train for a specific job; hence, there is no need to get the baccalaureate degree. Further, their own evidence shows that a significant difference in job satisfaction between the two-year and four-year graduates derives from promotion policies of the organization. Yet, their interpretation rests heavily on the "credentials barrier." An alternative hypothesis never mentioned by the authors is that organizations provide promotional opportunities to four-year graduates more readily than to the two-year graduates because the former, having a broader educational base, are more flexible and not merely technological problem-solvers. The four-year graduate presumably learns how to think in levels of abstraction, to identify problems. Which hypothesis has merit represents an exciting possibility for future research.

Barnum and Gleason provide us with an innovative application of basic decision theory. They confront a rational economic employer, who feels he is in violation of OSHA, with two strategies: Should the condition(s) be corrected, or should the funds be invested in an alternative project? On the assumption that a firm may face a safety inspection but once every ten years and that five possible states of nature exist—no inspection occurs, no violation is cited, a nonserious violation is cited, a serious violation is cited, a willful violation is cited—the authors construct a loss (payoff) table and find that a rational employer will correct conditions if the cost is less than \$18.20. Otherwise, funds will be invested elsewhere. They conclude that since few unsafe conditions can be corrected for less than this amount, it is doubtful that conditions would be corrected unless the firm is forced to do so.

This research supports the proposition that the small expected fines give the impression the government does not take violations too seriously. If penalties are to be used at all, they should be high enough to accomplish their purpose. But the authors warn that raising fines substantially without other corrections to the act and its administration might cause

more harm than good. This caveat needs emphasis because of the issues that surround the standards themselves; e.g., some OSHA standards are not enforceable, others are not appropriate, some are not complete for specific industries, and others are too technical to be comprehensible to the average small firm. Some revisions of federal standards have taken place since the wholesale adoption of selected national consensus and established federal standards since mid-1971. But critics continue to plead that revisions are needed so that all standards meet two criteria—they should (1) clearly identify the hazard and (2) specify actions that must be taken to prevent occurrence of the hazard.

The Barnum-Gleason results rest heavily on the probability of one inspection every ten years. With close to 2,000 state and federal compliance personnel to inspect from four to five million workplaces subject to coverage of the law, a conclusion easily reached is that if the standards do not contain the two criteria noted, many millions of workers will work under substandard conditions. In summary, the purpose of this law cannot be achieved if reliance is vested in traditional enforcement techniques where safety inspectors fine and punish violators and then get them to correct conditions. This paper elegantly supports this contention. Whether or not the National Emphasis Program scheduled to start in April 1976 will begin to correct implementation problems remains to be seen.

Aussieker's paper clarifies the varieties of multilateral bargaining in higher education, and I find little to comment on. By defining multilateralism as independent student involvement in the faculty-union bargaining process, he avoids the problem of identifying the interests of nonstudent parties to the bargaining process. More generally, the paper provides many insights into the incidence of student involvement with collective bargaining and is an addition to the literature that deals with the complexities of the bargaining process in public higher education where managerial authority is so diffuse.

Friedman, Bumstead, and Lund provide a creative approach to resolve the conflict between "last hired—first fired" seniority systems and Title VII of the Civil Rights Act of 1964. Although Congress acknowledged that a "bona fide seniority system" is exempt from the prohibition of Title VII, this conclusion has found little support in recent case law. The authors review some of the major cases to date and conclude that the inverse seniority plan, already negotiated for reasons unrelated to the above dilemma, may be a feasible concept to extend more widely. This proposal allows senior workers to choose temporary layoff so that more junior workers can retain their jobs.

I found it of interest that limited forms of inverse seniority in certain collective bargaining contracts were reported by Slichter, Livernash, and Healy who wrote in the late fifties. It seems that current labor market developments have made this an idea whose time has come.

Does a common thread emerge from the four totally different papers reviewed? I believe it has. Each topic deals with a challenging area for the functioning of labor markets in the balance of this decade. These papers clearly point to the need for indepth research on the impact on management of recent legislation, collective bargaining, and educational requirements in recruiting. The time has come to bring the classic study by Slichter, Livernash, and Healy up to date.

IV. RURAL LABOR MARKETS

Manpower Policy and Rural-Urban Population Balance¹

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Social and economic problems of metropolitan centers have recently created considerable interest in development of a federal rural-urban population balance policy. Such a policy would include programs that would seek to stabilize or decentralize the present rural-urban population distribution.² Decentralization of population is the reverse of the policy objective held for many years by students of rural-urban population problems. From the 1930s until emergence of urban disorders in the 1960s, a standard policy recommendation was the development of manpower programs to assist in relocation of stranded rural populations to urban centers.³ With the exception of the Labor Mobility Demonstration Projects under the Manpower Development and Training Act of 1962 (MDTA), Congress did not incorporate these recommendations into manpower legislation.

Recommendations for population-distribution policy have been based on economic analysis concerned with standard concepts of efficiency and equity: these policies were designed to increase the income of unemployed and underemployed workers while increasing the aggregate efficiency of labor resource allocation. While the existence of external

¹The research on which this paper is based was completed when the author was a graduate student at the University of California, Berkeley. Varden Fuller, Phillip Le Veen, and Davis McEntire provided much guidance and many suggestions in this research. Colleagues at the University of Georgia made several helpful suggestions on a draft of this paper.

²Luther Tweeten, "Emerging Issues for Sparsely Populated Areas and Regions under a National Growth Policy," *American Journal of Agricultural Economics*, vol. 55:5 (Dec. 1973), and James L. Sundquist, *Dispensing Population: What America Can Learn from Europe* (Washington: Brookings Institution, 1975).

³Carter Goodrich, et al., *Migration and Economic Opportunity* (Philadelphia: University of Pennsylvania Press, 1936), and Varden Fuller, *Rural Worker Adjustment to Urban Life: An Assessment of the Research*, Policy Papers in Human Resources and Industrial Relations No. 15 (Ann Arbor, Mich.: Institute of Labor and Industrial Relations, University of Michigan, 1970).

costs from population relocation on origin and recipient populations were recognized,⁴ these costs were generally not given due analytical consideration since they did not have aggregate allocative significance. However, an alternative theoretical viewpoint recognizes that these costs do influence political decisions.⁵

This paper considers the impact of potential external costs of population relocation on the political decisions in reference to the design of manpower policy in the United States. Particular emphasis is placed on legislative considerations associated with programs authorized by MDTA. Hypotheses concerning political support and opposition are derived with consideration of relevant external costs and benefits. These hypotheses are then evaluated with empirical information from the legislature record associated with MDTA. Implications of this analysis for implementation of population-distribution policy are then briefly considered.

External Costs and Benefits of Population Redistribution

Conceptually, manpower programs for stranded rural populations could have two alternative population-distribution objectives: (1) relocation of jobs to rural areas, or (2) relocation of rural workers to urban areas. The first would involve utilization of manpower programs as relocation incentives for industrial employers, and the second the utilization of manpower programs to provide training, financing, and other relocation assistance. In this section, the incidence of external effects of manpower programs associated with these objectives is delineated, and hypotheses concerning the political importance of the various external effects are derived.

A TAXONOMY OF COSTS AND BENEFITS OF POPULATION DISTRIBUTION

The primary external effects of relocation of workers from rural areas to urban areas arise from the increase in supply of workers in urban areas and the decrease in rural areas. These supply shifts have potential benefits for workers remaining in rural areas and employers in urban areas and potential costs for workers in urban areas and employers in rural areas. Additional effects arise from shifts in demand for consumer goods which result in external benefits for the urban consumer good sector and costs for the rural sector.

⁴For example, see Goodrich, et al., pp. 666-67 and James G. Maddox, "Private and Social Costs of the Movement of People Out of Agriculture," *American Economic Review*, vol. 50:2 (May 1960).

⁵For a review of this literature, see Wesley N. Musser, *Federal Manpower Policy and the Rural Sector*, Ph.D dissertation, University of California, Berkeley, pp. 20-77.

The incidence of costs and benefits associated with creation of jobs is similar to that for relocation of workers. Assuming no worker migration, the source of the external effects are shifts in demand for labor rather than in the supply of labor. Increased demand for workers in rural areas and decreased demand for workers in urban areas would have the same external effects as the alternative strategy. Creation of jobs would have the opposite external effects on the trade sectors: sales in rural areas would be expected to increase and sales in urban areas decrease.

IMPORTANCE OF COSTS AND BENEFITS FOR POLITICAL ACTION

Besides providing a taxonomy of costs and benefits, economic theory provides some plausible assumptions in reference to their importance for political action. Political relationships which are assumed for this study include: (1) Maintenance of present income and position provides a stronger incentive for political action than improvements; therefore, costs are more important than benefits. (2) The potential for political action of a group is directly related to the individual magnitude of the costs and benefits. And (3) political action is more likely if the group is represented by an interest group.

With these assumptions, it is possible to derive some hypotheses concerning the relative group support and opposition for various population distribution objectives. In general, rural workers are politically unorganized and therefore would not be expected to be represented in the political process. Since the benefits to urban employers would be diffused among a large number of places-of-work, these external benefits would be of little political consequence. Similarly, external effects to business establishments, even though they would involve costs in the case of job relocation, would also be diffused and of minor consequence. As a result, political participants in geographical distribution considerations would mainly be urban workers and rural business interests.

These groups would have different political responses to worker and job relocation programs. A worker-relocation program that is not confined to specific skills and geographical destinations would have only diffused external costs for urban workers so that their political response would be limited. In contrast, the costs on rural businessmen and employers would be concentrated in locations with stranded populations. Therefore, the primary opposition to worker-relocation programs would be from rural business and employer groups. Relocation of jobs, on the other hand, would have a reverse pattern of opposition. The incidence of both costs and benefits to groups that comprise the rural power structure would result in a mixed political response. However, the re-

location of jobs could involve concentrated external costs on urban workers when specific places-of-work relocate. Even if unemployment were low in urban labor markets, urban workers would lose the benefits of specific on-the-job training, job security, and other amenities associated with seniority. Urban workers would therefore be expected to provide the primary opposition to job-relocation programs. This theoretical reasoning suggests that neither population-distribution objective has organized support and that both will have organized opposition.

Population Distribution Objectives in MDTA Programs⁶

MDTA established manpower research and information programs and training programs. From a population-distribution perspective, training programs could have been designed either to prepare rural workers for jobs in urban areas or to provide incentives for plant relocation in rural areas. In addition, a relocation assistance program under MDTA was proposed in 1961, and a pilot program was authorized in 1963. Since more legislative controversy existed for the relocation-assistance program than for the training program, the former is emphasized in the analysis of relocation of workers.

RELOCATION-ASSISTANCE PROGRAMS

Legislative documentation of the opposition to the relocation assistance program in 1961-62 is limited, but the relationship of the opposition to costs on origin populations is apparent. A witness from Alabama noted that relocation of industry was preferable for most rural populations.⁷ A letter from Hazeltown, Pa., summarized opposition to potential relocation: "We have schools, hospitals, churches, stores, and other business establishments which not only accommodate these people but which depend on their continuance in this community."⁸ Another Pennsylvania witness noted that the program would confound industrial growth by relocating skilled labor;⁹ Senator Randolph of West Virginia generalized these observations to his constituency.¹⁰ In House hearings, Congressman Holland of Pennsylvania noted that merchants from depressed areas expressed opposition to loss of customers, even public welfare recipients.¹¹

⁶ For an expanded version of this section, see Musser, pp. 123-34, 173-91.

⁷ U.S. Senate, *Training of the Unemployed*, Committee Hearings, 87th Congress (Washington: U.S. Government Printing Office, 1961), pp. 193-94.

⁸ U.S. Senate, pp. 13-14.

⁹ U.S. Senate, pp. 212-15.

¹⁰ U.S. Senate, pp. 235-36.

¹¹ U.S. House of Representatives, *Manpower Development and Training Act*, Committee Hearings, 88th Congress (Washington: U.S. Government Printing Office, 1963), p. 523.

Support in 1961–62 for relocation assistance was limited to academic witnesses and the American Federation of Labor–Congress of Industrial Organizations (AFL-CIO). Since requirements for bona fide employment blunted the potential costs to union members, the AFL-CIO supported the program because of its potential usefulness to its members.¹² However, potential beneficiaries such as urban employers and rural workers were not represented in congressional hearings. Stronger opposition from areas with potential migrants than support from beneficiaries was apparent in the decision on the relocation-assistance program in the original MDTA.

While no opposition was expressed in 1963 hearings, Congress only adopted a pilot program of relocation assistance.¹³ Experience with these projects was largely favorable from an aggregate welfare perspective. However, Audrey Freedman reported that negative reactions from farm and industrial employers in the origin area and residents in the destination area did exist.¹⁴ This experience with MDTA illustrates that relocation assistance had opposition from origin populations with little effective support from beneficiaries.

TRAINING FOR JOBS IN OTHER GEOGRAPHICAL AREAS

A national labor market orientation is important for training programs for rural populations. Training rural workers for the national labor market is consistent with the mobility of rural populations and is necessary for feasible training programs for populations in areas without employment growth. Two restrictions were included in MDTA that effectively prohibited a national orientation. One of these restrictions was related to the opposition to the relocation-assistance program, and the other was added in response to the position of the AFL-CIO.

The restriction related to relocation assistance was added after committee hearings in which opposition to relocation was expressed. While the legislative record contains no evidence on the purpose of the restriction, the substantive content clearly limits training in preparation for mobility. The specific clause read: "Priority in referral for training shall also be extended to persons to be trained, for skills needed within, first, the labor market in which they reside and, second, within the state of their residence."¹⁵ The provision did not strictly prohibit training

¹² U.S. Senate, p. 207.

¹³ U.S. House of Representatives, *Amendments of Manpower Development and Training Act of 1962*, Report No. 861, 88th Congress (Washington: U.S. Government Printing Office, 1963), p. 14.

¹⁴ Audrey Freedman, "Labor Mobility Projects for the Unemployed," *Monthly Labor Review*, vol. 52:3 (June 1968), p. 62.

¹⁵ Sec. 202 (b), *U.S. Public Law 87-415*, (March 15, 1962), p. 3.

for jobs in other geographical areas, but it did give low priority to such training, especially for employment in different states.

These priorities were particularly restrictive on training in preparation for mobility because of another clause in MDTA that linked training with employment opportunities. This clause read: "Before selecting a person for training, the Secretary shall determine that there is a reasonable expectation of employment for which the person is to be trained."¹⁶ This clause was added in response to testimony in congressional hearings which opposed training programs imposing costs on existing skilled workers. George Meany, president of the AFL-CIO, clearly expressed organized labor's position on the need for this provision: "Clear provisions are needed to protect the jobs of the existing work force and to prevent the use of trainees to depress wage standards."¹⁷ This position was reaffirmed in 1963 and 1966 hearings.¹⁸

A potential loophole in the local priority requirement was limited by the linkage of training to employment. Training programs for local labor market demands could not train more workers than was consistent with local employment opportunities and thereby indirectly encourage mobility to other areas. That these two clauses were effective in limiting training that could prepare for labor mobility was documented in manpower hearings in 1966: The Texas Employment Commission allegedly refused to sponsor a training program in which part of the trainees would be employed in another state.¹⁹

RELOCATION OF JOBS TO RURAL AREAS

Theoretically, manpower programs could either substitute for or supplement on-the-job training to prepare workers for new jobs in firms relocating to rural areas. The use of manpower programs as incentives for relocation of industrial firms to rural areas was also limited in MDTA. The antipirating provision in MDTA read as follows:

The Secretary of Labor and the Secretary of Health, Education, and Welfare shall not use any authority conferred by this Act to assist in relocating establishments from one area to another. Such limitation shall not prohibit assistance to a business

¹⁶ Sec. 202 (d), *U.S. Public Law 87-415*, p. 3.

¹⁷ U.S. House of Representatives, *Manpower Utilization and Training*, Committee Hearings, 87th Congress, (Washington: U.S. Government Printing Office, 1961), p. 152.

¹⁸ U.S. House of Representatives, *Manpower Development and Training Act*, p. 124, and U.S. House of Representatives, *Manpower Development and Training Act Amendments of 1966*, Committee Hearings, 89th Congress (Washington: U.S. Government Printing Office, 1966), p. 99.

¹⁹ U.S. Senate, *Manpower Development and Training Act Amendments of 1966*, Committee Hearings, 89th Congress (Washington: U.S. Government Printing Office, 1966) p. 33.

entity in the establishment of a new branch, affiliate, or subsidiary of such entity if the Secretary of Labor finds that assistance will not result in an increase in unemployment in the area of original location or in any other area where such entity conducts business operations, unless he has reason to believe that such branch, affiliate, or subsidiary is being established with the intention of closing down the operations of the existing business entity. . . .²⁰

While the support for this clause was not revealed in the legislative record on the enactment of MDTA, the substantive content is clearly aimed at preventing external costs on existing skilled workers. The position of the AFL-CIO on the antipirating provisions was apparent in hearings on MDTA amendments. In 1963, AFL-CIO representatives proposed strengthening the provision to prohibit training for a particular skill as long as workers with this skill were unemployed in any area of the country.²¹ In 1966, concern was expressed that the provision was not being enforced; the position of the AFL-CIO was substantiated by the testimony of a union local official who presented an alleged example of MDTA subsidizing plant relocation. In addition, the AFL-CIO opposed a proposal of Congressman Hathaway of Maine to liberalize on-the-job training benefits aimed particularly at rural areas.²²

It must be emphasized that few rural representatives gave testimony at manpower hearings to oppose the AFL-CIO position. While the lack of representation of potential rural program participants is not surprising, the politically influential rural businessmen and real estate owners who could receive external benefits from rural industrialization did not support proposals such as Congressman Hathaway's. The lack of rural support was apparent in the very limited participation of rural pressure groups and rural legislators in hearings on MDTA. This result suggests that potential external costs to rural employers of plant relocation was at least as politically important as the benefits for rural businesses and real estate owners of economic growth.

Implications for Implementation of a Population-Distribution Policy

The experience with incorporating population-distribution objectives into MDTA was not unique. Despite increasing awareness of the social costs of unresolved rural employment problems during the past decade,

²⁰ Sec. 306 (b), *U.S. Public Law 87-415*, pp. 9-10.

²¹ U.S. House of Representatives, *Manpower Development and Training Act*, p. 134.

²² U.S. House of Representatives, *Manpower Development and Training Act Amendments of 1966*, pp. 100-129.

the Comprehensive Employment and Training Act of 1973 was similar to MDTA in reference to population distribution: it included no authorization for relocation assistance and had a more restrictive anti-pirating provision.²³ In addition, similar opposition existed to redistribution of jobs under the Area Redevelopment Act as well as for tax incentive proposals.²⁴ The lack of political organization of rural workers relative to groups that would incur external costs from a policy of rural-urban balance is not likely to be altered by foreseeable events.

Because the benefits of improved allocative efficiency from a population-distribution policy are diffused throughout the national population, national political leadership is necessary for the enactment of such a policy. Only presidential political resources can marshal a coalition of support to counter the political opposition of organized groups. However, in more traditional areas of federal responsibility, individual action would be expected to deviate further from social optima than past and future decisions of workers and businesses with respect to geographical location. The possibility that a population-distribution policy would achieve a priority relative to these other areas sufficient to warrant investment of limited presidential political resources appears unlikely. Without the intervention of unforeseen political events, the analysis of this paper suggests that the United States will continue to "muddle through" without a population-distribution policy.

²³ U.S. Public Law 93-203, 93rd Congress (Dec. 28, 1973), pp. 2-3, 41.

²⁴ James L. Sundquist, *Politics and Policy: The Eisenhower, Kennedy, and Johnson Years* (Washington: Brookings Institution, 1968), pp. 105-109, and Sundquist, "Dispensing Population . . .," pp. 13-16.

The "Start-Up" Industry Training for Rural Development*

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The "start-up" training concept has received considerable attention as a way to better match workers and jobs, to "leapfrog" the industrial development process by attracting higher wage industry to a place through upgrading local work forces, and to make it possible to increase the wages of low-income workers. The start-up concept attempts to meet some of the main defects of manpower programs and industrial development. Manpower programs often are criticized either for training workers for jobs that do not exist or training them for jobs that really require little training. A problem for industrial developers, particularly in rural areas, is uncertainties about the availability of skilled workers in a local rural work force where there are few formal labor market information systems.¹

As a consequence, the "natural" process of rural development is for the initial development to be in marginal industry which hires workers from agriculture and subsequently, as development occurs, higher-wage industry recruits workers from these marginal industries. In this way, work forces tend to be upgraded over a long period of time.² Moreover, even though there is considerable rural economic development—indeed, manufacturing employment is growing faster in nonmetropolitan than in metropolitan areas—it tends to bypass some areas (especially those which are predominately agricultural or have black population concentrations) and some people (especially those with limited work experience, skills, or education).

By simultaneously training workers in advance for specific jobs, the

* This paper is based on a University of Texas project funded by the Manpower Administration, U.S. Department of Labor. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this paper do not necessarily represent the official position or policy of the Department of Labor.

¹ Ray Marshall, *Rural Workers in Rural Labor Markets* (Salt Lake City: Olympus Publishing Company, 1974).

² Thomas E. Till with the assistance of Ray Marshall, "Industrialization and Poverty in Nonmetropolitan Labor Markets," (paper prepared for the second meeting of the Task Force on Southern Rural Development, Nashville, Tennessee, November 22, 1974).

“start-up” training concept has the potential of helping upgrade the nature and location of industry as well as rural work forces. Moreover, the concept could be applied to large-scale public works as well as to private employment. The main objective of the project on which this paper is based has been to determine the extent to which start-up training has accomplished these objectives in states where the concept has been applied.

By 1972, 26 states reported having “State Funded Worker Training Programs,” in various stages of planning, development, implementation and operation (Table 1). These programs had as their stated general objectives: (1) Encourage the location of new and the expansion of existing industry by offering to assist in the training of new personnel, thereby reducing start-up cost. (2) Assist in the employment of unemployed, underemployed, and disadvantaged.³

Our study examined in detail the start-up industry training programs of South Carolina, North Carolina, Virginia, and Alabama. Comparative analyses were made of the accomplishments, operational and support organizations, costs, and the start-up processes. The effects of the programs on industrial relocation trends and the leap-frogging of the unemployed and underemployed into the labor force were also examined.

The Programs

*The New York Times*⁴ recently cited South Carolina as a “textbook example of how a Southern state successfully lures industry from other regions of the United States and, in recent years, from around the world.” To earn this type of recognition, South Carolina during 1963–1973 lured \$5.9 billion worth of new or expanding industry into the state in 611 new and 724 expanding industries. The new industries hired 81,930 employees while the expanding ones added 42,460 to their payrolls. Thus, a total of 124,399 jobs were created. To support this growth, the Division of Industrial Service of the State Board of Technical and Comprehensive Education trained 46,317 South Carolinians for jobs in the new and/or expanding industries in its Start-Up Industry Training Program.

During the period 1962–1973, North Carolina officials announced that capital investment in some 6,000 new and expanding industries totaled more than \$6.7 billion and that 318,698 jobs, with a total annual

³Office of Industrial Development, Department of Resources and Economic Development, “State Funded Worker Training Programs,” (New Hampshire: July 16, 1973).

⁴Roy Reed, “Salesmanship by South Carolina Wins Foreign and U.S. Investors,” *The New York Times*, July 24, 1973, p. 1.

TABLE I
State Funded Worker Training Programs

State	Pre-employment Program									On-the-Job Training											
	*	1	2	3	4	5	6	7	8	9	*	1	2	3	4	5	6	7	8	9	
Alabama	Y	S	C*	S	S	S	S	J	J	S	Y	S	C	C	C	C	C	C	J	C	
Arizona	Y	S	O	S	S	S	S	J	S	J	N										
Arkansas	Y	S	O	S	C	S	S	S	S	J	Y	S	C	C	C	C	C	S	J		
Delaware	Y	S	S*	S	S	S	S	S	S	S	N										
Georgia	Y	S	SC*	S	C	J	J	J	S	S	Y	S	C	C	C	C	C	C	J		
Hawaii	Y	S	O	S	J	S	S	S	S	S	Y	Program Data Not Provided									
Iowa	Y	S	O	L	C	L	C	L	C	S	N										
Kentucky	Y	S	O	J	J	J	J	S	S	S	Y	S	J	C	C	J	J	C	C	C	
Louisiana	Y	S	C*	J	J	S	S	X	J	J	Y	S	C	J	J	C	J	J	J	C	
Maine	Y	S	J	S	S	S	S	J	S	J	Y	S	J	S	S	C	C	J	C	J	
Maryland	Y	S	J	C	J	C	J	J	J	J	Y	J	C	J	J	C	J	J	J	J	
Mississippi	Y	S	S	S	S	S	S	J	C	J	N										
Nebraska	Y	In The Planning Stages									Y	In The Planning Stages									
New Mexico	Y	S	O	S	S	J	S	J	J	J	Y	C	C	C	C	C	C	J	J	J	
New York	N										Y	S	C	S	S	C	C	J	C	J	
North Carolina	Y	S	O	S	C	J	S	J	J	J	Y	S	C	C	C	J	C	J	J	J	
Oklahoma	Y	S	X	S	C	X	J	X	J	J	Y	X	C	C	C	C	X	C	C	X	
Oregon	Pending Legislation										Pending Legislation										
Pennsylvania	Y	S	X	S	S	S	S	S	X	X	Y	S	C	C	C	C	S	J	C		
South Carolina	Y	S	O	S	S	S	S	S	S	S	N	Program Data Not Provided									
South Dakota	N										Y	Program Data Not Provided									
Tennessee	Y	S	X	X	X	X	S	J	X	J	N										
Texas	Y	S	O	S	C	J	S	J	J	J	Y	C	C	C	C	C	C	C	C	C	
Utah	Y	Program Data Not Provided									N										
Virginia	Y	S	X	S	S	S	S	J	J	S	N										
West Virginia	Y	Program Data Not Provided									N										

* Have Program S = State Supplied/Funded X = Data Not Provided
 Y = Yes C = Company Supplied/Funded O = Not Provided
 N = No L = Local Supplied/Funded + = Optional
 J = Joint Company/State

payroll of over \$1.5 billion, had been created. North Carolina's program trained workers for 35.5 percent of those jobs with the annual percent trained ranging from a low of 30.9 in 1969 to a high of 43.9 percent in 1967.

Since the inception of Virginia's program in 1966, it has provided training to some 41,000 workers to fill some 100,517 reported⁵ new jobs that had been created by new and expanding industries.

Cost

During the combined 28 years of operation for all of the states, a total of \$49,671,923 has been recorded as spent. In computing the costs for the development boards, all expenditures except those specifically designated for projects other than industrial development were assigned as demand-creation costs. Demand-creation costs were 54.9 percent (\$27,269,885) of the total, while training costs were 45.1 percent (\$22,402,038) of the total.

The figures show a wide disparity in cost per job created among states. South Carolina from 1968-1973 spent an average of over \$2.8 million a year in demand-creation and training, while North Carolina spent over \$2.1 million a year. During that period, a reported 91,902 jobs were created in South Carolina and 157,787 in North Carolina. South Carolina's average cost per new job was \$183 and per trainee \$616, while North Carolina's was \$81 per new job and \$229 per trainee.

Procedures

If there is a local need for a new or expanding industry to utilize excess human resources, in most states a properly planned and well-executed recruitment campaign results in more than sufficient applicants for the trainee and job slots, and there is a relatively high degree of selectivity. The personnel recruited are tested and classified, and those persons found most suited are slotted into training programs.

The current employer-run selection operations offer little employment of individuals with no previous work experience. All of the industry representatives interviewed (plant managers and personnel directors) indicated that they were only hiring individuals with previous work experience.

North Carolina's stated policy is: North Carolina's industrial training program makes a conscious effort not to infringe on the company's right of selection. However, at the company's request, the Employment Com-

⁵ The Division of Industrial Development makes this disclaimer about its figures: No claim is made that this list includes all new manufacturing enterprises in Virginia. It merely lists those that have come to the attention of this Division.

mission will test and screen job candidates. Only those applicants meeting the physical and mental criteria established for a particular job by the employer will be referred to the company for further evaluation.

Virginia's policy is: If a company so desires, the Virginia Employment Commission will screen and test prospective employees. . . . It is important to note that final selection of the employee is completely up to the discretion of the employer. Special Training does not advise a particular company to hire any individual. Selection of employees is up to the businessmen.

Alabama authorities state: If desired, the Alabama Industrial Development Training staff will assist in the advertising and recruitment of applicants. After this screening, the applicant must be interviewed and selected by a company official. Trainees selected are not usually former welfare recipients but persons who are "underemployed" in their current jobs.

Thus, it can be deduced that the programs are not providing a leap-frogging effect for the labor force; instead, the effect is one of upgrading of the current work force.

At the time indicated by the Lead Time Schedule, those individuals selected for training are provided *skills development* which enables them to perform the jobs, duties, and tasks of the positions in which they are placed. The training may or may not be conducted on the worker's time, done with or without pay, and handled either as preemployment or on-the-job training.

For the job-placement stage in a preemployment program, each of the stages in the process is scheduled and interfaced in such a manner that the trainees are placed on the firm's payroll to ensure that full-scale operations can commence upon completion of the physical plant without any delays due to labor problems. In the OJT mode, job placement is concurrent with selection for training and this stage is not applicable.

The key words for these programs are *Industry's Needs*. These programs are adjuncts to industrial development—i.e., industrial development training programs. The question that remained was: "Are they also by chance human resources development programs for those in greatest need of development?"

The study of the industrial-development training programs of the four states indicates that variations in *modus operandi* were more a matter of emphasis than substance. The great variations existing between the decentralized North Carolina and highly centralized South Carolina programs, the longevity of their programs with their complete, comprehensive and readily available data, and their regional similarity, resulted in their being the focus of the analysis.

Hypotheses Tested

The analysis was conducted to test two hypotheses: (1) whether or not the existence of a start-up industry training program in a region or locale had resulted in a change in industrial relocation trends, and (2) whether the presence of such a program had resulted in a leap-frogging effect in the labor force, particularly in rural areas of greatest human resource development need.

In testing the first hypothesis, an assumption was made that the location of a technical education institution within a county was prima facie evidence of the presence of a start-up industry training program. In North Carolina the local educational institutions are responsible for the formulation and conduct of the basically on-the-job training programs from their inception. In South Carolina, the basically preemployment training programs are conducted primarily in the technical education centers. Thus, regardless of the type of program, decentralized or centralized, the technical education institutions are the focal point and an essential element of the industrial-development training process in both states.

In the interest of reducing an original set of 80 variables to a considerably smaller set, while retaining as much as possible of the information (or independent variation) contained in the original set, factor analysis was employed initially. The next step was a series of one-on-one (single predictor) regressions in which each of the six testing variables was used as a dependent variable. From these regressions the variables for inclusion in six multiple regression models were chosen. The criterion for selection was an F-test significance level of .10 or less. In addition to the predictor chosen in this manner, dummy variables for state, SMSAs, region, and technical educational institutions were included in order to compare models and ascertain whether any or all of those four aspects were significant. The next step in the regression analysis was an analysis of variance. Finally, in order to ascertain what portion of the predicted variation was due to unique contributions and what was shared, Veldman's Commonality Analysis Program (COMMAP) was used.⁶

Using the dummy variable for state, region, SMSA, and TEC locations, regression analyses were run to ascertain whether any or all of those aspects were significant as predictors. For the new jobs variable, neither state, region, SMSA, nor TEC locations were significant predic-

⁶ Donald J. Veldman, "COMMAP A Computer Program for Commonality Analysis," (unpublished manuscript, The University of Texas at Austin, Project PRIME, Department of Educational Psychology, February 1975).

tors. While for new plants, neither state, region, nor TEC location were significant predictors, however, SMSA was significant at the .01 level.

The regression analysis results were then cross-validated by cluster analyzing each of the six dependent variables, and then performing discriminant analysis to see if cluster membership could be predicted by using the original regression predictors as discriminant predictors.

Summary of Data Analysis

The results of our analyses did not support the hypothesis that training programs had influenced industrial location. The regression model comparisons produced F-ratios proving that the location of the TEC centers was insignificant for industrial location. The results continually showed certain variables to be highly associated with opening of new plants and creation of new jobs. These associations boil down to the simple fact that counties that had favorable employment, high education, population, and industrialization continued to have them, while those that did not continued to do without.

We conclude that the start-up training concept has the potential to affect the character and location of industry but that the potential is largely unrealized in these four states because of the way the projects have operated. By catering mainly to the interests of profit-maximizing employers, the projects have had marginal impacts in upgrading work forces and affecting industry location. If the start-up training approach were used as part of a program specifically to influence the location of industry and provide jobs for more disadvantaged workers, the outcome might have been different.

Job Search in Rural Labor Markets¹

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There have been numerous empirical efforts in the area of job search which have concentrated on (1) determining the methods of search used by various subgroups of the population, (2) explaining any existing differences among subgroups and (3) identifying any differentials in the effectiveness of various search methods.² The data in these studies have come from either national or urban samples, leaving something of a vacuum in our knowledge of job search in rural areas. In this paper, we devote significant space to describing techniques in rural vis-à-vis urban areas. However, emphasis will be placed on comparing the *relative effectiveness* of various job search techniques.

Data used in this paper come from a survey conducted in 1974 in four southern rural counties.³ Interviews were conducted in a random stratified sample of 3,357 households. As a part of the survey, heads of household were asked if they had looked for work at any time during 1973. Responses to this question indicated 367 household heads had been job-seekers that year, of whom over 75 percent were men. The racial composition was 43 percent Chicano, 29 percent Anglo, and 28 percent Black.

The sections which follow contain an examination of the job search methods employed by job seekers, an analysis of the relative effectiveness of job-search methods in rural labor markets, and conclusions based on the findings.

¹ This research was supported by a grant from the Employment and Training Administration, U.S.D.L. The authors alone are responsible for the views expressed in this paper.

² See for example Melvin Lurie and Elton Rayack, "Racial Differences in Migration and Job Search: A Case Study," *Southern Economic Journal* (July 1966), pp. 81-95; David W. Stevens, "Racial Differences in Migration and Job Search: A Case Study-Comment," *Southern Economic Journal* (April 1967), pp. 574-76; E. C. Koziara, K. S. Koziara, and A. G. Verzilli, "Racial Differences in Migration and Job Search: A Case Study," *Southern Economic Journal* (July 1970), pp. 97-99; Harvey J. Hilaski, "How Poverty Area Residents Look for Work," *Monthly Labor Review* (March 1971), pp. 41-45; Lee D. Dyer, "Managerial Job Seeking: Methods and Techniques," *Monthly Labor Review* (December 1972), pp. 29-30; Thomas F. Bradshaw, "Job Seeking Methods Used by Unemployed Workers," *Monthly Labor Review* (February 1973), pp. 35-40; and Carl Rosenfeld, "Job Seeking Methods Used by American Workers," *Monthly Labor Review* (August 1975), pp. 39-42.

³ Counties included were Dodge County, Ga.; Natchitoches Parish, La.; Starr County, Tex.; and Sunflower County, Miss.

I. Job-Search Methods Used

In this section, the search methods of the job seekers are examined from two perspectives: (a) search methods used, and (b) search method by which job was obtained. In each case it will be possible to compare the data from this rural study with other investigations of search behavior involving urban populations and the national population.

SEARCH METHODS USED

In the first four columns of Table 1, data are presented on the percent of job-seekers using various methods of search not only in the rural study but in two national population studies⁴ and an *urban* investigation⁵ as well. Several interesting points are evident from a perusal of these four columns. First, no matter which population sample is considered, direct application to employer (DE) is the most often mentioned source used. Second, with the exception of the Bradshaw study, friends and relatives (F-R) is the second most often mentioned source. The state employment service (ES) is definitely third in the rural study, but this may not be the case in the other three. The manner in which the data were presented in these latter investigations prevents a calculation of the percentage using the "other" category of search methods. This is very unfortunate since intuitively we would expect that the "other" category would probably be mentioned more often than the ES in these nonrural studies. This is because the "other" category includes newspaper ads, union hiring halls, private employment agencies, etc. Rural areas use these methods less because most newspapers are not geographically specific to the rural area, and unions and private employment agencies are not as prevalent in rural areas as in urban areas.

It is not surprising to find the ES well down the list among search methods mentioned in rural areas. Only two of the counties in this study (Sunflower and Natchitoches) have a full-time ES office. The ES office serving Dodge county is just across the county line, while Starr county residents are at least 80 miles from the nearest ES office.

Notice that in the one study that is urban-specific (Hilaski's) the population mentions use of the ES office significantly more than the populations of the other studies. No doubt, ease of accessibility is an explanation for the greatest part of this difference. Further credence is lent to this point when the rural data are broken down by county. The two counties without ES offices had only 13 percent and 24 percent,

⁴Bradshaw and Rosenfeld.

⁵Hilaski.

TABLE 1
A Comparison of Usage of Job-Search Techniques

Method	Method by Which Job Obtained									
	Mentioned Using The Method ^a									
	Rural	Bradshaw- ^b Unemployed Workers (1971)	Rosenfeld- ^c Nationwide Sample (1973)	Hilaski- ^d Urban Poor (1968-69)	Rural ^e	Stevens ^f Urban Males (1965)	Koziara- Koziara ^g Verzilli Urban Males (1968)	Rocha ^h Urban Males (1965)	Lurie ⁱ Urban Males (1964)	Rosenfeld- ^e Nationwide Sample (1973)
State Employment Service	30.8	30.8	33.5	46.9	6.3	7.1	11.2	7.0	6.0	5.1
Direct application to employer	76.0	71.6	66.0	75.9	59.0	33.4	12.1	15.0	50.0	34.9
Friends or relatives	54.8	15.2	50.8	64.4	26.3	23.7	33.5	35.0	33.6	26.2
Other	21.5	•	•	•	8.3	35.8	43.2	43.0	10.4	33.8
Sample Size	367	4,117	10,437,000	142,500	315	1,106	349	60	250	10,347,000

^a Percentages do not add to 100 because some job seekers used more than one method.

^b Thomas F. Bradshaw, "Jobseeking Methods Used by Unemployed Workers," *Monthly Labor Review*, (February 1973), p. 36.

^c Carl Rosenfeld, "Jobseeking Methods Used by American Workers," *Monthly Labor Review*, (August 1975), p. 40.

^d Harvey J. Hilaski, "How Poverty Area Residents Look for Work," *Monthly Labor Review*, (March 1971), calculated from Table I, p. 43.

^e Cannot be directly calculated.

^f David W. Stevens, "Racial Differences in Migration and Job Search: A Case Study: Comment," *Southern Economic Journal*, (April 1967), pp. 574-76.

^g E. C. Koziara, A. G. Verzilli, and K. S. Koziara, "Racial Differences in Migration and Job Search: A Case Study," *Southern Economic Journal* (July 1970), pp. 97-99.

^h J. R. Rocha, Jr. "The Differential Impact of an Urban Labor Market Upon the Mobility of White and Negro Potentially Skilled Workers," Ph.D. dissertation, M.I.T., August 1967.

ⁱ Melvin Lurie and Elton Rayack, "Racial Differences in Migration and Job Search: A Case Study," *Southern Economic Journal* (July 1966), pp. 81-95.

respectively, using the ES method. On the other hand, Sunflower and Natchitoches counties—both containing ES offices—report a “percentage using ES” of 51 percent and 42 percent, respectively. Both of these latter percentages are comparable to that found in the Hilaski study.

SEARCH METHOD BY WHICH JOB OBTAINED

One would expect the patterns pertaining to “methods used” to be duplicated when referenced according to “search method by which job obtained.” Indeed, a comparison of the two rural columns in Table I reveals that the patterns are much the same. That is, column 1 shows that DE was the search method mentioned the most often, and column 5 indicates that the largest percentage of job-seekers found a job using that method. F-R ranks second in both columns.

The ES and “other” categories are closely ranked in both instances. However, their positions are reversed—ES was ranked third among methods mentioned most often, but it was fourth in terms of method by which job obtained. The implication is that the “other” methods are somewhat more efficient in obtaining jobs than is the ES. This is a point which is addressed later in Section II.

Additional data are supplied in the last five columns of Table I for making comparisons of the results from the rural study with four urban inquiries⁶ and the Rosenfeld investigation of the general population.⁷ It is apparent that the “other” category is a significantly more important search method for obtaining jobs in urban areas than in rural areas. It bears repeating that this is because the “other” category includes newspaper ads, union hiring halls, private employment agencies, and community action agencies. Newspapers in rural areas are typically delivered from urban publishing sites, concentrate their coverage on the urban center, and more often their want-ads are not geographically specific to the rural areas. Further, rural areas simply do not have the other three institutions in the quantity (or quality) that exists in urban areas.

The data indicate that in rural areas DE is *more* important and F-R *less* important in obtaining jobs as compared to urban areas. One possible explanation for this is that the greater population density of the urban areas increases the number of daily contacts with “friends or relatives” and makes this network more widely used than in rural areas.

⁶ Lurie and Rayack; Koziara, Koziara and Verzilli; Stevens, and J. R. Rocha, “The Differential Impact of an Urban Labor Market Upon the Mobility of White and Negro Potentially Skilled Workers,” Ph.D. dissertation, M.I.T., August 1967.

⁷ Rosenfeld.

II. Job Search Effectiveness

Often in the job-search literature the words efficiency and effectiveness have been used interchangeably. This is unfortunate since the only measures derived so far have been *effectiveness* measures. From an economic standpoint, no one has yet measured the comparative *efficiency* of different search methods. This would require data on the amount of time spent using each method, the total cost (both money and psychic) of using each method, the payoffs for each method in terms of starting wages, reduced duration of unemployment, etc., which to date have been unavailable. The standard approach has been to calculate some sort of effectiveness measure as a means of inferring the relative worth of the various search techniques.

TWO MEASURES OF EFFECTIVENESS

Previous investigations have employed two different effectiveness measures which are referred to here as simply Method I and Method II. They are calculated according to the following:

$$(1) \text{ Effectiveness Method I} = \frac{\text{number who obtain job by method}}{\text{number who mentioned using the method}}$$

$$(2) \text{ Effectiveness Method II} = \frac{\text{number who obtained job by method}}{\text{number who used method the most}}$$

Method I was used by Rosenfeld in his study of the national population.⁸ In column 1 of Table 2, the effectiveness rates for rural household heads are calculated using Method I. DE clearly ranks above the other three search methods, with F-R and "other" ranking second and third, respectively. One of the more interesting revelations in Table 2 is the poor score of ES. Even though ES ranked third in terms of users of the method (see Table 1), it ranks a distant fourth by this measure of effectiveness. It is also instructive to note that the effectiveness figure for ES in this rural study—17.7 percent—is comparable to the figure for ES in Rosenfeld's study (13.7 percent).⁹ It would appear that the ineffectiveness of ES is not just a rural phenomenon.

Effectiveness Method II was employed by Hilaski.¹⁰ Column 2 of Table 2 illustrates the results of applying this formula to the rural data. There is more noticeable clustering of the rates for DE, F-R, and "other" using Method II. However, ES remains a very distant fourth, even though it ranked third among the most used sources (see Table 2).

⁸ *Ibid.*, p. 40.

⁹ *Ibid.*

¹⁰ Hilaski, p. 44.

TABLE 2
Effectiveness of Job-Search Methods in Rural Areas—Methods I and II

Job Search Method	Method I	Method II
State Employment Service	17.7	46.5
Direct application to employer	66.6	93.5
Friends or relatives	41.3	89.2
Other	32.9	81.3

Once again, the effectiveness rate for ES in Table 2 (46.5 percent) is similar to that of the Hilaski study of the urban poor where ES received a score of 51 percent.¹¹ This is further evidence implying effectiveness difficulties for ES and that these difficulties extend beyond rural areas.

AN ALTERNATIVE MEASURE OF EFFECTIVENESS

One glaring shortcoming with the aforementioned measures of effectiveness is their failure to consider *ceteris paribus* factors. Differences in the effectiveness of the various search methods may result from smaller embodiments of human capital in one user group relative to another or from adverse discriminatory behavior in the labor market toward users of a particular method. A more scientific test of effectiveness would be to select individuals with comparable socioeconomic characteristics, have them try the various search methods, and then compare results. Controlling for differences in socioeconomic characteristics of the users may be critical in making effectiveness comparisons among methods.

In an attempt to simulate such a controlled situation as closely as possible given the nature of the rural data, we have turned to the tool of regression analysis. Two measures of search success or effectiveness were employed: (a) whether or not the job seeker found a job (JOB) and (b) the duration of unemployment of those who found a job (DURA).¹² The following regression equations were estimated:

$$(3) \text{ JOB} = b_0 + b_1DE + b_2F-R + b_3OTHER + b_4SEX + b_5ANGLO \\ + b_6BLACK + b_7ED + b_8AGE + b_9TRAIN + b_{10}HEALTH + u$$

$$(4) \text{ DURA} = c_0 + c_1DE + c_2F-R + c_3OTHER + c_4SEX + c_5ANGLO \\ + c_6BLACK + c_7ED + c_8AGE + c_9TRAIN + c_{10}HEALTH \\ + c_{11}OTHERY + c_{12}WEALTH + u$$

¹¹ In the Hilaski study all the other methods achieved significantly higher scores than ES except newspaper ads which scored 34.0 percent. *Ibid.*

¹² We had hoped to use a third measure of search success—the starting wage on the job obtained. Unfortunately, data on the initial wage were not collected from the sample. Regression equations using the *present* wage rate as a proxy for the initial wage yielded unsatisfactory results in terms of significance of independent variables and overall explanatory power of the equation.

where *JOB* = 1 if the job-seeker obtained a job, 0 otherwise¹³; *DURA* = duration of unemployment in weeks; *DE* = 1 in equation (3) if the jobseeker used *DE* the *most* among the search methods, 0 otherwise; *DE* = 1 in equation (4) if *DE* was the method *that got the job*, 0 otherwise; *F-R* = 1 in equation (3) if *F-R* was the most-used technique, 0 otherwise; *F-R* = 1 in equation (4) if *F-R* was the technique *by which job obtained*, 0 otherwise; *OTHER* = 1 in equation (3) if the "other" category was the *most used* search technique, 0 otherwise; *OTHER* = 1 in equation (4) if it was the search method by which job obtained; 0 otherwise.

Since the search category *ES* is being omitted from both equations, we are attempting to determine—via b_1 , b_2 , b_3 , c_1 , c_2 , and c_3 —whether the three included methods have a significantly different impact on the success measures relative to *ES*.

Three independent variables are included in each equation to control for discrimination in the labor market. *SEX* (which equals 1 if the jobseeker is a man, 0 otherwise) provides a measure of sex discrimination. Among the variables to measure racial discrimination, Chicano is the omitted category so the coefficients on *ANGLO* and *BLACK* (dummy variables) are measuring the success differentials for Anglos relative to Chicanos and Blacks relative to Chicanos.

Several variables are included to control for differences in human capital embodiment among the job seekers. They include: total years of formal schooling (*ED*) and the age of the individual (*AGE*) both in continuous form; *TRAIN*, a dummy variable having a value of 1 if the person participated in a government-sponsored training program and 0 otherwise; and *HEALTH*, a dummy variable with a value of 1 if the individual indicated that he had a health problem and 0 otherwise.

Two additional variables were added to the duration-of-unemployment equations to measure factors that should enable a job-seeker to endure longer periods of unemployment while seeking the most preferred job. *OTHERY* is a dummy variable having a value of 1 if the household head received income other than his own earnings (i.e., earnings of other family members, rent on a house, etc.), 0 otherwise. *WEALTH* similarly had a value of 1 if the respondent indicated that he had some stock of wealth—e.g., a savings account, bonds, a credit union membership, or life insurance policies; 0 otherwise.

¹³ It is recognized that the use of a dichotomous dependent variable in ordinary least squares (OLS) regression analysis introduces an element of heteroskedasticity. Alternative data transformation schemes do exist. However, Gunderson has demonstrated that such transformations, though theoretically more exact, result in little change in the OLS results. Morley Gunderson, "Statistical Models for Dichotomous Dependent Variables," Working Paper, Center for Industrial Relations, University of Toronto, 1972.

TABLE 3
Job Search Effectiveness Equations

Independent Variable	Coefficients (t-values)	
	Found—Did Not Find Job (JOB) N = 367	Duration of Unemployment (DURA) N = 312
Constant	0.81	33.92
<i>DE</i>	0.12 (2.69) **	-3.04 (1.30)
<i>F-R</i>	0.10 (1.90)	-1.09 (0.41)
<i>OTHER</i>	0.11 (0.73)	-3.62 (0.46)
<i>SEX</i>	0.19 (4.14) **	-11.84 (5.14) **
<i>ANGLO</i>	-0.07 (1.46)	-7.15 (3.00) **
<i>BLACK</i>	-0.12 (2.53) *	-1.49 (0.66)
<i>ED</i>	-0.001 (0.21)	-0.21 (0.81)
<i>AGE</i>	-0.002 (1.54)	0.06 (0.80)
<i>TRAIN</i>	-0.07 (1.50)	-0.51 (0.20)
<i>HEALTH</i>	-0.15 (3.42) **	7.82 (3.48) **
<i>OTHERY</i>		0.57 (0.32)
<i>WEALTH</i>		-3.97 (2.10) *
<i>R</i> ²	.16	.24
F	6.99**	7.93**

* Means significant at the .05 level.

** Means significant at the .01 level.

The results of estimating equations (3) and (4) are shown in Table 3. Since our primary reason for estimating these equations was to determine if there are significant differences in payoffs for using alternative search techniques, the most interesting coefficients will be those on the search-method variables. In the *JOB* equation, *DE*, *F-R*, and *OTHER* all have positive values, indicating the probability of finding a job through these methods exceeds that of the *ES* technique. However, *only the coefficient on DE is significantly different from zero and it is not very large.* In the *DURA* equation, none of the coefficients on the search-method variables are significantly different from zero.

Compare these results to the prior effectiveness measures illustrated in Table 2. There it appeared that *ES* was a significantly inferior search-approach relative to the other three methods. However, the data in Table 3 suggests that this overstates the case considerably. *Apparently, the reason the ES has shown such a poor effectiveness record is because their clientele were less heavily endowed with human capital or were more likely to be discriminated against than the users of the other search methods.* That is, it is simply more difficult to find jobs for those who use the *ES*.

III. Summary and Conclusions

Our primary objective in this paper has been to identify the job-search methods used by rural job-seekers, and to compare the relative effectiveness of the various search methods. Regarding search methods employed, rural residents were found to use *DE* the most, followed by *F-R*. These rankings are the same as in studies of job-seekers in urban areas and in the general population. However, rural residents tend to use *ES* more and "other" methods less than do urban residents. This is primarily because the institutions in the "other" category are less accessible or specific to rural residents than urban residents. Too, evidence was presented linking use of *ES* to its proximity to the rural population.

Finally, the effectiveness of the various search techniques was examined. An application of effectiveness measures used in earlier studies indicated the *ES* was the least effective of the four techniques available in both the rural and other populations. However, when regression analysis was employed to hold constant human capital and potential discrimination traits between clients, little difference is found in the degree of effectiveness of the various techniques in the rural sample. That is, because of their sociodemographic characteristics, it is simply more difficult to find jobs for those who use *ES*. It would be instructive to use this methodology on the urban and national populations to see if this is the case for those groups also.

DISCUSSION

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Professor Musser provides valuable insights into reasons why manpower programs relating to rural-urban population balance have received little political support in the United States. In his commendable attention to rigor, he restricts his analysis to selected interest groups and overlooks a substantive point: the widespread public apathy to labor-relocation programs. To find reasons for lack of acceptance, particularly of subsidized labor-relocation programs in the U.S., it is well to look beyond Professor Musser's analysis. I focus particularly on the economic environment, problems inherent in subsidized relocation of workers, and attitudes of cross-sections of people toward relocation assistance.

It is of interest that Canada and several nations in Western Europe have had sizable manpower programs of the types discussed by Musser despite presence of the same externalities and interest groups which prevented formation of sound programs in the U.S. Full employment in areas receiving migrants helps to reduce externalities experienced by "native" urban workers and hence reduces their opposition to relocation programs. On the whole until recently, Western European countries had low unemployment rates. Furthermore, their highly centralized governments were perhaps less influenced by regional politicians thwarting relocation programs for fear of losing constituencies. Canada and Western European countries had fewer problems of urban unrest and segregation likely to be exacerbated by further concentration of population in large cities. Some were also further along on national growth policies which made population-redistribution more rational by encouraging development of medium size "growth centers." These above elements made publicly assisted migration more acceptable to voters and politicians.

Professor Musser leaves the impression that the case of subsidized mobility programs rests comfortably on a foundation of equity and efficiency. While this overall premise cannot be rejected, the foundation has many cracks—perhaps these cracks have diminished support for manpower programs because they have been apparent to laymen.

Based on available data, Nelson and Tweeten computed internal rates of return averaging approximately 30 percent on relocation in-

vestment among 67 pilot projects.¹ In general, data available to us from pilot project evaluations were not adequate for a really thorough analysis. A notable omission was data on relocatees who would have moved anyway. Adjustment for this factor probably would have pushed internal rates of return to levels comparable to those on other human resource investments such as schooling. A major problem of relocation itself rather than the data (for which we did adjust in computing the internal rate of return) was the high propensity for relocatees to return home. In a Mississippi project, three-fourths of the relocatees returned home within six months. For 67 projects, approximately two-thirds of the relocatees eventually returned home—on the average, about 30 percent the first year. Returnees often faced underemployment and low incomes. The disillusionment and despair associated with failure to hold a job or survive in a different culture is a real external diseconomy not accounted for in usual cost-benefit analysis.

In another study, Nelson and Tweeten found that subsidized labor mobility was the single most cost-effective program in a rural development systems simulation containing several programs.² But a major rural development target, alleviation of underemployment, could not be attained by outmigration alone in the study area (eastern Oklahoma) because many underemployed residents could not be moved at all and many who do move return home to poverty or underemployment. Furthermore, a major problem in depressed rural areas is high dependency rates, outflow of locally created capital through uncompensated outmigration, and consequent problems financing adequate local infrastructure. Faced with the choice between a federal program assisting outmovement of local workers (each exiting with \$12,000 of local capital invested in his schooling, etc.) and another federal industrial development program bringing local jobs (each which generates net benefits of \$3,500 per year to the community), which program would the rational community choose? Local people see speeded outmigration as needless uprooting of social ties, and foreclosure of future local development opportunities to generate jobs through industrial development. (This latter feeling is not entirely warranted—the simulation analysis indicated that temporary employment elsewhere is a useful “holding action” while jobs are being developed locally. Repatriated workers often bring back useful skills, leadership, and progressive attitudes.)

¹James Nelson and Luther Tweeten, “Subsidized Labor Mobility.” *The Annals of Regional Science* 8 (1973), pp. 57–66.

²James Nelson and Luther Tweeten, “Systems Planning of Economic Development in Eastern Oklahoma.” *American Journal of Agricultural Economics* 57 (1975), pp. 480–89.

These above considerations suggest widespread opposition to relocation assistance from people and politicians in the sending area. In 1974 and 1975, 289 mailed questionnaires were completed and returned by residents of three multicounty substate development districts located respectively, in east-central, south-central, and north-central Oklahoma.³ The development districts contained no metropolitan centers and the survey was confined to residents of open country and towns up to 10,000 population. Respondents were believed to be reasonably representative of rank-and-file rural voters in the districts. One question asked was on what programs the federal government should spend more money. Percentages favoring the various programs were as follows: industrialization 35, technical training 29, education 21, public assistance 8, family planning 5, and moving compensation 3 percent. Percentages for the latter program were very low in each district despite the fact that the east-central and south-central districts are characterized by high underemployment and poverty.

A recent nationwide Gallup poll obtained responses to a program to subsidize movement of welfare families from urban ghettos into areas of better living conditions and job opportunities.⁴ Less than half of the respondents favored the plan. However, among persons with incomes under \$5,000 per year, 62 percent favored the plan.

In conclusion, politicians may be responding to a rather widespread apathy to relocation assistance, not just to the interest groups cited by Professor Musser.

³Jackie Smith and Luther Tweeten, "Attitudes Toward Rural Development Strategies" (Stillwater, Okla.: Department of Agricultural Economics, Oklahoma State University, (1975), mimeo.

⁴"Plan to Relocate Welfare Families," in *Area Development Interchange* (Rockport, Tex.: National Area Development Institute, December 1, 1975).

DISCUSSION

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In the paper "Job Search in Rural Labor Markets," Rungeling, Smith, and Scott discuss three major sets of conclusions with respect to a sample of 367 household heads who in 1974 resided in four rural counties in four southern states and who had "looked for work at any time during 1973."

Their major conclusions are as follows: (1) Comparing this sample with seven published analyses of job-search activities between 1965 and 1973 in urban areas (or nationwide), they found that rural residents used direct application to employer more often than did urban (or "national") samples of the other studies, and more often it was the source by which a job was obtained. (2) For their rural sample, when a simple analysis of job-search measured "effectiveness" as a ratio of the number who *said* that they obtained a job by a particular method to the number who *said* they used that method "the most," they found that direct application to employer is about twice as effective as using the Employment Service (ES) the most. (3) The relative "ineffectiveness" of using the ES the "most" in job-search is explained on the basis of their *hypothesis* that such users of the ES "were less heavily endowed with human capital or were more likely to be discriminated against than the users of other job-search methods."

This third and major conclusion is a hypothesis that is not tested directly by comparing the characteristics of those who "used ES the most" with the characteristics of those who used "direct employer," "friends and relatives," or "other" methods the most. The conclusion is derived from an analysis of covariance wherein only the direct employer job-search method is significant in explaining who found jobs, and even this method has a coefficient of only .12. Moreover, none of the methods is significant in explaining differences in the duration of unemployment. Since there was a striking difference between the "effectiveness" or "ineffectiveness" of the ES and other job-search methods before the introduction of "human capital" and "discrimination" factors, the authors conclude that these factors are the "apparent" explanation of ES ineffectiveness, particularly since some of these factors—primarily female sex, black race,

* The author wishes to thank James Booth and Lester Manderscheid, Agricultural Economics, Michigan State University, for their helpful comments.

and poor health—had significant negative coefficients in finding a job; moreover, being male and Anglo were significant in explaining a lesser duration of unemployment.

Thus, the first methodological question is as follows: If differences in the characteristics of users of the various methods are so important, why not test, by direct comparison, the hypothesis that the users are different? Verification of this hypothesis would add to our stock of job-search information.

A second methodological issue is that of sample size and significance level. If the authors had used a larger sample or taken a 10 percent significance level, perhaps the Employment Service would be found significantly more ineffective in finding a job. "Friends and relatives" is almost statistically significant at the 5 percent level.

A third and very important question is: What does it mean to "use the Employment Service the most"? Does this category also include people who are mandated to register with the Employment Service, such as welfare recipients, unemployment compensation recipients, etc.? If it does, then the variables should have been specified to separate or hold constant those mandated to register with ES because of social programs. Such registrants may have less motivation to find a job quickly.

There are also some questions of data interpretation and policy implications. In analyzing and explaining the greater use of the direct employer search method in rural areas as opposed to urban areas, the authors emphasize weaknesses of ES, friends and relatives, trade unions, and newspapers as search methods in rural areas. It seems to me that the explanation of the strength of the direct employer method is related to the structure of employment in rural areas and the greater visibility that any size employer has in rural areas relative to urban areas. The difference is particularly important when dealing with larger employers. In this case, as we know from our experience with Operaton-Hitchhike (pilot projects to deliver manpower services in rural areas), it is simply not necessary for large employers to use ES for recruitment purposes. The employers are so dominant in the community that most people know when they're hiring, they keep applicant cards on file, etc. For that matter, it may not even be necessary for a job-seeker to *use* friends and relatives, newspapers, etc., because of the obviousness of certain employers in rural areas.

In comparing methods of job-search in rural and urban areas, the authors have given little or no information on the structure of employment, including employer size and kinds of jobs, industries, and occupations. This information can be very important in determining the nature of job-search. For example, if the community is one where a

migratory agricultural labor force is employed, then use of a crew leader will be important. Yet agriculture employment is not discussed in the paper. Also, in rural Michigan our Operation Hitchhike project found that if the ES has good rapport with small firms, they will often welcome the opportunity to place their orders with ES in order to avoid uncomfortable situations with personal acquaintances, relatives of workers, etc.

Also, the study could have been enriched by contacting the ES for any information or observations they may have had on the survey results. In Michigan, some ES personnel have noted that often they are a contact point between an employer and job-searcher even though a job placement is not concluded at the time of referral. Further evidence that there are what one might call "levels of information and search" comes from a study conducted by Mark Erenburg. From a sample of 120 Chicano migrant households in Wisconsin in 1970, Erenburg notes that although the respondents reported getting their job information as follows—36 percent crew leaders, 30 percent employer representatives, 20 percent friends and relatives, 9 percent previous employers, 3 percent Texas Employment Commission—under further examination it was found that 26 percent of crew leaders and friends and relatives had obtained *their* information from the Texas Employment Commission.¹

Perhaps the most important question I have about this paper is that of its meaning in terms of policy proscriptions. Should we expand or contract Employment Service activities in rural areas? On one hand, the authors point out that where ES offices were located in the immediate rural areas, the "percentage using ES" increased substantially. Also, we know that in some states, such as in Virginia where ES employer activities were enriched, placements increased. Yet the conclusion of the paper implies that there is no sense in improving ES in rural areas because other factors are far more important in determining who gets a job. Some of the other factors, according to the authors, are the sex, race, and health of the workers. Accordingly, since the largest coefficient, and significant at the .01 level, was negative for female sex and finding a job, to the extent that rural jobs exist, I infer from this finding, the major problems of rural labor markets are discrimination and labor market segmentation.

For research on job-search, then, at least two questions should be formulated: (1) Given that one is a woman or a member of another discriminated-against group, does one have a better chance of finding

¹Mark Erenburg, "Labor Market Information Dissemination and Decision-Making Among Chicano Migrants," in *Labor Market Information in Rural Areas: Proceedings of a Conference*, ed. Collette Moser (East Lansing, Center for Rural Manpower and Public Affairs, Michigan State University, 1972), pp. 99-100.

a job in a rural area using a particular search method? (2) Does the ES do anything to break down the barriers to employment of discriminated-against groups, i.e., would these groups be "worse off" without the ES?

Finally, a policy proscription that seems to flow from this study is one to the individual worker: Don't count on the ES exclusively. Mere registration with ES may not be sufficient; continued inquiry with ES convinces the interviewer of one's "seriousness," but other means of search should also be used.

A final observation on the methodology of the study concerns the limitation to "household heads." The assumption that job-search methods among "nonheads" (however defined) is significantly different from that of heads is an empirical question. In rural areas in particular, off-farm jobs of wives, for instance, are an important source of cash flow, particularly during the nonfarm season. Under these circumstances, the search of the wives may be even more serious than that of the husbands.

V. BEHAVIORAL SCIENCE APPROACHES TO EMPLOYEE COMPENSATION

Compensation, Organizational Structure, and Control: Toward a Balance

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Most modern economies use some mixture of planning and control mechanisms to develop and allocate their resources. Somewhat similarly, most organizations utilize a blend of *controls* (directives, schedules, budgets, etc.) and *rewards* (incentives, bonuses, awards, etc.) to structure and direct their members' activities. During the middle years of this century, a parallel shift in emphasis has been apparent at both the level of national economies and the level of the firm—planning mechanisms and control systems have become increasingly emphasized rather than markets and rewards.

Today, in the U.S. economy at least, there appears to be growing pressure for a reexamination of the trend toward increased reliance on centralized planning at the expense of market mechanisms. It is my contention, in no sense original,¹ that a similar reappraisal of the balance between controls and rewards within U.S. organizations is also appropriate. In fact, I believe such reappraisal is a decade or so overdue—many organizations have made major structural and process adaptations in the face of control system failures, without making corresponding changes in their compensation systems.

Supporting my position, in the following pages I will (1) explore some of the more important reasons underlying the growth in reliance on organizational control systems, particularly those related to organization technology and structure; (2) examine some of the more pervasive behavioral implications of this shift in emphasis; (3) speculate on the relative efficacy of controls versus rewards under changing technological and structural conditions, and (4) offer some specific suggestions for

¹Lawler, for example, has argued convincingly for greater attention to performance-based compensation systems. See E. E. Lawler, III, *Pay and Organizational Effectiveness: A Psychological View* (New York: McGraw-Hill, 1971).

achieving a more appropriate balance between controls and rewards in current and future organizational settings.

Why the Shift from Rewards to Controls?

In the early decades of this century, leading management theorists had little doubt that compensation systems were the key determinants of individual and organizational productivity, and a plethora of performance-based pay plans for production, sales, and executive personnel were created, each promising increased effectiveness and efficiency.² Today, few such claims concerning the primacy of compensation systems are made, even though many of the early pay plans and their progeny are visible in modern organizations.³ Instead, the predominant view today is that most compensation plans are at worst potential sources of dissatisfaction with little if any motivational value,⁴ and, at best, only loosely linked to effort and performance.⁵ Pay systems are still viewed as important, but primarily for their role in attracting and maintaining a work force rather than in enhancing and guiding its performance.

A host of factors underlie the shift from the more positive, proactive role assigned to compensation by the earlier scholars to the more negative, reactive role defined by many current theorists. We will look briefly at three of the more important factors.

PROBLEMS OF PAY SYSTEM DESIGN AND MAINTENANCE

Clearly many of the early compensation systems were oversold in terms of their applicability and efficacy. Moreover, a number of pay plans were exploitive in their design or application, thus producing long-lasting antagonism toward performance-based plans in general. In addition, employee and union resistance to updated standards, coupled with managerial neglect and/or ineptitude, led over time to the "demoralization" of many incentive pay programs.⁶ However, beyond the negative effects of specific pay-system designs, promotions, applications, and maintenance, there have arisen much more subtle but per-

²For a review of the types of incentive-pay plans developed over the years, see David N. Belcher, *Compensation Administration* (Englewood Cliffs, N.J.: Prentice-Hall, 1974), especially pp. 311-35.

³For many years the proportion of manufacturing workers covered by incentive-pay plans remained roughly constant at about 20 to 25 percent. See Belcher, pp. 300-303.

⁴Herzberg has been perhaps the strongest advocate of this view. See Frederick Herzberg, *Work and the Nature of Man* (Cleveland: World Publishing Company, 1966).

⁵See Lyman W. Porter and E. E. Lawler, III, *Managerial Attitudes and Performance* (Homewood, Ill.: Richard D. Irwin, 1968), especially Ch. 2.

⁶For a description of the demoralization process, see Garth L. Mangum, "Are Wage Incentives Becoming Obsolete?" *Industrial Relations*, vol. 2 (October 1962), pp. 73-96.

vasive barriers to performance-based compensation programs, barriers endemic to the design of modern organizational structures and control systems.

EFFECTS OF STRUCTURE

During the period in which the shift in attitudes toward compensation systems occurred, the structure of many industries and the organizations within them tended to stabilize, and performance goals shifted from unlimited production and growth to more constrained objectives appropriate to oligopolistic markets. Technologies became far more complex and capital-intensive, and coordination requirements increased the size and importance of the administrative cadre (staff and managerial personnel) in most organizations. Thus, the proportion of persons whose individual efforts directly influenced organizational outcomes in a measurable manner was dramatically diminished.

EFFECTS OF CONTROL DESIGN

Even more important, however, than the purely structural limitations on pay-system design are the control-system designs associated with emerging structures. As coordination of complex processes becomes the key to organizational effectiveness, there is increased pressure on control systems to focus their attention on "exceptions," negative deviations from expected behavior. Positive deviations (performance above standard) tend to be ignored in the effort to highlight and correct performance shortcomings, and in fact are of little if any value since they are not easily accommodated by the planning and control process. Thus, both the structural characteristics of many modern organizations and the foci of their control systems tend to restrict compensation-system practices to those which acknowledge performance to standard (purposely designed to be achievable by most, if not all, members) and occasionally penalize downside variation.

Behavioral Implications

The use of planning and control mechanisms which focus primarily on exceptions allows certain efficiencies, but not without costs. Such systems tend to produce a generally defensive organizational climate and a number of specific dysfunctional behaviors.

In an environment in which only negative deviations are recognized, advancement occurs primarily through attrition. Not making mistakes becomes far more important than efficient performance. Managers are motivated to accumulate "slack" in their systems to avoid any possibility of shortfalls and risk-taking to improve output is restricted. Moreover, a substantial amount of organizational energy is devoted to documenting

adherence to standards or to accepted procedures to avoid responsibility for possible failures.⁷

More broadly, where accountability is the major performance concern, communications between levels, particularly upwards communications, are frequently distorted. Lower levels are motivated to delete or "hide" evidence of substandard performance.⁸ Such distortions produce control-system failures which in turn result in increased efforts to determine accountability, etc. Laterally, exceptions-oriented control systems produce little if any incentive for cooperation among units. Again, where recognition is achievable primarily by attrition, the failure of a parallel unit may in fact be valuable. That is, when one unit fails to perform according to plan, the relative status of managers in the units which do not "cause trouble" are enhanced.

Behavioral dysfunctions of the sort described here do not, obviously, always occur, and where they do, they are not always apparent. Good leadership practices, as advocated in the prevailing human relations managerial philosophy, can smooth vertical and horizontal conflicts resulting from control-system-motivated behaviors. The byword of human relations is cooperation through discussion and involvement, and skilled managers utilize these techniques to keep complex systems running.⁹ Moreover, most organizations maintain some real and pretential emphasis on performance-based compensation systems. At the top of the organization, and at its borders, executives and sales personnel, whose performance is inherently difficult to control through planning, frequently operate under some form of performance-based pay direction. Inside the hierarchy, elaborate "merit" systems are often operated to dispense what amounts to normal longevity and cost-of-living increases. These systems are not designed to guide performance but simply to maintain dedication (though there is good reason to believe they may create more alienation than loyalty), and their constant readjustment provides "evidence" of interest in performance and a means of dissipating negative emotions.

There is little question that organizations could, if they chose, shift the current balance between controls and rewards back in the direction of performance-based compensation. As Lawler has shown, it is possible to design pay plans emphasizing performance under most, if not all,

⁷ Cf. Chris Argyris, *Integrating the Individual and the Organization* (New York: John Wiley & Sons, 1964), especially pp. 110-12.

⁸ William H. Read, "Upward Communication in Industrial Hierarchies," *Human Relations*, vol. 15 (1962), pp. 3-16.

⁹ See Raymond E. Miles, *Theories of Management: Implications for Organizational Behavior and Development* (New York: McGraw-Hill, 1975), especially Chs. 3 and 6.

structural conditions.¹⁰ Such shifts are not likely in most instances, however, because, as suggested above, in most systems current dysfunctions are at least partially controllable and their costs more often than not are effectively hidden. Without alternative performance models against which to evaluate current costs, budgets tend to perpetuate slack. The lack of cooperation between and across hierarchical levels is viewed as normal, and its relationship to control practices is seldom closely evaluated. Finally, performance-based systems that might actually increase and guide performance simply entail more risk than most "exceptions"-oriented control systems are likely to accept. In sum, if the control-reward balance is to be shifted, it will probably not occur voluntarily. Rather, such a shift will occur only as the result of current systems becoming ineffective enough for their costs to become obvious. The ineffectiveness of current systems is already beginning to be recognized in some situations, as we will discuss in the following section.

Efficacy of Controls and Rewards Under Changing Conditions

Jay Galbraith has suggested that organizations have several alternative strategies for the coordination and direction of their activities.¹¹ Most attempt, as we have suggested, to use the alternative of reliance on their vertical information system (controls) which measure performance against plans and suggest corrective actions. However, in situations where variable demands are placed on the system, more and more costly information-processing efforts are required, and even elaborate computer-based systems may prove deficient. Deficiencies are most often "patched over," Galbraith suggests, through slack—through the use of padded time and resource allocations which allow for unplanned contingencies. (At times these patches appear to cover the entire system: witness the "overrun" costs of such modern pyramids as the C 5 and the Superdome.)

The alternatives to the use of vertical information systems padded with slack are all, in some sense, antithetical to current control-system philosophies, and, of course, each has its costs and risks. Where centralized control efforts appear to be failing, organizations can set up what Galbraith calls "self-contained" units which can operate in smaller spheres, more or less independently. An example of this approach to decentralization is visible in the textbook-publishing industry where numerous subsidiaries have been "spun off" by parent organizations in order to increase responsiveness to rapidly developing and changing markets and suppliers ("new" knowledge).

¹⁰ See Lawler, *Pay and Organizational Effectiveness*, and E. E. Lawler, III, "Reward Systems," in *Improving Life in Organizations*, eds. J. Richard Hackman and Lloyd Suttle (Los Angeles: Goodyear Publishing, 1976).

¹¹ Jay Galbraith, *Designing Complex Organizations* (Reading, Mass.: Addison-Wesley, 1973).

Where technologies are not as easily separable as in the textbook editorial process, and where permanent adaptations are neither practical nor desirable, coordination and control may be achieved by temporary structures interlaced or "matrixed" in with the permanent hierarchy. Committees, task forces, and project teams are all examples of this alternative, and their growth in recent years has been phenomenal. In fact, it is the rapid growth of these "lateral" adjustments to central planning and control-system shortcomings that has highlighted the need for a reappraisal of reward-system practices.

To illustrate, as an organization first begins to make use of committees and task forces to plug gaps in its centralized control system, the performance of these temporary mechanisms and member commitment to them are often high. (Service in these assignments is frequently an attractive alternative to more routine and constrained jobs.) However, as such temporary arrangements become increasingly common, both committee task-force effectiveness and member interest frequently wanes. Committee task-force actions which are aimed merely at removing barriers to the operation of central control systems are easily accepted, but those which attempt to change the system or influence resource allocation in significant ways are usually rejected. Moreover, committee and task-force members soon discover that they are not only not rewarded for their service but in fact may be penalized. Frequently no real relief is given from permanent assignments during service on these temporary mechanisms, and members thus run the risk of failing in their regular jobs if they take their added assignments seriously. Most often no extra compensation is given for such assignments, and in systems with advancement geared more to attrition than performance it is little wonder that many members soon learn to avoid committee task-force assignments.

These problems become even more visible in those organizations which have moved toward recognizable matrix structures. In these structures, project managers are given budgets with which to "buy" needed skills from functionally organized units—to pay the salaries of the engineers, scientists, technicians, machinists, etc., needed to accomplish a given project. Clearly over time the more highly skilled members of functional units will be most sought after for temporary assignments, and project managers may be willing to pay more than their present salaries in order to obtain the services of the highly skilled. However, an individual's "market price" may not result in appropriate salary increases. Even though an individual's performance on temporary assignments may be entered in his records, advancement may still be controlled by his regular assignment superior, and salary-range limits and "equity" barriers may limit his financial rewards.

Finally, a related set of dynamics is likely as organizations move

further into the motivationally attractive arena of "job enrichment." Where jobs are actually enriched, members exercise increased responsibility for the pace and quality of their work—responsibilities formerly held by managers and staff personnel. As self-direction and self-control are exercised, fewer staff and supervisory personnel are needed (at least not in their previous roles), but the pay of "enriched" jobs seldom fully reflects this shift. Token pay increases may accompany job redesign, but over time members are likely to consider these token payments just that.¹²

In all the above examples the dilemmas described are in no sense surprising. They are the natural result of attempting to influence performance without a parallel adjustment in control-reward-system balance.

Toward Control-Reward Balance

I have neither the time nor the knowledge to present a complete set of prescriptions for rebalancing organizational control and reward systems. The problems themselves, however, appear to me to dictate some of the needed reforms.

To begin with the last of the examples cited above, job redesign efforts need, I believe, to be coupled with rewards reflective of slack reduction. For example, if 15 employees can operate without a shift supervisor, the salary savings could well be split among the team members and with the organization.¹³ (We already have a model for such cost-savings sharing in the Scanlon Plan.) Rewards of this nature will obviously be difficult to administer and will be resisted, particularly by middle-level managers and staff. They will, however, serve to educate management concerning the feelings engendered by "slack" reduction at the rank-and-file level.

Equally obvious, it seems to me, is the need for formal release from permanent assignment and/or bonus payments for committee and task-force members. I would argue that committee and task-force members be permitted (expected) to bargain over both the responsibilities they are undertaking and the rewards which will accompany them. Such freedom may well inhibit the number of committees and task forces appointed, but it will serve to enhance the importance of those which are set up.

With regard to project teams in matrix structures, I feel that organization members with high market value should be allowed to receive

¹² Walton has made an effective argument for aligning dollar rewards with increased inputs resulting from work redesign. See Richard E. Walton, "Innovative Restructuring of Work," in *The Worker and the Job: Coping with Change*, ed. Jerome Rosow (Englewood Cliffs, N.J.: Prentice-Hall, 1974).

¹³ For related arguments, see Walton, "Innovative Restructuring of Work," and *Work in America*, special task-force report to the U.S. Department of Health, Education, and Welfare (Cambridge, Mass.: MIT Press, 1973).

substantial added payments (equal to some portion of that price) during their project-team service, and those whose market price is consistently bid up above their salary level should receive immediate permanent adjustments without regard to artificial ceilings. Such rewards will, of course, present problems (some members will earn far more than their superiors in their permanent positions), but no more than now are caused by engineers and scientists being forced to move into managerial positions in order to receive pay increases.

In line with the suggestion concerning project-team members, I believe there is increased need for internal "subcontracting," particularly with regard to staff and technical services. Much of the "slack" in modern organizations is visible in these areas (and testified to by their own members),¹⁴ and I see no more harm involved in having these units "bid" for projects to provide their own support than I do in the cyclical "build up-meet axe" conditions under which they frequently operate.

Finally, it seems likely to me that more and more organizations in the less capital-intensive arenas (service, professional, even governmental) may well find benefit in spinning off smaller, more responsive self-contained units. Performance-based rewards will be essential if these units are to achieve the levels of innovation and responsiveness for which they were established.

Concluding Comments

My analysis of the current control-reward balance in modern organizations, the implications I draw from that balance, and my suggestions for realignment are all obviously incomplete and frequently highly speculative. I offer them without concern that damage may result from their primitive form, however, because there is little danger of their being widely accepted. On the other hand, management theories have emerged over the past decade or so that visualize broadly disseminated capability for responsible self-direction and self-control and are thus conducive to experimentation along the lines suggested here.¹⁵ The use of rewards rather than controls to develop, allocate, and guide performance is logically a part of the more advanced of these models. I believe such experimentation would be healthy and feel confident that the costs involved are likely to be no larger than those generated by current compensation practices.

¹⁴ See, for example, R. Richard Ritti, "Underemployment of Engineers," *Industrial Relations*, vol. 9 (October 1970), pp. 437-52.

¹⁵ See Miles, *Theories of Management* particularly Ch. 8.

The Union as a Bargaining Organization: Some Implications for Organizational Behavior

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This paper undertakes to give a somewhat sharper point to the discussion of the union as an organization. More particularly we argue that the union is at its core a bargaining organization. It is this bargaining essence of the union which the union leadership seeks to preserve over all other goals. Others have variously identified the union's primary goal as revolution, job consciousness, business unionism, maximizing (or "satisficing") power accumulation, monopoly, organizational survival, and capitalist "front." We do not say that the union doesn't at various times pursue many of these goals, only that these goals are subordinated to bargaining effectiveness. Only the revolutionary goal is, I believe, excluded by bargaining.

Maintenance of the union as a bargaining organization means the ability to command support from rank and file, including striking when necessary, and the ability to "command respect" from employers.¹ The union seeks to maintain itself as a bargaining organization in the context of collective bargaining of the North American variety, wherein the union, as the designated representative of workers in specified units, and appropriate employers negotiate terms of employment. The union's ability to strike and the employer's ability to deny employment are what impel the parties to bargain with each other.

The terms that are bargained about may be broadly categorized as price and power. Price is meant to comprehend all forms of compensation including, but not limited to, direct wages. The price structure of labor is necessarily more complex than that of inanimate commodities, and therefore the modern price of labor consists of "a system of worker compensation . . . , of pay for time worked, . . . paid vacations and holidays, insurance . . . that gives employees and their dependents financial protection in case of death, accident, illness, unemployment and other benefits."² Moreover, the requirements of a meaningful price bargain require specification of: (a) effort, i.e., measurement, classifica-

¹ John R. Commons, *Industrial Goodwill* (New York: McGraw-Hill, 1919), p. 15.

² U.S. Bureau of Labor Statistics, *Employee Compensation in the Private Non-Farm Economy, 1970*, Bulletin 1770 (1973), p. 50.

tion, determination, and scheduling of the work; (b) the terms of tenure, i.e., layoff, recall, promotion, transfer, discipline, and discharge; (c) adjustments to change during the life of the contract—cost of living, technology, merger, etc. It is then not possible to price labor realistically without also specifying the attendant rules relating to effort, tenure, and structure of compensation.

Collective bargaining *necessarily* carries with it employer accountability to the union and the worker for how the labor is utilized—which is what the rules are about—inasmuch as utilization is inseparable from price. Without accountability, the price bargain could be nullified by the employer's unilateral manipulation of the conditions of utilization—and with this nullification, nullification of the essence of the bargain which is not for a lump of nondescript labor, but for labor with very specific properties which, for both the supplier and user of labor, go to the heart of the transaction. Incidentally, accountability is a more precise characterization of the collective bargaining relationship than, say, joint decision-making, power-sharing, etc.

The full realization of the price bargain requires, from the union and worker viewpoint, not only a price specification, but also power and hence the requisite organization to demand effective accountability as to the use of the labor which has been contracted for. Price and power are therefore inseparable in the bargaining of the effective price.

Power is also important to union people for nonpricing, self-expression objectives. Power makes possible "talking back to the boss," self-actualization, self-determination—what economists used to call "psychic values," and what are now subsumed under organizational behavior—job satisfaction. The source of this value of power is collective bargaining perceived as rights. Job *rights*, i.e., seniority, discharge for cause as a matter of right, are what mainly distinguishes collective bargaining from unilateral employer regulation. Under the regime of rights, the terms of employment in the agreement represent a sense of personal power and security based on entitlement. "The full attainment of dignity and self-respect . . . cannot rest on favor or goodwill alone. It must in some way be warranted by the institutional order and available as a claim of right."³

Collective bargaining with the employer is integrated with two complementary strategies, termed here internal bargaining and political or public policy bargaining. Internal bargaining describes the process by which the union bargains out its eventual position *within* its organization. In many respects, the union is a mediator of diverse sectional

³ Philip Selznick, *Law, Society and Industrial Justice* (New York: Russell Sage, 1969), p. 117.

claims. The broader the base—i.e., industrial unionism—the more internal claimants; the narrower the base—i.e., craft unionism—the fewer internal claimants.

In political or public policy bargaining, the object is to enlist the support of legislators and public administrators on behalf of union collective bargaining goals. Politics, in important degree, is *bargaining* because unions engage in negotiations with political and government officials based on withholding or offering material and moral aid in return for the latter's support of policies favored by the union.

The union strategies are enforced through sanctions which, by promise of benefit, threat to withhold, rational persuasion, and direct action, induce the employer to agree. The strike is the major union sanction; on occasion it is backed up by consumer boycotts and direct action. Sanctions need not be negative only, in the sense of inflicting costs, although the positive sanctions get most of their force from the threat of the potential negative sanction. Standardization of labor costs, improvement of product market positions, and common features of shop-floor stability are positive sanctions which unions will hold out to employers as inducements to agree.

The negotiating process is the forum or market where the parties face each other in the working out of precise terms of the bargain. It is the "game of discovering what the other party really [is] after, its irreducible minimum, and its genuine demands."⁴ Negotiation allows the initially announced terms to be modified through continuous exchange of information and feedback, normally face-to-face or through mediation. Negotiation is a part of bargaining, but not all bargaining is negotiation. That is to say, terms and sanctions can be communicated without negotiation. Bargaining can be of "the tacit kind in which adversaries watch and interpret each other's behavior, each aware that his own actions are being interpreted and anticipated."⁵

The formulation and implementation of bargaining terms and the supportive strategies, sanctions, and negotiations are of such scale and complexity that both sides require organizations to render their bargaining representation effective. Organization, in turn, brings professionalization and hierarchy. For the union this means that lay administration—that is, administration by members who are also employed at other full-time jobs—tends to get displaced by full-time staff; for management, industrial relations requires specialized competence and is,

⁴ Neil W. Chamberlain and James W. Kuhn, *Collective Bargaining* (2nd ed.; New York: McGraw-Hill, 1965), p. 242.

⁵ Thomas C. Shelling, *The Strategy of Conflict* (New York: Oxford University Press, 1963), p. 21.

in this respect, on a par with the management functions of production, finance, marketing, and research and development.

The union and management organizations are quite different however. Bureaucracy in the classic vein is of the essence of the management organization, modified in the last generation by the practice of Organization Behavior. Bureaucracy (such as it is) in the union organization is of smaller scale and is so permeated with politics that the phenomena are not really comparable. The union bureaucracy is like others in that it will favor policies that maintain it in office. But "as compared with corporate executives, the formal accountabilities of union leaders are clear and unambiguous. The people to be satisfied in terms of the exercise of the authority are the rank and file members."⁶

The argument for the theory of the union as bargaining organization as the best fit is based on three propositions:

1. The maintenance of the union as a bargaining organization will prevail in any clash with other goals.
2. The maintenance of the union as a bargaining organization has proved to be historically the fundamental working principle of its structure, government, and administration.
3. Bargaining and revolution are mutually exclusive.

Under certain circumstances the union is, of course, a maximizer-satisficer (to deal with the other major explanation of union organization goals), but maximizing is not of the essence of the union despite the deceptive appeal of the "more" slogan to theorists. More without more is without meaning as a predictor of union goals in bargaining. Further, maximizing is not any stronger—indeed, it may be weaker—than equity as a bargaining goal. Equity means the maintenance of an acceptable balance among the contending claims of the sectional groups within the union and in relation to the "significant others" on the outside with whom the groups compare themselves. It is the "compar[isons] [that] are important to the worker. They establish the dividing line between a square deal and a raw deal."⁷ And, we argue, these "orbits of coercive comparison"⁸ are important to the union as a bargaining institution in maintaining that internal parity in bargaining which is so decisive for the union's viability as an organization. The union leadership ignores the internal balance of power at the peril of severance, secession, and impaired rank-and-file support.

⁶ Wilbert E. Moore, "Management and Union Organizations: An Analytical Comparison" in *Research in Industrial Human Relations*, eds. Conrad M. Arensberg et al., (New York: Harper, 1957), p. 125.

⁷ Arthur M. Ross, *Trade Union Wage Policy* (Berkeley: University of California Press, 1948), p. 51.

⁸ Ross, pp. 53ff.

The history of unionism's practical attitudes to scientific management offers another piece of evidence on the importance of maintaining the union as a bargaining organization. The main thrust of union criticism was that Taylor, as he himself said, sought to remove wages from the bargaining process and replace the union with unilateral determinations by engineers in the service of management. ("A union is absolutely unnecessary. . . . The principles of scientific management will confer greater blessings upon the working people than could be brought about by any form of collective bargaining."⁹) After a long debate the industrial unions, to all intents and purposes, came to terms with industrial engineering methods when its rules became subject to bargaining.

Nor is power to penetrate into "management rights" an end in itself if the effect is to weaken the union's grievance stance because it had earlier "codetermined" a rule. The union generally avoids joining with management in the installation of wage-setting systems or disciplinary codes, for example, precisely because codetermination will prejudice its grievance effectiveness on these issues and impair the union's credibility as the workers' "attorney for the defense" when rules materialize into grievances.

The maintenance of the union as a bargaining organization seems to have been the dominant working principle in the union's evolution as a government. The American trade union movement seems historically to have pursued five calculated strategies toward maintaining itself as a bargaining organization: (1) the coordination of interests between shop floor and union—unlike unionisms in other countries the steward is not constituted as a permanent opposition to the union leadership, nor does a works council exist apart from the union; (2) the ascendance of supra-local bodies as a response to enlarging product and/or labor markets—this is probably the most significant tendency in American trade union government; (3) accommodation of the federation forms—national, state, and local—to the increasing need for effectiveness in politics and legislation, in substantial part as a reenforcement of collective bargaining effectiveness; (4) shaping the internal structuring of trade union government to allow for voice by particularistic interest groups within the union and union movement; (5) professionalization of union staff and rationalization of union organization in response to the technical demands of collective bargaining effectiveness.

Bargaining excludes revolution because, first of all, bargaining means coming to terms with the fundamental structure of the other side

⁹Frederick Taylor quoted in Sudhir Kakar, *Frederick Taylor: A Study in Personality and Innovation* (Cambridge: MIT Press, 1970), p. 485.

(employers will not negotiate their own dissolution), just as earlier, employers first had to “recognize” the union before bargaining could begin—a not inconsiderable obstacle for American employers as it turned out. Second, the insistence of the union’s constituents on *immediate* gains forces the unions into settling for incremental—“step-wise”—gains. It has proved impossible to postpone these incremental gains in bargaining to favor a more wholesale revolutionary strategy. It was essentially on this ground that Lenin and other revolutionary theoreticians argued that revolutionary consciousness could only be brought to the trade unionists from without.

Organizational behavior is evidently not yet a discipline with a clearly settled body of doctrine and principle. Given this unsettled state—which has however been made more orderly for me by the recent IRRA volume, *Organizational Behavior*¹⁰—I hope it will not be deemed presumptuous for a nonspecialist to have something to say about OB’s spirit and leanings. The qualities of bargaining that raise problems for OB are called here: (1) economism, (2) power, (3) rationalization, (4) trade-off, (5) protectivism, and (6) gamesmanship.

Economism means bargaining’s preoccupation with price, which is at odds with the fuller human development of the individual urged by OB. The union as bargainer develops a hypersensitivity to anything that threatens to impair the equilibrium of power against it. Hoxie said it many years ago: “So far as the workers are concerned, there is no society as a whole and no long-run but immediate needs and rival social groups.”¹¹ There is a tendency to nail everything down for sure. This is reenforced by management’s constant vigilance against attrition of management rights, which causes management to move industrial relations authority upward in the organization to guard against union whipsawing down in the ranks. This is why, contrary to the hopes of the early collective bargaining philosophers, contracts have become longer and processes including arbitration have become more formalized—more “legalistic” is the way it is usually put.

Rationalization means the tendency of bargaining to take on highly structured institutionalized forms: 3- and 4-step grievance arbitration systems, 100-plus pages written agreements, the rituals of bargaining and negotiation, the complexity of internal union processes and politics are some cases in point. Rationalization is of a piece with power in that it springs from a need to constrain the exercise of discretionary power

¹⁰ George Strauss et al., ed., *Organizational Behavior, Research and Issues* (Madison: IRRA, 1974).

¹¹ Robert Hoxie, *Trade Unionism in the United States* (New York: D. Appleton, 1923), p. 262.

by rules and procedures. For union-management relations, rationalization represented an advance over earlier catch-as-catch-can conflict. But power and rationalization do not comport with the trust, openness, flexibility, and stress on interpersonal empathy which underlie the animating spirit of OB. Formalization of job demarcations via collective bargaining besets job redesign with all sorts of obstacles.

The trade-off syndrome sharpens what is already there to begin with: namely, a distributive relationship in which concession on one side needs to be matched by concession on the other. The distributive, adversary, or conflict-of-interest posture is so much a part of the bargaining game that the terms of trade-off often need not be symmetrical; that is, if the union is forced by economic constraints to concede on price, it will be forced by its role to seek concession from management on power simply to prove to its constituency that it had not been "soft" in negotiations.

The bargaining trade-off runs against the grain of the key OB concept of problem-solving. From the standpoint of organization development, "once the parties understand each other, bargaining should be viewed as a joint exercise in which the union helps management solve management problems, management helps the union solve the union's problems and both parties work to establish conditions under which employees can satisfy their own economic, social and egoistic needs through working creatively toward organizational objectives."¹² There have been problem-solving experiments in collective bargaining, but the survival rate has been sufficiently discouraging as to raise the question as to whether the adversary relationship is not so intrinsic to collective bargaining as to make problem-solving a special case.

Protectivism means that unions are essentially defensive organizations seeking to secure their members and the union as an institution from the uncertainties and stresses of the market and the work situation. In this posture, the union is necessarily a *reacting* institution: the major initiatives, in the nature of industrial enterprise management, lie with the employer. Protectivism explains why unions prefer to be critics rather than partners.¹³ Again, the negativeness of protectivism contrasts with the creativity, involvement, and commitment that characterize participation as it figures in the organizational development ideal type.

The gamesmanship of negotiations is the "immense amount of palaver, playacting, game playing and general emotional hullabaloo"¹⁴

¹² Strauss, p. 213.

¹³ Adolf Sturmthal, "Workers Participation in Management: A Review of United States Experience," *IILS Bulletin*, International Institute for Labor Studies, Geneva (June 1969), pp. 185-94.

¹⁴ Kenneth Boulding, *The Organizational Revolution* (New York: Harper, 1953), p. 101.

as the union acts to maintain itself on two fronts: the negotiating table and its rank-and-file constituency. In the process of preserving "face," negotiation tactics of "deceit, bluffing and lack of regard for the truth"¹⁵ run counter to "trusting, open relationships," "nonevaluative feedback," "sharing of feelings" which organization development theorists encourage.¹⁶

For their part the unions (with some exceptions) appear to be recapitulating their attitude to scientific management. Union spokesmen direct their animus against OB's job satisfaction or humanization of work which they perceive as ideologically and institutionally unfriendly to trade unionism and collective bargaining. Like scientific management, organizational behavior appears to the union commentators as an efficiency ideology disguised as organizational science in which trade unionism and collective bargaining are largely tangential, redundant, irrelevant, and friction-inducing.

Organizational behavior is deemed institutionally hostile in that its fullest development is to be found in nonunion situations and that the initiative for organization development invariably comes from management, not from the shop floor. At bottom, the decentralization, participation, trust which organizational behavior seeks to impart are, in the union view, really disguised methods of exploitation for increasing productivity and reducing costs at the expense of wages and job rights. Job enlargement, enrichment, and rotation, the union critique continues, are devices (1) to increase effort *norms* without compensatory increases in effort *value*, (2) to move workers from job to job without reference to job rights, and (3) to upgrade skill and responsibility without paying for it.

If conciliation is possible or desirable between bargaining-centered unions and organizational behavior, it might begin conceptually with Daniel as a starting point, who posits two contexts: The bargaining context stresses "the share of the wealth generated by the enterprise expressed in terms of earnings and fringe benefits"; the work context stresses "the quality of th[e] job content, the scope it [gives] for interest and the use and development of abilities, and the quality of interpersonal contact with workmates and supervisors in day-to-day activities and relationships at work."¹⁷ There might additionally be further investigation of the Norwegian and Swedish experience to probe the evident coexistence of effective bargaining *and* work reform or are the Scandinavians invariably sporting cases?

¹⁵ Boulding, p. 105.

¹⁶ Raymond E. Miles, "Organization Development" in Strauss, p. 170.

¹⁷ W. W. Daniel, "Understanding Employee Behavior" in *Man and Organization*, ed. John Child (London: Allen and Unwin, 1973), p. 58.

An initiative for conciliation will have to come from OB which will need to try to understand—even if it doesn't agree with—the union as a bargaining organization on the union's terms. Up to now OB has been only casually interested in the union, and then mainly to test it for adherence or deviation from some a priori OB category. I think a basic hang-up is OB's indifference (with a few exceptions) to the humanistic content in union bargaining power.

Compensation Fungibility

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“Fungibility” is a word not often applied to compensation. My dictionary defines it as “being of such a nature or kind as to be freely exchangeable or replaceable in whole or in part for another of like nature or kind.” I would like to examine the fungibility of the compensation dollar. Reports of wage settlements often give the impression that pay and benefits are quite interchangeable, or fungible. A typical report may describe an increase of \$1.29 an hour over a two-year period—81 cents in pay and 48 cents in improved benefits. This may create the impression that the employee really experiences \$1.29 in increased compensation. This, of course, is not the case for *every* employee. Some employees may receive *no* benefit from the improved benefits. Benefits are specific to certain needs. If you don’t happen to have these needs, too bad. Benefit programs take spending decisions out of employee hands. Unneeded or unwanted benefits can’t be exchanged at the store for something needed. In other words, they are not fungible.

Pay and benefits not only serve different needs, but are given to employees for different reasons. As a psychologist, I am interested in the long tradition of using pay to motivate employees to good job performance. Nearly every organization has this objective as a cornerstone of compensation policy, but I must say I agree with those who feel this strategy seldom works as intended. Still, the rhetoric is there. With benefits, however, there isn’t even talk about using them as a reward for performance. Since benefits are typically based on service, they are simply a reward for showing up. I might comment that increasing benefits with service could be considered inequitable since performance often decreases with age. In this sense, the young sometimes subsidize the old.

A rare example of the use of a benefit as an element of the motivational system is allowing employees to go home when the job is done. This is a tradition with certain types of jobs such as mail carriers and refuse collectors. It appears to have powerful motivational properties. At one company where average performance had been 92 percent of the production standard, employees encouraged the use of release time. After it went into effect, the average employee completed the production standard in five hours. Unfortunately, such systems often cause trouble. Management feels cheated. They are getting a little more production for the same money, but the “wasted production potential” makes them

look foolish. Then too, only a certain number of jobs fit the prerequisites for installing such a system. People on jobs that do not fit often feel unfairly treated.

Before going further, let me reveal my main concern with the non-fungibility of benefits. Over the past three decades the proportion of the total compensation dollar expended on benefits has increased steadily. I am concerned that this trend may not be serving the needs of many employees even though it leads to more kinds of benefits with broader coverage. I won't try to argue strongly for drastic reductions in benefits, with the savings going to pay, although I think the outcomes of this approach deserve consideration. For instance, a steelworker these days makes about \$10 an hour in total compensation. Six dollars of this is in pay and four dollars in fringe benefits. This yields an annual total compensation figure of about \$20,000. One might consider sweeping away the benefits and giving the employee the \$8,000 now supposedly spent on fringe benefits. With this money some pretty attractive benefits could be purchased—life insurance, medical and retirement benefits, even vacation. Income tax would chew up some of the money, but even after taxes many employees, perhaps most, would come out ahead. Of course there would be some abuses, and social policy to provide basic protection to every employee would not be served. Still, I would urge each of you, as an exercise, to try working out your total compensation dollar and see what you could buy with the money now going into fringe benefits.

A less radical approach to improving the fungibility of the compensation dollar has been called "cafeteria compensation." I had quite a lot of experience with the cafeteria compensation concept in a long project that I participated in at TRW Systems in Redondo Beach, California. This company was, to my knowledge, the first to put in operation a major program that offered considerable individual flexibility to employees in choosing a pattern of fringe benefits to suit their own individual cases. At TRW systems, Gene Hamilton and Ray Olsen were prime contributors to the formation of the program. Jeff Wilkens and Berk Fagner were important, with help from many others, in actually implementing cafeteria compensation. These men persisted in establishing a major innovation in benefits administration, and TRW Systems deserves credit for pushing on in the face of many opinions that it wouldn't work.

I think we need much more innovative thinking and study of benefits programs. The ratio of benefits to pay is being pushed ever higher, but benefit programs are shaped by a number of forces that serve as constraints on innovation. I am going to briefly discuss how the com-

pensation package is shaped by six of these: compensation managers, unions, employees, insurance regulations, insurance companies, and taxes.

Compensation Managers. They are charged with carrying out company policy, and while they do not ordinarily make major compensation decisions, they consult with top management that does. They are concerned with employee needs, with company policy objectives such as recruiting and retention, and with enhancing the company image. At the same time, they must keep the cost of benefits down and keep peace on the industrial relations front without giving the union more than its fair share of credit for improvements. Of course, if there is not a union, they try to keep it that way. They are also concerned with fending off the Internal Revenue Service by maximizing nontaxable income. Unfortunately, compensation managers sometimes act as a constraint on innovation in the benefits field. As architects of the benefit program, they tend to overemphasize its appropriateness to employee needs and its acceptance by employees. Surveys at TRW Systems showed that over 90 percent of employees would opt for a pattern of benefits different from their current one. Most managers had predicted a much lower figure. Another frequent difficulty is that compensation managers tend to migrate into the field without professional goals or special training.

Unions. The union leadership is concerned with carrying out union policy and keeping the power base with members. It is also concerned with employee needs—the needs of both the employed and the unemployed. Union demands are the prime force for change in benefits, and many innovations start there. The union can also constrain innovations such as stock options on the questionable ground that employees might lose their loyalty to the union if they have a financial stake in the company. Union bargainers also tend to calculate the cost of benefits as if the compensation dollar *were* fungible, and sometimes they appear to be seeking the largest financial bite from the company rather than the bite most appropriate to employee needs. There is also a strong union tendency to negotiate rewards for long service, sometimes to the detriment of a majority of employees. I am sorry to say I have not had any opportunity to observe how union leaders react to the idea of cafeteria compensation. They might lose a certain amount of control, but since employees seem to be overwhelmingly in favor of the cafeteria compensation concept, perhaps they would also gain in popularity.

Employees. Employees might be considered a third force that shapes the compensation package, although it is seldom that they have any very direct input. In the rare cases in which employees are surveyed regarding pay and benefits issues, the results seem to show quite uniformly that employees want more benefits. In fact, they seem to want to

increase the ratio of benefits to pay. In a study I conducted at General Electric,¹ 829 employees were asked how they would spend a hypothetical extra \$190 in compensation. There were ten alternative compensation options, including pay. Only 24 percent of the total amount was spent on pay, the remaining 76 percent going to benefits. In the TRW Systems cafeteria compensation program, employees again showed they were in favor of increasing benefits. In choosing hospital insurance, for instance, 40 percent of the employees picked the current plan, 55 percent picked an improved plan, and only 5 percent opted for a less expensive plan with reduced benefits. The score on life insurance was 79 percent for the current plan, 18 percent buying additional coverage, and 3 percent buying less. Unfortunately, as a result of tax complications, the TRW Systems program did not allow employees to receive additional cash if they decided to decrease the total size of their benefit package. Surveys showed, however, that less than 10 percent wished to decrease the actual size of their benefit package.

There are several reasons why employees seem to favor increases in benefits at the expense of pay. First of all, employees seemed quite enamored with the tax advantage of benefits even though my own experience indicates they often misunderstand the graduated income tax. Employees also seem to feel that benefits are a painless way of paying for basic security. Finally, employees may favor benefits since they serve to increase the portion of take-home pay available for discretionary spending. Discretionary spending gives people the feeling of wealth.

Employees seldom have direct input in shaping benefit programs, because neither the company nor the union takes the trouble to ask them, although good survey and group decision-making techniques are available. I have encountered a number of companies that fear employee surveys about compensation on grounds that it might lead employees to expect something. This logic argues that employees won't think about compensation if nobody mentions it. Another argument I have heard from both the management and union side is that "Employees don't know what they want—let alone what they *need*." The distinction between employee wants and needs is a philosophical one involving value judgments. It deserves more study. I question whether either management or union leadership understands employee desires. Employees, however, do not have trouble deciding what they want, providing the survey methodology is appropriate.

Insurance Regulations. The purpose of insurance regulations is to prevent abuses such as buying excessive amounts of life insurance on

¹ Stanley M. Nealey, "Pay and Benefit Preference," *Industrial Relations*, vol. 3 (October 1963), pp. 17-28.

dependents. Although it sounds farfetched, this has been known to lead to murder. Unfortunately, the insurance regulations, while generally well intentioned, appear to be heavily influenced by life insurance agents. This group seeks to reduce opportunity for flexibility in group plans since this would cut into the individual life insurance agent's market. In general, insurance regulations tend to maintain the status quo, and thus constrain innovation in benefit programs.

Insurance Companies. In my experience, group insurance carriers exert an important, and largely conservative, influence on benefit programs. They appear comfortable with the status quo. Insurance carriers have been unenthusiastic about cafeteria compensation. This lack of interest in providing insurance flexibility for employees is hard to reconcile with the frequently advertised concern for tailoring insurance to individual needs. The primary fear seems to be "adverse selection," the notion that poor risks will load up on insurance and thus take advantage of the plan. The extensive survey results at TRW Systems showed no evidence for adverse selection. In any case, adverse selection seems to be a red herring since rates are adjusted by experience anyway.

Taxes. Finally, the tax laws, in my opinion, exert a very powerful influence on benefit planning. The attraction of avoiding income tax seems to be the greatest single pressure on increasing the ratio of benefits to pay. I think it is time to ask whether providing a tax incentive to stimulate fringe benefits is a desirable social policy. For one thing, it causes a corresponding upward pressure on income tax applied to the pay portion of compensation. I would very much like to see a closer look taken at the economic and social welfare impact of tax exemptions on group benefits. The Internal Revenue Service is quite wary of compensation innovations. They seem fearful of any change lest it result in yet another decrease in the tax take. The result is a highly conservative policy. The TRW Systems cafeteria compensation system was affected by it. If employees who wished to decrease total benefits had been allowed to receive increased cash, the company risked exposing employees who wanted to keep their current benefits to increased taxes. This stance of the IRS was difficult to understand since allowing increased cash for decreased benefits would have increased the aggregate amount of income taxes collected.

In closing, I have a few brief suggestions that may help clarify how we can avoid proliferation of costly benefits that may not offer most employees good value for money.

First, it seems to me there are some needs that are best met by providing employees with more take-home pay and letting them buy their own benefits. Second, I think it's time to take a closer look at tax ex-

emptions for benefit plans. Is this a useful social policy, or is the tail wagging the dog? Third, I would like to see more emphasis on employee needs in making benefit decisions. Fourth, I would like to see more effort to inform employees about the costs of benefits. For some reason that escapes me, many companies actually make secret the cost of benefits. A benign explanation would be that they feel employees don't care, and in truth employees do show a good deal of apathy about benefits in general. A less kindly view of benefit cost secrecy, however, is that the benefits really aren't as valuable as implied, and if the true costs were known, employees might seriously question them. Fifth, I feel that it's useful to continue innovations that increase benefit fungibility, such as the cafeteria compensation program. However, I think such programs would serve employees better if there were fewer constraints. Of course, it's necessary to require minimums on some programs, but I would provide more flexibility and I would allow employees who would like to cash out on certain benefits to do so. Finally, I would like to see more research on employee wants and needs. Who is served in which ways by what programs? What groups are getting more or less than their share of the benefit dollar? We do know, in this regard, that the young, single employees, employees with short service, and women are subsidizing other employee groups, but we don't know to what extent. If the present trends continue, I am concerned that these groups will become so discriminated against that eventual rebellion will result.

Once again, I am not advocating the overthrow of group insurance plans. They offer the insurance carrier a large volume of business with low administrative costs and sufficient good risks to allow attractive rates in comparison to term insurance purchased privately. I am advocating careful study of the differential appropriateness of benefit plans to the needs and desires of employees of all kinds.

Implications of New Theories of Work for the Design of Compensation Systems

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As used here, the term *theories of work* refers to the philosophies and practices of management pertaining to work-place structure and job design. Over the years an interesting evolution has occurred in theories of work, beginning in the early 1900s with scientific management, and continuing since the 1930s with the human relations movement, and since the 1960s with job enrichment and work place democratization (under such labels as autonomous work groups and self-managing work teams). The most recent development in the evolutionary process has no convenient label; for lack of a better term, I will call it new systems of work (NSW).

Consistent with the advocates of job enrichment and work-place democratization, those who champion NSW emphasize employees' self-esteem and self-actualization needs and their capacity for self-motivation and self-control. Similarly, they urge managerial strategies designed to appeal to these needs and capacities to increase organizational productivity and the quality of working life. Supporters of NSW, however, criticize job enrichment and work-place democratization as "piecemeal reforms," advocating instead, in Walton's words, the "systemic redesign" of the work place.¹ Thus NSW include enriched jobs and self-managing work teams, but also planned flexibility in work assignments, facilitative or process-oriented leadership styles, open communications systems, reduced status differentials between management and lower-level employees, and a variety of reconstituted personnel policies and procedures, particularly in the areas of staffing, training and compensation. The goal in NSW is to create a high degree of consistency and mutual supportiveness between organizational structure and climate, job design, work-group and leadership processes, and manpower-management techniques.

Unfortunately, the NSW concept is not yet well developed. This is particularly true with respect to personnel policies and procedures in

¹Richard E. Walton, "Innovative Restructuring of Work," in *The Worker and the Job: Coping with Change*, ed. Jerome M. Rosow (Englewood Cliffs, N.J.: Prentice-Hall, 1974), p. 149.

general and compensation practices in particular. Walton has stated, for example, that “. . . compensation is the least understood element of these new work systems.”² Those who plan, implement, and write about NSW tend to be primarily concerned with so-called intrinsic motivation and rewards and the socioemotional aspect of organizational change and have generally failed to recognize the centrality of pay as an organizational reward that can serve as either a positive or negative reinforcing agent in the process of “systemic reform.” Thus the purpose of this paper is to focus on the implications of NSW for the design of compensation systems. Particular emphasis is placed on the major problems of compensation policy and administration inherent in the implementation of NSW and, where possible, on suggestions for developing pay practices that are consistent with and supportive of the main features of NSW. For purposes of analysis, attention is focused on the implications of five major features of NSW: (1) the goal of increased productivity; (2) changed job responsibilities; (3) increased employee motivation; (4) revised organizational climate; and (5) hazards of the experimental approach to program implementation.

The Goal of Increased Productivity

One of the major goals of NSW is increased organizational productivity, not through increased capital investment or improved managerial techniques, but through the efforts of employees who are asked to work both harder and smarter in the pursuit of organizational goals. While increased productivity may be seen as a generally desirable goal by the advocates of NSW, two potential problems must be kept in mind. First, this view may not be shared by employees who often equate increased productivity with more profits for management and fewer jobs for employees. Second, while increased psychic satisfaction at work may initially be seen by employees as adequate compensation for participating in NSW, advocates should be aware that this feeling is likely to be short-lived. Eventually workers come to feel that their sustained efforts should result in a sharing of the monetary gains resulting from cost-savings and increased productivity.³

Thus it seems clear that one of the implications of NSW for the design of compensation systems is the desirability of incorporating the principle of gain-sharing by all participating employees. Details may vary. Some have suggested that cost-savings achieved at the work-group

²Walton, p. 175.

³Walton, p. 158. See also William F. Whyte, “Organizations for the Future,” in *The Next Twenty-five Years of Industrial Relations* ed. Gerald G. Somers (Madison, Wis.: Industrial Relations Research Association, 1973).

level be shared through some type of group-bonus scheme. Others advocate the sharing of cost-savings on a system-wide basis, using a variant of the Scanlon Plan, or profit-sharing, using as a prototype the well-known Lincoln Electric Plan.

Whatever the details, however, in thinking through the issue of gain-sharing, the following guiding principles would seem to be in order: (1) employees should be rewarded and not penalized for increased productivity; (2) gains should be shared on a contractual (not whimsical) basis, using agreed-upon formulas that provide returns commensurate with contributions made; (3) gain-sharing should be viewed as an essential feature of NSW and not as some sort of gimmick, frill, or add-on; and (4) the internal functioning of the gain-sharing plan should be consistent with the norms and values of NSW (more on this point later).

Changed Job Responsibilities

The principal thrusts of NSW are in the direction of changing decision-making patterns, job structures, and employment patterns to increase employee responsibility and to widen the range of duties or jobs performed. Decentralization, job enrichment, and flexible work assignments, in turn, require that employees develop new skills and abilities. All of these changes have implications for the design and administration of compensation systems. Specifically, models of pay-satisfaction suggest that increases in job demands or in the skill levels of employees that are not accompanied by commensurate increases in pay result in employee dissatisfaction with pay.⁴ To avoid this undesirable consequence requires adjustments in the techniques used to price jobs or to determine the pay rates of individual employees.

PRICING JOBS

Most organizations use some form of job evaluation, coupled with wage and salary surveys, to determine minimum and maximum wage rates for each job in the organizational hierarchy. Carefully done, these techniques foster employee satisfaction with pay by establishing feelings of internal and external equity. The effect of changes in job duties and responsibilities brought on by NSW, however, is to upset established relationships among jobs both internally and externally. Some jobs may be eliminated, new jobs may be created, and nearly all jobs will be more complex than before. To avoid employee dissatisfaction with pay in this

⁴Edward E. Lawler, III, *Pay and Organizational Effectiveness: A Psychological View* (New York: McGraw-Hill, 1971), pp. 205-17, and Lec Dyer and Roland D. Theriault, "The Determinants of Pay Satisfaction," *Journal of Applied Psychology* (forthcoming).

situation requires that, at a minimum, affected jobs be reevaluated to restore internal and external equity. If the changes are extensive, entirely new job-evaluation plans may be required, as well as new wage and salary surveys.

This is an issue, however, only in situations where employees are assigned to specific jobs. In these situations, job rates reflect the general skill levels of the employees who perform the jobs. In many NSW, however, flexible work assignments are the rule. Where this is the case, attention should turn from techniques used to price jobs to methods of determining individual rates of pay.

PRICING INDIVIDUALS

Flexible work assignments can be a reality only where individual employees possess more skills than they use on any given job. To encourage employees to learn new skills and to avoid the emergence of pay dissatisfaction as they build their skill repertoires requires a compensation plan that specifically pays workers for individual development rather than for the jobs they happen to perform at any given point in time.

Pricing individuals on the basis of skill development is not a common phenomenon in wage and salary administration, although it is sometimes done among certain groups of professionals, including scientists and engineers in private industry and teachers in public schools. One approach tried at both the professional and blue-collar levels has been to tie pay increments directly to employee knowledge or skill acquisition. Such plans appear to be difficult to administer, however, particularly because the opportunity to learn may not be equalized and the criteria for increments are difficult to define.

In summary, then, it appears that the three major features of NSW, namely democratization, job enrichment, and flexible job assignments, together have both policy and administrative implications in the compensation area. At the policy level it must be decided whether NSW are amenable to compensation plans that attach wage rates to various jobs or if a more individualized approach is called for. If jobs are the focus, NSW will invariably involve the reevaluation of jobs, and perhaps new evaluation techniques and wage and salary surveys. If individuals are the focus, entirely new compensation schemes will have to be designed and tried.

Increased Employee Motivation

As was previously discussed, NSW are in part designed to result in increased organizational productivity. This can occur in several ways, one of which is through increased employee motivation fostered by

enriched jobs and, perhaps, by a closer identification with work-group or organizational goals. Increased motivation refers to greater effort and (usually) performance levels at the individual level. Presumably the motivational effects of NSW do not operate in a uniform manner across all employees, however, and this, too, has implications for the design and administration of compensation systems.

The models of pay satisfaction referred to earlier suggest that, in addition to job demands and skill inputs, many employees expect to be compensated for their effort and performance levels as well, and if they are not, pay dissatisfaction is the result. Appropriate pay practices to avoid this dimension of pay dissatisfaction include merit-pay and individual-bonus plans. These plans may be combined with gain-sharing plans by allocating savings or profits on the basis of individual performance levels as is done, for example, in the Lincoln Electric Plan.

Merit-pay and individual-bonus plans are fraught with difficulties as every pay administrator knows. Two difficulties particularly related to NSW, however, are the following. First, some motivational theorists have recently suggested that, contrary to the usual assumption, the so-called intrinsic motivational value of NSW may actually be counteracted by making pay increments or bonuses contingent upon individual performance levels.⁵ Second, an integral feature of most NSW is group activity, making it difficult at best to identify and accurately assess individual contribution for the purpose of allocating rewards.

It is not clear at this point whether the motivational implications of NSW are reinforced or extinguished by merit-pay or individual-bonus plans. Nevertheless, it must at least be acknowledged that the possibility of counteracting motivational effects creates a dilemma for the formulation of compensation policy. On the one hand, a policy of recognizing individual differences in effort and performance levels should lead to increased satisfaction with pay among many employees. On the other hand, it may also result in a general decreased motivation to perform. The way around this potential dilemma is unclear, although a decision against merit pay or individual bonuses may be dictated in situations where policy-makers feel that supervisors will be unable to accurately measure individual contributions under the new work structures and job designs. Presumably, if no attempt is made to reward individual performance with pay, however, some attempt will have to be made to assuage the potential negative impact on employee satisfaction with pay.

⁵ See, for example, Edward L. Deci, "Paying People Doesn't Always Work the Way You Expect It To," *Human Resources Management*, vol. 12 (Summer 1973), pp. 28-32.

Changed Organizational Climate

NSW attempt to change organizational climate in a number of ways. Three effects which appear to be particularly relevant to the compensation issue are: (1) the tendency to reduce status differentials between management and lower-level employees; (2) the heavy emphasis on employee participation; and (3) the inclination toward openness and trust.

REDUCED STATUS DIFFERENTIALS

A philosophical undercurrent in NSW is the reduction of status differentials between management and lower-level employees. This is a natural outcome of systems that decentralize decision-making and encourage self-control. With respect to compensation policy this may argue for the elimination of payroll distinctions (monthly, weekly, hourly) in favor of one uniform salary plan. This issue may not be very important. Nevertheless, removing time clocks may help to foster the climate of responsibility and trust that other aspects of NSW are striving for, and the greater stability of earnings that salaried workers enjoy may encourage employee acceptance of changes in work structure and job design.

EMPLOYEE PARTICIPATION

Obviously, NSW encourages employee participation in decision-making concerning a wide variety of job-related issues. Should this philosophy be extended to the design and administration of compensation systems as well? If employees are to be relied upon to decide such matters as the most efficient way to allocate their work or the most appropriate matching of workers to jobs, presumably they also could be relied upon to design compensation plans that are consistent with their needs and administer these plans in a way that would be both effective and fair.

This idea will no doubt meet with considerable skepticism among managers, perhaps even among those who are generally favorably disposed toward NSW. Nevertheless, it is worth taking time to consider the nature of the message that is communicated to employees when they are asked to wrestle with and overcome difficult production and personnel problems on the shop floor but to leave to management "experts" decisions about the allocation of important organizational rewards, including pay.

OPENNESS AND TRUST

NSW necessarily involve the opening of communications channels and are often implemented using organizational development techniques designed to foster openness and trust. In many organizations this general thrust will stand in sharp contrast to the policy of secrecy with respect to pay. Where compensation issues are decided participatively, of course, this is not an issue. In the absence of participation, the astute compensation administrator may still want to examine the apparent inconsistency between the climate needed to foster NSW and any tendency that may exist to hide the way pay decisions are made, including the amount of money people make, the increments they receive, and the reasons for the differentials that exist.

Hazards of Experimentation

Wage and salary administrators (and labor unions where they exist) spend a great deal of time and effort trying to establish a high degree of consistency in compensation policies and programs. NSW, on the other hand, are typically introduced into organizations piecemeal, i.e., in one or two subunits at a time. The problems that situation poses for compensation administration are apparent, although the solutions are not. Experimental changes in compensation policies and procedures among selected employees can quickly erupt into perceptions of inequity on the part of those not involved. Walton has documented this problem, and I have personally seen it happen in a "sheltered" field experiment which was undertaken with the full cooperation of the union that represented all of the employees at the site.

Clearly, this type of situation needs to be avoided by the planners of NSW if at all possible since it has the potential to destroy the experiment or, in the longer run, to greatly complicate the dissemination of the program to other parts of the organization. Unfortunately, little guidance is available to indicate how this might be done, although at a minimum it probably requires that experimental changes be reasonable and justifiable and carefully communicated to all employees. Organizations that fully subscribe to the principles of NSW might try working out the details on a participative basis, involving both employees who are and are not scheduled to be involved in the experiment per se.

Conclusion

Perhaps the major conclusion to be drawn from this paper is that the designers of NSW should think through the implications of their programs for the design of compensation systems before implementa-

tion rather than calling on the wage-and-salary specialist to patch up problems that emerge once experimentation is underway. It is hoped that the issues raised in the paper will help to identify some of the questions that should be asked and provide some guidance in thinking through these questions in a logical way. Obviously, however, few ready-made answers are available at the present time.

It is apparent that the implementation of NSW has a number of implications for the design and administration of compensation systems. The challenge for the designers of NSW is to be as creative in dealing with compensation issues as they have been and continue to be in the areas of organizational restructuring and job redesign. At the same time, there is a very real need for more research on the full range of issues discussed in this paper. Contributions in this area could come not only from social psychologists concerned with employee motivation and job attitudes, but also from compensation specialists and those trained in organizational change techniques. Field experiments are sorely needed. These, of course, should be designed to include analyses of compensation issues as well as the problem areas more traditionally identified with NSW.

DISCUSSION

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My comments on "Behavioral Science Approaches to Employee Compensation" amount to a radical critique of three of the papers presented.¹ Because of my political views, I am skeptical about the potential for improving the relations between managers and workers through the organizational behavior (OB) prescription of trust and communication (Dyer and Miles), and I question whether unions do an effective job of protecting the interests of workers (Barbash).

OB and Compensation

Dyer and Miles discuss compensation-related problems that appear where OB principles have been applied. Because they do not deal with the limits to the applicability of OB techniques, they make some fundamental mistakes. It is important when looking at compensation (or any other aspect of the organization of production) that the issues which arise be considered in the context of the capitalist economy. In this regard the role of profit maximization as the driving force behind capitalist production is crucial.

Miles deals with problems of slack and inappropriate incentives, both of which relate to technical efficiency and short-run profits. He notes that where controls prevail over rewards, inefficiencies occur. The point he misses is that controls may not be efficient in the short run, but they are crucial in the long run. Control over production gives management (as the agent of capital) the right to capture profits. Thus, the loss of control threatens profits in the long run. An increase in worker control over production (and the attendant reduction in management control) will lead to worker demands for an increasing share of profits. To avoid this, management refuses to relinquish control *even* where applying OB principles. As Miles himself notes, "if the control-reward balance is to be shifted . . . such a shift will occur only as the result of current systems becoming ineffective enough for their costs to become obvious." To reinterpret: Control will be sacrificed only when absolutely necessary to maintain profitability.

Dyer notes that where OB techniques have been applied, worker responsibility expands and status differentials between workers and man-

¹ Nealey's paper is not mentioned because it deals with a specific topic (cafeteria compensation) and does not fit in with my more general comments.

agement decline. However, this change is seldom reflected in pay, as the prevailing compensation policies are maintained. To correct this philosophical inconsistency, he argues for gain-sharing—where new systems of work are adopted, workers should share in the profits. What Dyer overlooks is that the very adoption of OB techniques reflects a desire to increase profits through higher productivity and lower costs. Thus, gain-sharing is not acceptable because profit maximization implies minimizing payment for the increased productivity.

Dyer also observes that if workers are allowed to participate in some decisions but not in those concerning compensation, dissatisfaction will arise. Problems with new systems of work, then, often result from faulty compensation systems. Steve Marglin, who looks at the same general problem within the context of the capitalist economy, goes a step beyond Dyer. Based on a version of the domino theory, he concludes that many OB experiments fail and/or are abandoned because once workers get a taste of participation in decision-making, they keep asking for more and more.² The point is that management has to draw the line somewhere in order to maintain control.

Unions and Compensation

Barbash reminds us that it is impossible to talk about compensation without considering unions. He concludes that unions will oppose attempts to apply OB regardless of the attached compensation system because they are bargaining organizations. I concur with Barbash that this union opposition is legitimate because: (1) OB techniques have been viewed by management as an alternative to unions; (2) OB techniques have been used to increase productivity without a corresponding rise in wages (as Dyer and Miles observe); and (3) to the extent that OB is successful, the necessity for unions is no longer obvious.

However, Barbash goes too far in rejecting OB. The principles of OB (communication, trust, etc.) can be applied without union opposition *if* union bureaucrats are included in the implementation process. This has occurred in the U.S. in the steel industry where increased communication between management and the union has accompanied the creation of the joint productivity committee. It has also happened in Western Europe where codetermination systems (worker representation on boards of directors) are typically supported by unions.

To comment on a side issue: I must disagree with Barbash's proclamation that bargaining and revolution are inconsistent. The French

² Steve Marglin, "What Do Bosses Do?" *Review of Radical Political Economics*, vol. 6 (Summer 1974), pp. 33-60.

socialist, Andre Gorz, has distinguished between reformist reforms, or reforms that operate within the rules of a capitalist economy, and revolutionary reforms, or reforms that challenge and contradict the capitalist organization of production.³ Under this dichotomy, OB and codetermination are reformist; they are designed to improve profitability and protect capital. However, successful attempts by workers to wrest control of the production process away from management are anticapitalist and thus revolutionary. Unions, then, can play a revolutionary role in this regard (and, in fact, have in a small way with work rules and seniority regulations). However, Barbash is absolutely correct in that the increasing bureaucratization of unions and the collective bargaining process make the revolutionary potential of unions slim indeed.⁴

Conclusion

My major point is that true worker participation in decision-making (regarding compensation or any other aspect of the organization of production) is not possible on a broad scale within a capitalist economy because of the threat posed to profits. The potential applicability of OB principles, then, is limited unless adapted to the capitalist economy, such as in the codetermination systems of Western Europe or the steel industry joint productivity programs. In both of these cases, the participation of workers in decision-making is more illusory than real. Worker participation has more potential in a system not geared to profits. In fact, the most interesting examples of worker participation come from socialist economies—Yugoslavia, China, to some extent Cuba, and Chile prior to the CIA-supported overthrow of Allende.

³ Andre Gorz, *Strategy for Labor* (Boston: Beacon Press, 1967).

⁴ This is not to say that rank-and-file workers are not interested in revolutionary reforms, i.e., in increasing their control over the jobs they perform. In fact, the opposite is probably true.

VI. PUBLIC SERVICE EMPLOYMENT AND PUBLIC SECTOR LABOR RELATIONS

The Impact of Public Service Employment on Public Sector Labor Relations

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The last 15 years have witnessed two significant and related developments in the field of industrial relations in the United States. The first has been the tremendous growth of collective bargaining in the public sector, which one observer recently described as “[T]he most important single development in labor relations in the United States in the past decade.”¹ It is estimated that over 50 percent of all full-time state and local public employees are members of employee organizations,² and public sector unionism continues to increase at an unprecedented pace.

The second development is the rebirth of interest in the role of public service employment (PSE) as both a counter-cyclical economic and long-range manpower strategy. According to recent estimates, the total appropriations for PSE programs will provide well over 300,000 jobs through the current fiscal year, and the push for even more PSE funding continues unabated. Despite the likelihood of a presidential veto of any bill requiring large expenditures for public jobs programs, it is clear that PSE is currently riding the crest of considerable popular and bipartisan support. It has indeed come a long way from the days when its mention elicited only contemptuous references to leaf-raking and ditch-digging.

The phenomenal growth of PSE and public sector unions has recently been accompanied by concerned discussion about the effects of their interaction. Can this interaction best be described as a collision course, or can the two coexist in a harmonious and complementary fashion? This paper seeks to provide some insights into this question

¹ Lee C. Shaw, “The Development of State and Federal Laws,” in *Public Workers and Public Unions*, ed. Sam Zagoria (Englewood Cliffs, N.J.: Prentice-Hall, 1972), p. 20.

² Bureau of the Census, *Census of Governments*, 1972.

by outlining the major issues which have emerged in the interaction of PSE and public sector bargaining. Some of the implications of these issues for future PSE programs are also addressed. Most of the background information for the paper came from a review of the major cases arising under the Public Employment Program (PEP) and the Comprehensive Employment and Training Act (CETA), as well as discussions with union officials, prime sponsors, and Labor Department officials.³

The Issues Involved

One point warrants notation at the outset of this discussion. Even a cursory examination of the cases reveals that the collective bargaining issues under PSE do not arise individually—they are inextricably linked to such an extent that any particular case will almost inevitably involve a number of them.

LAYOFFS AND REHIRES

The relationship between the layoff and recall rights of regular employees and the rights of current and potential CETA participants has been the most important and the most difficult collective bargaining issue in the implementation of PSE programs. In a paper presented at the IRRA meetings last year, Robert Guttman emphasized the critical nature of this issue: "The whole problem of who should be hired in an expanded PSE program when many public employees are in the process of being laid off is a difficult one . . . and the lack of an acceptable solution is the greatest threat to the continuation of a PSE program."⁴

The importance of this issue stems from the fact that it goes directly to the heart of the question of who should be served by PSE programs. Clearly one of the primary objectives of PSE is to provide jobs for those who have suffered the burdens of long-term unemployment, whether that unemployment is structurally or cyclically induced. Yet this objective must be juxtaposed with the rights of seniority and job protection, certainly among the most sacred rights of the collective bargaining agreement. The difficulty in solving the problem is a direct consequence

³ The information relating to cases arising under PEP was taken primarily from J. Joseph Loewenburg, Richard Leone, Karen S. Koziara, and Edward C. Koziara, *The Impact of Employee Unions on the Public Employment Program*, Report prepared for the Manpower Administration, Department of Labor, Contract #92-42-72-17. I would also like to give special thanks to William Mirengoff of the National Academy of Sciences, Sheldon Mann of the American Federation of State, County and Municipal Employees, and Jon Weintraub of the National Association of Counties, for their comments and useful suggestions for additional contacts.

⁴ Robert Guttman, "A Year of CETA—Observations of a Library of Congressman," in *Proceedings of the 27th Annual Meeting, IRRA* (Madison, Wisconsin: The Association, 1975), p. 193.

of its complexity; it arises in a variety of forms, among them the particularly troublesome issue of maintenance-of-effort. There is no doubt that the problem has been exacerbated by the deterioration of both the economy and the fiscal position of local units of government.

The first issue to be faced in implementing PSE programs concerned the procedure for filling positions in which there were regular employees already on layoff. Some of the prime sponsors sought to place new persons in the jobs without regard to the laid-off workers, while others planned from the outset to use the program as a vehicle for rehiring regular employees. Still others attempted to avoid the issue completely by steering their PSE programs away from positions in which previous layoffs had occurred, or by establishing special projects outside the regular civil service or bargaining units.

Once the programs were underway, a second form of the layoff-rehire issue arose—the problem of “future layoffs,” in which the layoff of regular employees occurred subsequent to the filling of CETA positions. The unions argued that there was no difference between this and the existing layoff situation, and that the job rights of regular employees must be protected in either case. This, of course, would mean that the CETA employees would have to be laid off (“bumped”) or transferred to other positions. On the other hand, a number of prime sponsors sought to distinguish between the two situations, arguing that it was unfair to expect only the CETA participants to bear the brunt of future layoffs. The response of the unions, and ultimately the Labor Department, was that permitting such a distinction might result in prime sponsors circumventing the safeguards for regular employees by delaying any layoffs until after the CETA positions were filled.

In May 1975, the Labor Department issued a new set of CETA regulations that both expanded and clarified the provisions pertaining to the layoff-rehire issue. The revised regulations prohibit the hiring of any person when any other person is on layoff from the same or any substantially equivalent job. If layoffs of regular employees occur during the grant period, participants may not remain working in the job that is affected by the layoff; under these circumstances, the participants would have to be laid off or transferred to positions not affected.

There is little question that the revised regulations have clarified the rules governing the hiring and retention of CETA participants in the face of employment cutbacks in the regular work force, although disputes continue to emerge over specific applications of these rules. Nevertheless, the regulations have raised yet another issue—what constitutes a “substantially equivalent job”? The unions have argued that some prime sponsors have made minor changes in job descriptions in order to dif-

ferentiate CETA jobs which are for all intents and purposes identical, or at least substantially equivalent to regular positions. Prime sponsors have responded that the unions have sought to interpret the definition so liberally as to make the provision virtually meaningless. Undoubtedly there is evidence to support both cases. More important, however, are the implications of the arguments for the intent of a PSE program. At the one extreme the program could be used to subvert the seniority and job protection rights of regular public employees. At the other, it could be distorted from its stated objectives to become merely a guaranteed employment program for public sector employees.

ENTRY-LEVEL POSITIONS AND PROMOTIONAL RIGHTS

The CETA regulations stipulate that no job can be filled in other than an entry-level position until personnel and collective bargaining procedures have been complied with, and that the jobs in each job category cannot infringe upon the promotional opportunities of regular employees. The issue here essentially involves the balance which is to be struck between the desire of the unions to protect these promotional rights and the desire of the prime sponsor to maximize the flexibility of the PSE programs in terms of the types of jobs to be funded. In a number of cases, unions have charged that prime sponsors have engaged in either flagrant violations of these rights by totally disregarding the provision prohibiting other than entry-level jobs, or more subtle violations in which the prime sponsors again make minor wording changes in job descriptions and then claim the job is an entry-level position in another job category or is outside the normal promotional lines altogether. Prime sponsors have responded that it is unrealistic to expect all PSE jobs to be entry-level, that legitimate unmet public service needs exist at higher level positions as well, and that in many cases the CETA positions do (and were intended to) represent special positions outside the normal job structure of an agency. They have also claimed that unions have expanded the promotional ladders for certain jobs to include positions that were originally in other categories, e.g., attaching laborer positions to the promotional line for truck-driver positions. Perhaps more important than the specific outcome, however, is the fact that in many of these cases Labor Department officials have found themselves in the awkward position of serving as mediator (and ultimately arbitrator) in essentially personnel-related matters in which they may have little expertise or experience.

PREVAILING WAGES

The CETA regulations require prime sponsors to pay prevailing

wage rates on all PSE jobs.⁵ The unions' interest in this regulation, of course, is to protect their members from low-wage competition in the form of CETA participants. Their ultimate fear is that the programs may lead to wholesale job substitution of PSE positions for regular public sector jobs. On the other hand, prime sponsors and others interested in the employment and manpower effects of PSE raise a number of equally important arguments. The first is that the employment effects of PSE are larger at lower wage rates. Some have also expressed concern that the payment of prevailing wages undermines the counter-cyclical objective of PSE—i.e., the provision of *temporary, transitional* jobs for the unemployed—since it may reduce their incentive to return to their primary jobs. A corollary argument involves the inflationary effect of PSE. Countering this argument is the possible inequity of paying presumably skilled workers lower wage rates because of economic developments over which they had little control. If the goal of PSE, on the other hand, is to provide work experience and skill development for the disadvantaged, then the payment of prevailing wages could be opposed on different grounds—that of the lower productivity (at least initially) of these workers. Yet others argue a contrary position—that public sector jobs paying higher wages are needed to provide “disadvantaged” workers with an entry into the primary labor market.

While these theoretical considerations underlie the discussion of the prevailing wage issue, its actual treatment has revolved around more practical problems, such as defining what constitutes the prevailing wage, what political jurisdiction is the appropriate one on which to base this determination,⁶ and what jobs are in fact applicable to a particular prevailing wage. This last issue again illustrates the importance of the CETA job descriptions, with unions protesting subtle changes in these descriptions and prime sponsors emphasizing the difference in role specifications and qualifications between program and regular jobs.

ORGANIZING CETA WORKERS

Statistics on the extent of organization of CETA participants are not available, but there are indications that unions have at least sought to absorb the PSE employees whose jobs are in already existing bargaining units. The reasons offered in support of organization range from protecting the interests of the participants to increased control over the positions and financial benefits to the union. Positions in favor of

⁵ Actually, prime sponsors are required to compensate CETA employees at prevailing or federal minimum wage rates, whichever is higher. In most cases, however, the prevailing wage will exceed the federal minimum wage.

⁶ This problem is especially difficult in the case of consortia, where the prevailing rate may differ between the political jurisdictions comprising a particular consortium.

organizing the CETA work force are not universal, however. In some cases, disputes arising over other issues have resulted in considerable antagonism between union members and PSE participants, and regular employees may be quite wary of absorbing "potential replacements" into their ranks.

Implications for Future PSE Programs

Out of the recent discussion of PSE under CETA have come several proposals for expanded and altered forms of public jobs programs. These proposals reflect a variety of goals for PSE, but a common strand running through almost all of them is the view that it has two primary functions: (1) a manpower development strategy, with emphasis on the disadvantaged and hard-core unemployed, and (2) a counter-cyclical device designed to stimulate the economy and maintain the incomes of laid-off workers by providing them with temporary employment.⁷

Each of the proposals differs slightly in a number of respects, most notably the administrative arrangements: Some call for public works jobs, some for federal projects, while others want to retain local administration but expand it to include private nonprofit organizations. More importantly for our purposes, they share one somewhat alarming characteristic: None of them, in my opinion, gives adequate attention to the relationship between the PSE jobs and the regular public sector positions. More alarming is the implicit assumption which I read into some of them that merely by establishing special work projects and/or transferring sponsorship and administration of the jobs to the federal government or private nonprofit organizations, the program can circumvent the layoff-rehire and other problems encountered under PEP and CETA. At best, this belief is overly sanguine; at worst, it is folly. As long as federal programs create jobs in close proximity (geographic or occupational) to regular local government positions, the relationship between those jobs will be at issue, especially in times of fiscal crises that threaten public services and the workers who provide them.

This is not to say that PSE must be foremost a guaranteed employment program for one sector of the economy; no one favors unemployment, but equity dictates that its incidence should be shared, and there

⁷ It is worth noting that even these two objectives have not achieved universal acceptance. Allan Fechter and Richard Nathan, in papers prepared for a conference on PSE, and Secretary of Labor Dunlop in Congressional testimony have raised doubts about the usefulness of PSE as a counter-cyclical device. Robert Hall, also in a PSE conference paper, has expressed reservations about its potential as a structural remedy. Milton Friedman, of course, does not think much of the idea in general. (The Fechter, Nathan, and Hall papers can be found in, *Proceedings of a Conference on Public Service Employment*, A Special Report of the National Commission for Manpower Policy, Special Report No. 1, May, 1975.)

are few who would dispute the inequity of jurisdiction-wide recall rights for public employees. It is not inconsistent with the above position, however, to suggest that the protection of threatened public services is also a legitimate objective of PSE program.

A method for achieving this objective within the context of a multi-tiered PSE program would be to use one component to provide state and local governments with revenue-sharing funds specifically earmarked for use in retaining public services threatened by a reduction in revenues. The need for effective enforcement of maintenance-of-effort provisions would be all the more important, of course, in order to minimize the substitution effect. But there is little doubt that many of the recent employment cutbacks in the public sector are in fact legitimate ones, and the use of part of the PSE funds to maintain needed public services under those circumstances would seem to be a reasonable strategy.

No proposed PSE program can resolve all (or perhaps any) of the issues raised in this paper. They are likely to emerge in some form in even the most thoughtfully designed program. Consequently, there is also a need for continued efforts toward the development of effective and timely dispute-settlement machinery within the structure of a given program. A number of respondents expressed concern over what they perceived as a lack of responsiveness by the Labor Department to their complaints, especially in the earlier stages of CETA. To the extent that this concern is well founded, it may stem from an allegiance to the spirit of decentralization which dictates that the Labor Department pursue a policy of nonintervention, at least initially, in the hopes that the local disputes will see local resolutions. The alternative to resolving disputes within the program structure is to employ traditional collective bargaining mechanisms, such as negotiations, grievance procedures, and even job actions. Thus far the use of these mechanisms has been very limited. Ultimately, however, their use will depend on the experience with the CETA machinery, and a number of persons on both sides of the bargaining table predicted that PSE issues will increasingly become the subjects of negotiations, grievances, and possibly even strike activity.

This emphasizes the need for effective dispute-settlement procedures within a PSE program. To the extent this approach is in conflict with the concept of decentralization, the latter, as laudable as it may seem to some, will have to be sacrificed to some degree in the interests of just, consistent, and timely resolution of disputes. I would further suggest that these efforts include greater clarification of the role of the regional DOL offices in PSE disputes, as well as increased training for regional staff members in dealing with personnel and collective bargaining-related subjects.

Conclusion

There are no doubt those who would like to have seen the phrasing in the title of this session reversed. For these persons the crucial issue is the impact of public sector bargaining on public service employment. Their primary interest is in the broader issues relating to the potential (and its realization) of PSE, and to some extent they view the bargaining issues as constraints (albeit necessary ones) on this potential. But to public employees, and the unions that represent them, the causality implicit in the title is in the right direction—PSE has had an impact on bargaining, sometimes good, sometimes bad, more often unsure, at least to this point.

This leads to one final observation. The conflict between public service employment and collective bargaining, to the extent it exists, is very similar to the conflict between affirmative action and collective bargaining. Reflecting on this similarity, I am struck by the irony of the fact that the labor movement, a staunch and long-standing advocate of both civil rights and public service employment, now is faced with the prospect of partial retreat from these causes as it faces the stark reality of their potential effects on the primary interests of its members. I suspect this is an extremely uncomfortable position. But if the experience to date is a portent of the future, I suspect it is a position with which the labor movement will become increasingly familiar.

A Union View of the Impact of Public Service Employment on Public Sector Labor Relations

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The impact of Public Service Employment (PSE) on public sector labor relations can only be assessed within the context of our current national economic policy and the priorities that flow from such policy. The length and depth of the recession and its impact on the public sector has entrapped the public sector worker in a depressed economic time.

PSE programs have simply served to heighten the clash of myopic, incompatible, and counter-productive manpower policies that are at work in the public sector. Our national economy is slipping rather perceptibly at present and as economic activity continues to contract, the American worker is caught in the middle. The toll in human suffering is stunning as expressed in official unemployment figures and hauntingly articulated in unofficial assessments of unemployment, underemployment, and labor force discouragement.

The economic decline of recent years has had a severe impact on the fiscal resources of state and local governments. Beginning with the third quarter of 1973, the national income accounts figures for state and local governments shifted from a surplus to a deficit position.¹ This means layoffs and cuts in many service levels are the order of the day for the public sector.

While public sector payrolls are experiencing retrenchment as a result of intense recessionary pressures, they were designated as a vehicle to address the current increase in unemployment in the private sector.

The following excerpts from the *Federal Register* contain the Department of Labor's regulations providing for the establishment and operation of a public service employment and manpower training program under Title VI of CETA as amended, Pub. L. 93-567, 88 Stat. 1845:²

- (b) Public Service Employment and Manpower Training programs necessitated by the current increase in unemployment rates were designed to have an immediate impact at the local

¹ National League of Cities and the United States Conference of Mayors, *The Federal Budget and the Cities* (Washington: 1975), p. 3.

² *Federal Register*, Vol. 40, No. 7—Friday, January 10, 1975.

level. By making funds available for a specific, limited period of time and allowing local governments increased flexibility in the use of these funds, it will be possible to quickly provide a maximum number of individuals with employment opportunities.

- (c) To accomplish the objectives of this employment program, eligible applicants are encouraged to develop large, labor intensive employment projects which will provide immediate jobs for a maximum number of participants. . . .
- (e) In order to assure that selection criteria and time requirements of Local Civil Service laws do not prevent the prompt hiring of individuals under this program, eligible applicants may wish to redefine job classifications and take other necessary action to facilitate the prompt and effective hiring of participants. . . .
- (f) It is recognized that some local governments are experiencing severe revenue reductions and in revising their budgets, are deciding to lay-off employees. Those employees legitimately laid-off under these conditions, to the extent they meet the other eligibility requirements under the Act (30 days unemployment, etc.), may be enrolled in this program: Provided, that such employees were not laid-off with the purpose of calling them back into jobs funded under this program.

The scope and purpose of PSE as outlined above had a direct impact on public sector labor relations because it purported to widen employment opportunities for the victims of the recession by targeting the public sector where employment opportunities were perceptively drying up. Given this state of affairs, it is small wonder that public sector labor relations came under tension as it dealt with this issue.

New York City can serve well as an example of how PSE programs impacted on public sector labor relations. The public-sector unions in New York policed diligently the administration of the CETA program, and after tough negotiations with the prime sponsor and the DOL regional office, only 3,500 regular civil servants were enrolled in the program out of a total eligible population of 20,000.

CETA in its operation, from a union point of view, was the classic revolving door. On the one hand, New York City was laying off thousands of relatively well-trained permanent civil servants. On the other hand, thousands of economically disadvantaged unemployed, the victims of the recession, were brought on the public payroll.

PSE programs, in a booming economy or sector of the economy, would serve an additive national manpower policy mission. PSE would expand

the public payroll to provide "tide over" income to experienced labor force members who have lost their jobs during cycles of high unemployment. Also in an expanding economy, PSE could be used to attack problems of structural unemployment by improving the labor market status of disadvantaged groups through work experience, job training, and other services.³

CETA is a partial manpower system, not a truly comprehensive manpower delivery system for the nation, and due to this deficiency it has served to exacerbate public sector labor relations by pitting the young worker against the old worker, the white worker against the minority worker, the private sector excised worker against the recently excised public sector worker.

The AFL-CIO recognizes these problems and at the Executive Council's eleventh convention in San Francisco proposed:

Full funding by the Congress and full implementation by the labor department and state and local governments of the Public Service Employment Program adopted by the Congress in December . . . [the AFL-CIO] insists that federally financed public service jobs must be additional jobs and that state and local governments must not be permitted to fire permanent employees in order to hire temporary public service job seekers. Workers hired under the Public Service Employment program should be accorded the same general conditions of employment as regular state and local government employees.⁴

The New York Experience

The experience of the impact of PSE on public sector labor relations can be summarized as follows:

1. CETA, which began as a training and supplemental public service employment program, changed in December 1974 as the public service employment segment was increased through emergency job legislation. By April 30, 1975, the very small, "transitional," controlled public employment had subsumed the training intent of the 1973 legislation. In New York City, 10,000 to 15,000 Title II and VI enrollees were hired by the end of April 1975 and dispersed primarily to municipal agencies. The recruitment and hiring period was very compressed; the numbers of people going through the system was massive.

2. Also in April, the City ordered its first layoffs since the depression.

³ *Manpower Report of the President*, including reports by the U.S. Dept. of Labor and the U.S. Dept. of Health, Education and Welfare (Washington: 1975), pp. 39-55.

⁴ Report of the Executive Council of the AFL-CIO to the eleventh convention, San Francisco, October 1975.

The unions battled to have attrition declared the policy for cutting the City's work force. However, if layoffs were to take place, it was our position that those laid-off employees had the right to "bump" CETA workers in similar titles.

3. We had expressed this view in our letters of comment to the City on its CETA application, to which the City never responded. We believed that Regulation 96.24 (d) clearly forbade the City from keeping a CETA worker employed in a substantially equivalent title to one in which a regular employee was on layoff. We had numerous meetings with the City on this issue, but to no avail.

4. In June, the Department of Labor offered to both the unions and the City a written clarification of CETA regulation 96.24 (d) which stated that the city must replace CETA employees working in jobs substantially equivalent to those in which regular workers are on layoff, with the laidoff regular City employee.

5. Over 1400 CETA positions were found to be in conflict with titles in which layoffs had occurred. In August, the termination of affected CETA workers, and the rehiring of laidoff City employees began.

6. In September, two terminated CETA participants brought a putative class action for declaratory and injunctive relief in the United States District Court, Southern District of New York,⁵ because their employment was terminated pursuant to regulation 96.24 (d) which provides:

These regulations do not authorize the hiring of any person when any other person (a regular municipal employee) is on lay-off from the same or any substantially equivalent job. [See Sec. 205 (C) (7) (8) .] If lay-off of regular employees occur during the Title II (CETA) grant period (fiscal 1975), Title II participants (CETA employees) may not remain working in the same or substantially equivalent job within the employing agency that is affected by the lay-off. Under these circumstances, the Title II participants would either be transferred to positions not affected or be laid off (Sec. 205 (c) (8)) .

The court found for the City, dismissing plaintiffs complaint. The court stated: The existence of federally funded public service jobs created a danger that regular municipal workers holding equivalent jobs would be laid off. As a safeguard, certain provisions were inserted into the original statute. The Department of Labor is permitted to provide financial assistance to a municipality unless it determines that assistance "will not result in the displacement of currently employed workers" 29 U.S.C. 848(a) (1) (B) .

⁵ *Rivera v. City of New York*, 75 Civ. 4305 (S.P.N.Y. 9/75) .

The CETA program brought 20,000 new employees into City agencies, in titles equivalent to ones which exist in the Civil Service, and which are, for the most part, represented by the various New York City public-sector unions. There are no tests required for CETA positions and employees work side-by-side with Civil Service workers.

They must, under the CETA law, be treated in exactly the same manner as regular employees. It was incumbent upon the unions, therefore, to obtain certification for these titles—as a protection for CETA employees as well as for regular union members. Antagonism between the two groups always existed, but it increased as layoffs of Civil Service employees began and CETA employees remained on the job. Yet the CETA law, and the court decision in *Rivera v. N.Y.C.*, clearly indicate that the public service employment was never meant to displace regular City employees.

The unions, however, have had to deal with the realities of a situation that pits minority worker against minority worker for the very few employment opportunities that now exist. That is the reality of public sector labor relations in a context of public service employment programs that were designed to fulfill job needs which have tripled since its inception in 1973.⁶

Implications for the Future

Public sector unions have had to clarify the intent of PSE in an attempt to protect seniority principles, which are some the most fundamental elements of traditional union philosophy. In addition, they have had to attack the revolving-door aspects of current programs. In the future, public sector unions will address the goals of PSE, particularly for those CETA workers we have organized. We will, at the bargaining table, review the program's purpose, which is to assure career advancement and training, and we will police PSE's administration to ensure that PSE transitional employment will enable individuals so employed to move into regular public or private employment.

We must direct PSE programs, to the extent feasible, into occupational fields that are most likely to expand within the public or private sector as the unemployment rate recedes. As long as national PSE policies do not provide for real economic growth and stabilization, public sector unions will not be able to address the real questions of PSE. We will continue to react to the contradictions that flow from our present PSE policies.

⁶I would like to acknowledge the helpful comments of Alan Viani, Joan Stern Kiok, Marsha Sirkin, Marcia Lamel, and Reuben Rosenberg, as we reviewed the public-sector labor relations impact of CETA as it was experienced in New York City.

Jobs, Upward Mobility, and Bargaining in the Public Sector

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Northwestern University

Thirty years ago (1944), soldiers with fixed bayonets rode the Philadelphia trains and street cars, busting a two-week strike of the Philadelphia Transportation Company over the issue of whether black transit workers would have the right to apply their seniority system-wide. The gut issue was racial. Black workers had accumulated heavy seniority in essentially "second class" (janitorial, maintenance, service) jobs. Franklin Roosevelt had used his presidential emergency powers of World II to impose FEP (Fair Employment Practices) authority to end racial discrimination in what was then the nation's second largest city transit system.

Until that time, only whites ran the streetcars and operated the subway trains. Blacks cleaned them, maintained the rolling stock under white supervision, and cared for the miles of tracks and the station platforms and toilets. The President's order meant that blacks could use their seniority to bid on the more lucrative and higher status motormen jobs. The unionized whites revolted, struck, shut down a vital city operation and defense industry, and lost under the guns of federal soldiers who kept the transit system running. Blacks won the right to apply their often high seniority to better jobs in the system. They were the first to integrate a mass transit agency in America. Shortly thereafter the Philadelphia Transportation Company was socialized and became a part of the city government in law as well as it had previously been, *de facto*, a public operation.

This story is not too different from the disputes swirling around the Comprehensive Employment and Training Act (CETA) and the welter of other federally financed public employment programs that impact heavily on collective bargaining arrangements. The issues are those of job protection and enrichment for people who, by and large, have just begun to "make it" as opposed to creation of opportunities for people who have been historically "locked out." Today, these issues are drawn in terms of complex CETA regulations, civil service systems, and collective bargaining disputes.

An even more poignant conflict of those who "have" against those

who “aspire” was that of the Memphis, Tennessee, majority citizen taxpayers who, through the spokesman they elected mayor, told the aspiring garbage collectors that a living wage and union membership rights were not in the “public interest.” The Reverend Martin Luther King was assassinated as he led the aggrieved black public workers in their struggle for equal treatment.

I couch these true stories in a “black-white” and “have”–“have not” context because they sharply and accurately draw the picture, the dilemmas, the frustrations, of using public employment as a social tool. Today, these issues are characterized as technological and nonideological problems.

And, these issues tend to be framed in traditional current economic analyses. The questions try to relate the growth of employment in the public sector with collective bargaining advances. The issues most widely discussed are those of layoff and rehire as between subsidized and nonsubsidized workers; rights of new entrants versus those on the job; payment of prevailing wages for new CETA hires under public service jobs programs; the hiring standards used for creating public service jobs supported by federal money as opposed to the standards used for “normal” jobs required to perform state/local services; the organization of CETA and other federally funded workers by public unions; and, finally, the extent to which public employee organizations have been a part of the new federal financing of state/local jobs.

David Zimmerman has eloquently laid out these problems in his thoughtful paper on “The Impact of Public Sector Employment on Public Sector Labor Relations.” My purpose here is to complement his work by giving a historical insight into the problems, by presenting my personal experiences with some of the issues over the 25 years during which I’ve been involved, and to relate the issues to similar ones in the private sector.

There are two basic points I offer for debate. The first is that public employment has, throughout history, been a tool for social purposes and, usually, for upward mobility of those historically “locked out” of society. My second point is that the issues currently confronting public sector bargaining in the face of federal subsidies are not significantly different from those presented in government subsidization of private sector economic activities.

Public jobs have nearly always been used as vehicles for social achievement and as avenues of “upward mobility” for the locked-out. Herodotus tells us that the great pyramid of Khufu (about 2590 BC) employed a continuous average of 100,000 people for about 30 years. For the next 1,500 years the Egyptians had a public employment pro-

gram that built at least 35 major governmental structures. These employed a mixture of ad hoc labor (usually slaves), "civil servants," and governmental administrators.

The Chinese are credited with inventing bureaucracy. From 350 BC until at least 1700 AD the Chinese employed masses of people to build the Great Wall of China. It stretched about 1,250 miles along the Chinese frontier, providing an important social service to the area and creating public jobs.

The Romans had a public employment program. From as early as the first century AD, freed slaves who had become Roman citizens were employed extensively in public works programs.

Though our information is scant, it seems that the Mayan and other pre-Columbian civilizations in American organized massive public works programs that created jobs for their people.

A cursory look at Europe indicates that public employment is a linchpin in the economies of most European nations. I recall spending eight hours in 1966 with M. Louis Joxe, then Minister of State for Charles DeGaulle. M. Joxe railed against the power of central government bureaucracy, but pointed out that government provided the greatest opportunities for self-development in France.

The view from Italy is not much different. There the heroic attempts of Garibaldi to unify the country have resulted in an interesting 20th century schism. The northern, industrial section of Italy is dominated by private sector enterprises. The southern, rural section of the nation has usually been depressed and its people have sought public jobs for the security, pay and status these represent. A consequence has been that Italy is now largely ruled by a government bureaucracy drawn from the South.

In some ways the United States is not much different. The turn of the century found the Irish "cop" dominating big city employment systems. The military leadership classes of our society were largely drawn from the rural, nonindustrial South for the period between World War I and World War II. In the 1930s Jews found civil services in the East to be major avenues of upward movement. This kind of government employment clearly offered opportunity for upward mobility, status, and security.

In the Depression years, government was explicitly used as an employment generator. The WPA and PWA programs of the New Deal, along with creation of the Employment Services and other institutions, represented substantial growth of government. The civil service reformers of the National Civil Service League and others got into this act by demanding recruitment, tenure, and promotion standards.

"Rosie the Riveter" invaded the U.S. Naval shipyards of World War II, successfully challenging the status, credential, and promotion systems then intact.

In the 1950s, the struggle was epitomized in the government health field. Again, government was a major source of upward mobility. During those years, I organized the New York City hospital system (some 17 hospitals employing about 18,000 "nonprofessionals"). Two of the substantive issues with which we dealt were promotional opportunities for those within the system and job security for all. We answered the promotional question by creating the new title of Licensed Practical Nurse (LPN) in the nursing field and by developing career lattices in other fields.

Because government was seen during this period as a prime vehicle for upward mobility, there was a natural conflict between the two groups seeking advancement in New York: the Blacks and Spanish-speaking. The union tried to resolve the issue by upgrading all employees and by eliminating the "caste system" that then prevailed in hospitals. A result was that health fields later fully developed the concept of the "paraprofessional."

During the 1960s Frank Reisman and Arthur Pearl developed the idea of "New Careers." Implicit in this concept was the idea that new government jobs would be created *outside* the traditional civil service systems. Employees would band together in "New Careers Associations" that would lobby and bargain with the system. The government was paying the bill for the New Careerists' jobs. Reasonably, they did not effectively organize to fight for their rights within the system.

These facts are merely illustrative of my first point: that public sector employment has historically been an avenue of upward mobility and a prime provider of jobs. A careful historian or economist might point out that this is reasonable, in fact that the idea of private enterprise employment is neither an ancient nor a particularly pervasive form of economic organization.

Nevertheless, the notion of massive public employment is a relatively new one in the United States. In spite of the fact that governments now employ 19.6 percent of the work force, are continuing to show a net *growth* in jobs, create two out of every five new jobs, and have never since the Great Depression had an unemployment rate of 3 percent, we in America are prone to disdain government employment. In 1968, I wrote then presidential candidates Hubert Humphrey and Richard Nixon asking their views on government being the "employer of *first* resort." Both answered with great caution, inveighing against "leaf-raking" and other such horrors from the thirties. Neither noted the

substantial social, public works, job-dignity contributions of the "alphabet soup" programs of the New Deal (e.g., PWA, WPA).

Barely two years later, then President Nixon wrote me a letter commending the work of my organization—the National Civil Service League—in pioneering a public jobs programs for the disadvantaged. His 1971 Manpower Report devoted a whole chapter to public employment and two specific programs we were conducting. The next year's Manpower Report showed that all federal manpower programs combined were spending a little over \$5 billions of dollars. My estimate at the time was that about 60 percent of these funds were being spent on public sector job creation and training. That estimate stands today. There is no question but that the federal government is permanently in the business of financing state/local jobs.

What of the critical issues raised about the impact of public service employment on collective bargaining among public employees?

If we turn our thinking around a little bit, I believe the problems will not seem so serious as they do at first glance. First, we should recognize that public sector unions are not only relatively new as substantial power bases, but are also gaining maturity in an era and within employment systems that are far more sophisticated than was the case when private unions were growing in the 1930s and 1940s. One small indication of this complexity is in the fact that the American Federation of State, County, and Municipal Employees (AFSCME), AFL-CIO, recently turned out a 239-page packet on CETA for use of local union leaders.

Secondly, if we think of federally supported job programs in the context of Daniel Bell's "post-industrial society," we will recognize that the federal government is merely buying services from state and local governments. This is appropriate in a service society. It is inevitable in a society that is increasingly shifting its resources from the private to the public sectors. Thus, the problems of seniority, "leap-frogging," layoffs, phony job titles, and union security are not significantly different from those same problems when the government buys airplanes from Boeing, tractors from General Motors, services from General Learning, or war chemicals from General Analine. Rather, it is buying services from general governments.

The real issue is one of relative strength of public sector unions in dealing with public employers. To the extent unions of government employees think in traditional trade union terms and have both the muscle and imagination to force government employers to do the same, they will deal with these problems in historic union terms. In fact, it is quite possible—even likely—that public unions will negotiate with

the federal government to make federally funded jobs programs into vehicles to strengthen public employee bargaining among state and local governments.

As long as both parties recognize that many perceive a strong sense of "public interest" and welfare in public bargaining, they are likely to modify these traditional bargaining devices.

DISCUSSION

CHARLES C. KILLINGSWORTH

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Once upon a time, civil service employment was a world apart—no layoffs, no collective bargaining, few changes in routine. But this once-placid world has been rudely shaken up in recent years. Inflation has eroded salaries and benefits, and union organizing drives have made unprecedented gains in state and local government employment. Then came a sharp recession and multiple local fiscal crises, and the sudden realization that layoffs from government jobs are not unthinkable after all. Finally, the federal government created a kind of parallel civil service in the form of a public service employment (PSE) program, federally financed but largely administered by state and local governments. This set of major changes in a once-placid world has created major problems of adaptation. The papers presented in this session provide an instructive survey of these problems, although they understandably give us more questions than answers.

Although some of the problems are unique to the public sector, others bear some resemblance to recent problems in the private sector. The comparison with equal employment opportunity problems in the private sector is especially apt. I suggest that a consideration of private sector experience may provide some general guidelines which will be helpful in dealing with the somewhat similar problems of meshing together public service employment programs with old-line civil service employment.

In an arbitration hearing which I conducted in a steel plant recently, a witness was asked whether he had more or less seniority than John Smith. "Well," he replied, "before the consent decree I was older than Johnnie; but now I'm younger than he is." This answer was given with a smile. Its significance is that it illustrates the peacefulness of the seniority revolution which has taken place in the steel industry in the last few years. Some observers expected this revolution to be bloody, literally as well as figuratively. Seniority patterns were long-established and reasonably similar throughout the steel industry. The changes required by the consent decree, which settled a massive Equal Employment Opportunity Act suit, were far-reaching and affected scores of thousands of workers. But the patterns of change had been carefully bargained out by the United Steelworkers and the basic steel firms, and then an extensive educational effort was undertaken. The

transition was not painless, and there is still tension in some plants, but no blood has been shed. The integration of seniority systems in steel has been far more peaceful than the integration of school systems in the North. One of the basic functions of collective bargaining which has been too little noticed is the accommodation of conflicting interests within the work force. The steel industry consent decree is illustrative, not unique.

We must recognize, of course, that the Steelworkers Union is sophisticated and firmly established in its industry, and company bargaining representatives are equally sophisticated and experienced. Few if any public employee unions or public employer representatives can match the sophistication and experience found on both sides of the table in steel. But I suggest that the instrumentality of collective bargaining even in the public sector may have greater capabilities than are generally recognized for solving the problems which have been laid before us in this session.

Another lesson from private sector experience is that it is crucially important to assign each kind of bargaining problem to the *proper level*. In steel, some problems are dealt with at the industry level; others, at the company level; others, at the plant level; and still others, at the department level. Obviously, it is essential to avoid having different answers at different levels, and conflicts in jurisdiction must be carefully worked out, as in our federal-state-local system of political government. Not only steel, but many other large-scale industries have successfully dealt with this problem in collective bargaining.

One point that this private sector experience suggests to me is that it would be desirable and productive for the Employment and Training Administration (formerly Manpower Administration) to form an advisory committee of labor and management representatives to assist in devising solutions to some of the operating problems that have arisen in the public service employment program. Some private sector representation on such an advisory committee might prove to be particularly helpful.

The intent of the Comprehensive Employment and Training Act (CETA) appears to be that there will be a sharing of decision-making among federal, state, and local authorities. This act, however, does not provide very specific guidance concerning the exact kinds of decisions to be made at each level. As previously suggested, this precise division of authority is a matter that should be given the most careful consideration. The papers at this session suggest some tendency to pressure the federal authorities to overturn policy decisions that are unacceptable to employees and their representatives, and to keep hands off other decisions

which employees and unions find acceptable. This kind of ad hoc approach to the sharing and division of decision-making authority is not likely to prove very satisfactory in the long run.

One apparent policy conflict that should be resolved quickly seems to be reflected in the papers for this session. Established, regular civil service employees contend that they should not be displaced by the PSE employees; but the regular employees also contend that they should have the right to "bump" PSE employees in order to avoid layoff. The first contention is entirely consistent with the intent and provisions of CETA, even though there have undoubtedly been violations of the no-displacement provisions (just as there are always violations of traffic laws and other laws). In my opinion, no one really knows how widespread these violations are, although some economists have already given us some precise (and alarming) answers, based on sweeping but unverified assumptions. I suggest that the self-interest of regular civil service employees will be helpful in preventing such displacement, or in bringing it to official attention if and when it occurs.

Unlimited bumping rights for regular civil servants to PSE jobs cannot be justified. Although it is probably true that widespread layoffs from civil service jobs were not foreseen when the PSE program was debated and adopted, I am not aware of any intention to give a priority to laid-off regular civil servants in filling PSE slots. To provide an absolute priority, on the rationale of recognizing established seniority rights, would have the effect of converting a measure intended for the benefit of unemployed workers generally into one which protects the job rights of a small fraction of the labor force. I would argue that equity demands that regular civil service workers should receive a proportionate share of PSE jobs but not an absolute priority.

In conclusion, I want to call attention to the extent to which the problems that we have been discussing are the product of the particular characteristics of our present PSE program rather than the necessary result of the inherent characteristics of *any* PSE program no matter how it is administered and financed. Some of the problems, as I have already pointed out, result from the general decentralization of manpower programs that is decreed by CETA. In this respect, CETA represents a brave experiment. The decision to decentralize manpower programs rested more on faith and ideology than on experience; many people felt that manpower programs *should* work better under greatly enlarged local control. I do not think that the returns are in yet on this brave experiment; but I am sure that they will be mixed—that is, there will be some positive findings and some negative findings, and the problem will be to decide which outweighs the other. The conclusion

may differ from one program to another. I do not contend here and now that local administration of a PSE program cannot be successful; but I do insist that some of the problems—especially displacement—would obviously be substantially alleviated if not eliminated by federal administration.

We should also recognize the extent to which the problems that have been laid before us are the result of the relatively small size of the present PSE program. To dramatize the point, let us suppose that the federal government were made the “employer of last resort,” as is currently proposed in some quarters. Most of the controversy over “bumping” would disappear. The whole question of priorities in hiring for PSE jobs would be solved. Every applicant would be offered a job. The elimination of some present administrative headaches is not a conclusive argument for adoption of the “employer of last resort” proposal, of course. My point simply is that the current PSE program is very small in relation to the number eligible for it. The last report that I saw indicated a current total of approximately 325,000 slots in the PSE program, compared to 7½ or 8 million unemployed workers, most of whom could qualify for one of the PSE jobs. When you have so many potential claimants for so few slots, the rationing system must be harsh and in many respects arbitrary. It is well to remember that many of the current problems and complaints concerning the PSE program do not prove that such a program is inherently deficient; rather, they support the need for revisions and enlargement of the present embodiment of the PSE principle.

DISCUSSION

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All three papers in this session demonstrate the complexity of public sector labor relations in a period characterized by high levels of general unemployment and intense labor-market competition for a relatively limited supply of desirable jobs. As Zimmerman points out, the issues raised by the relationship of public sector unionism to public service employment are essentially the same as those raised by questions of affirmative action. In both cases, an effective implementation of policy implies the transfer of significant numbers of Americans from the "secondary" to the "primary" sectors of the economy (in dual-labor-market terminology). Given conditions of pervasive unemployment and job insecurity, there is no conceivable way by which the conflicts engendered either by affirmative action or "public service employment" can be satisfactorily resolved. Only through a national full-employment policy can these two programs, commonly perceived as being of most immediate and concrete benefit to unemployed or underemployed minorities and women, be made acceptable to the currently employed majority. Unions in the public sector have a particularly strong incentive to support an expansionist, full-employment policy, because they are affected *both* by affirmative action *and* by public service employment.

Cases of union resistance, whether to affirmative action or public service employment programs, may arise because American unions, in Peter Doeringer's words, historically have accepted the inevitability of high levels of unemployment and have adjusted their policies to that assumption, sometimes hindering new entry into organized trades and industries as a means of protecting the jobs of existing union members. Protecting the jobs and incomes of their members is a primary, and quite legitimate, concern of unions, but it can readily induce conflict with the goals of public service employment (as well as those of affirmative action). The degree of tension in the public sector may be related to the alternative types of public service employment envisaged, which, in my view, could be categorized in the following ways:

1. A short-term public service employment program, designed mainly as a temporary and transitional antirecession measure (e.g., Title VI of CETA), where the key question is whether such employment should be treated the same as permanent employment for labor relations and personnel policy purposes. If in fact it is so treated, the increased cost to

the prime sponsor limits the amount of transitional employment which can be generated for a target group presumably interested in returning to private employment and primarily concerned with the money income available through PSE in a recessionary period. It might well simplify the issue of public sector labor relations and enhance the interests of a longer term PSE program (directed to the chronically unemployed or underemployed) if the needs of the temporary unemployed could be met through an extended and expanded system of unemployment compensation with built-in training and retraining opportunities, rather than through PSE.

2. An intermediate longer run job development program for the public sector, meshed essentially into the existing civil service and labor relations structure (any prevailing collective bargaining provisions governing hiring, promotion, job classification, and fringe benefits would apply). Much of the public service employment generated under Title II of CETA would fall in this category.

3. A more advanced type of PSE, in line with the "New Careers" concept, with extensive job redefinition, review of hiring standards, and a new system of delivery of basic human services. This is the most progressive and innovative approach, but perhaps the most complex and threatening in terms of labor relations. It raises the possibility of tension between the new paraprofessionals and the older or more established professionals, all of whom may be encompassed within the same bargaining unit. Tension may arise, for various reasons, even though the professionals suffer no decline in income or change in job title. Paraprofessionals may demand significantly more pay if they are performing functions formerly performed by higher paid professionals. Given budgetary constraints, a prime sponsor may face a choice requiring it to limit salary increases for the higher paid so as to make provision for relatively more generous raises or promotions at the lower levels. This could create a tactical problem for unions which represent both groups.

In a labor relations sense, these issues become especially complex when union organizing focuses upon groups of jobholders who wield a critical influence upon (and, oftentimes, a "life-and-death" power over) their "constituencies:" doctors and other health professionals, teachers, policemen and firemen, welfare workers, among others. Here we must balance the equities of tenure and security for those already "in the system" against the rights, and the need for entry, of previously excluded groups who may have quite different characteristics in many respects. In recent cases, we have observed how the traditional prerogatives of existing union members may conflict with other social movements and goals: community control of schools, the hiring of "uncertificated" or

“uncredentialed” persons into technical or professional positions in government, redefinition of roles for policemen and others. Unions and other groups can reasonably differ over the question of what constitutes “qualification” for the performance of any given job in the public sector.

Some unions have reconciled conflicts and balanced claims with skill and effectiveness, focusing upon “organizing the unorganized” and extending collective bargaining benefits to all within the bargaining unit. By taking this position, they can undoubtedly help to underscore and preserve the permanency of useful public service employment and prevent the growth of a new “secondary labor market” within government. On the other hand, the relative permanency and cost of the employment offered may induce prime sponsors to “cream” within the eligible population and not to take perceived risks with the hiring of those who may represent a needier and more disadvantaged group. To combat this tendency, public sector unions might usefully ally themselves with legitimate and reasonable demands for review and validation of prevailing hiring standards.

Although I am conscious of the dangers inherent in historical analogies, I would suggest that public sector unions are at the same organizational crossroads as the American labor movement was in the mid-thirties, when the conflict between craft and industrial unionism reflected a fundamental policy clash between those who wanted to “organize the unorganized” and those who were exclusively concerned with protecting the established interests and rights of workers who were already union members. In that period, the issue arose because technological and economic factors had changed the nature of production and employment and, therefore, the basis for union organization, in certain of the basic industries. Today, a somewhat similar issue arises because of a relative switch of employment to the services sector, and especially to government and the nonprofit sector, and a growing interest in and demand for new forms of human service delivery in a variety of fields. PSE then becomes both a means of providing jobs for the unemployed and a channel for change in existing service systems. As Persons points out, however, such change can lead to irreconcilable conflict if general economic conditions require the pitting of one group against another for a too limited supply of jobs.

VII. COLLECTIVE BARGAINING AND COMPARABILITY IN THE FEDERAL SERVICE

Collective Bargaining and Comparability in the Federal Sector

STEPHEN A. KOCZAK

American Federation of Government Employees

It is with pleasure and honor that I have this opportunity to participate in this panel assembled by the Industrial Relations Research Association to discuss the subject, "Collective Bargaining and Comparability in the Federal Sector." I bring you greetings from AFGE president Clyde Webber, executive vice-president Dennis Garrison, and secretary-treasurer Nick Nolan, all of whom welcome your willingness to consider all sides of this important subject.

A favorite theme of federal managers is that a new system of labor-management relations, equivalent to collective bargaining, is emerging in the federal area. The generic term chosen for this so-called "genuine collective bargaining" is "bilateralism." According to this argument, the many disparate modalities of "consulting," "advising," negotiating contracts in specified areas that exist in the federal sector are a "collective bilateralism," which can be considered a new species of "collective bargaining," producing the same results as the classic system in private enterprise. It is stressed by proponents of this doctrine that federal management and labor representatives have now as many, and perhaps even more, latitude to resolve labor-management issues through the establishment of such "bilateral" instrumentalities as the Prevailing Rate Advisory Committee for blue-collar pay and the Agent/Federal Employees Pay Council system for white-collar pay. The more exuberant supporters of this view even allege that this system surpasses the private sector collective bargaining methodology by providing continuity of discussions and of the exchange of ideas.

This "bilateralism" thesis of collective bargaining is, in my opinion, a pseudo-thesis and disregards the basic issue. For genuine collective bargaining, at least two criteria should apply. First, the system should

collect together the representatives of all the interested parties, labor and management; and second, it should provide a means to collect together all the important issues for periodic review. This permits both sides to select their own order of priorities and to negotiate in terms of all the assembled or "collected" issues.

"Bilateralism" as practiced in the federal service does not do this, but *disperses* the issues, fragments and segregates them into "technical" discussions involving charts and data in such a manner that labor's policy priorities cannot be placed in proper order. Consequently, the "bilateral" machinery is a device that prevents the formulation and presentation of the most important policy goals of labor at any place within the "bilateral" system. Today, federal employees must continue to seek the attainment of their proper goals before Congress and in the courts rather than in genuine discussions with management. In this sense, therefore, it is not inappropriate to say that the subject of our panel, "Collective Bargaining and Comparability in the Federal Sector," is fictitious. Speaking strictly, there is no "collective bargaining" in the federal sector even today, and whatever pay comparability existed in the past is rapidly being eroded.

At this time I should like to turn this discussion away from a debate on structure and show the results of "bilateralism" in the matter of federal white-collar pay comparability.

Federal White-Collar Pay Comparability

The principal, perhaps the only important, gain that federal employees and their unions have received from enactment of the Federal Pay Comparability Act of 1970 is the requirement that the President set an annual pay adjustment. Save for that provision, federal employees would be even more behind in comparability than they are now.

One can demonstrate rather easily by statistics that federal white-collar pay lags far, far behind comparable private enterprise—especially at the lowest grades (GS-1 through GS-7) and at the highest grades (GS-16 through GS-18). One can also easily point to the fact that the predominant populations in the lowest grades are women and minority employees; and the predominant populations at the highest grades are extraordinarily talented and dedicated persons. But it is difficult to *explain easily* how these two sets of harmful circumstances have come to exist.

The presentation of these issues would be difficult in any case; it is also rendered almost impossible because the President's agent has channeled all its discussions into a specialized technical language, which has substituted "language of art" meanings for the regular and ordinary

meanings of the same words used in other discourse in the English language. This procedure has resulted in the agent's frequent use of "misplaced concretion" to intersperse disparate and improper data at all levels of drawing the payline, while claiming to be recording merely the objective facts.

The labor unions have sought for five years now, for example, to have third parties, drawn from recognized experts, from the professions, and from the universities, to review definitions of jobs, weighing techniques, and the proper "curve-fitting" to establish a payline with proper "internal alignment" between grades and proper "external alignment" with jobs at the same level of difficulty of work in private enterprise.

The Agent has resisted all these efforts, excepting the proposal to have a third-party review the job definition of "Secretary/Computer Operator." But even this single commitment of the Agent is now in suspense on the advice given the Agent by the Department of Justice, and the resolution of this impasse may have to be taken to the courts to require the Agent to comply with its undertaking to the Council of labor unions.

The Problem of Discussing Policy Issues As If They Were Primarily Technical Matters

I should like to indicate to you how such an important issue as pay equity in the lower grades, composed primarily of women and of minorities, is frustrated by its being treated as if it were primarily a technical issue. As an example of the problem may I give you two population fact-sheets for all grades and a third sheet showing the shortfall in pay rates for the GS-4, GS-5, and GS-7 (in the lower grades) as compared with private enterprise pay in comparable grades (Tables 1, 2, and 3).

A Technical Discussion of "The Paradox of 1975"

This is perforce a "technical" or statistical discussion of fundamental policy issues that could be better discussed in another framework. It demonstrates how important issues, affecting the most critical matter of equity in pay and equal employment opportunities for all, have to be discussed, unfortunately, in the technical language I shall use herein-after. I ask you: Is this a good forum for collective bargaining?

The term "Dual Payline" refers to a new system introduced by the Agent in 1973 over the objections of the Council to change the traditional fourth step reference point to a so-called "average" reference point, in effect reducing pay in several grades as much as 3.0 percent over a period of three years.

The inadequacies of the Dual Payline system became obvious to all in 1975 with the emergence of a major and irresolvable paradox. The

TABLE 1
Fact Sheet: Women in Federal Employment

Women in full-time white-collar employment, excluding postal, totaled 586,470, or 40.8 percent of 1,392,006 as of 10/31/73. Women comprised over three-fourths of the work force for General Schedule Grades GS-1-4. This rate declined to approximately one-half for grades GS-5-8, dropping to about one out of five workers for GS-9-11, and less than one out of 20 for the remaining grades GS-12-18. Below is a breakdown of women in full-time white-collar employment by General Schedule and equivalent grade, excluding postal, as of 10/31/73.

	Total Employment	Women	Percentage Women of Total
			%
GS-1	3,810	2,610	68.5
GS-2	35,955	27,773	77.2
GS-3	106,879	82,470	77.2
GS-4	167,451	124,800	74.5
GS 1-4	314,085	237,653	75.7
GS-5	177,584	116,277	65.5
GS-6	85,890	56,723	66.0
GS-7	123,058	51,790	42.1
GS-8	31,720	15,303	48.2
GS 5-8	418,252	240,093	57.4
GS 9-11	323,728	70,420	21.8
GS 12-13	243,543	16,735	6.9
GS 14-15	82,504	3,337	4.0
GS 16-18	9,450	216	2.3

TABLE 2
Fact Sheet: Minority Federal Employment

General Schedule or similar (white-collar) employment, excluding postal, as of 5/31/73 was: total employment, 1,330,581; minority employment, 217,346; percentage minority employment, 16.3.

Level	Total Employment	Minority Employment	Percentage Minority of Total Employment
			%
GS-1	4,665	2,141	45.9
GS-2	35,962	11,481	31.9
GS-3	107,189	31,426	29.3
GS-4	167,183	43,997	26.3
GS 1-4	314,999	89,045	28.3
GS-5	169,174	39,253	23.2
GS-6	79,073	17,196	21.7
GS-7	109,628	18,323	16.7
GS-8	28,985	4,582	15.8
GS 5-8	386,860	79,354	20.5
GS 9-11	314,738	31,552	10.0
GS 12-13	230,296	13,308	5.8
GS 14-15	77,871	3,885	5.0
GS 16-18	5,717	202	3.5

TABLE 3
Shortfall in Pay Rates

Grade	BLS Data 4/1/75	Originally Proposed GS Rates 10/1/75	Federal Underpayment in Dollars	Federal Underpayment in Percent
GS-5	\$11,544	\$10,134	\$1,390	13.90%
GS-7	\$13,266	\$12,526	\$ 704	5.90%
GS-4	\$ 9,464	\$ 9,050	\$ 404	4.57%

official BLS data indicated a trend such that salaries of clerical employees in private enterprise had advanced 9.3 percent, while those of professional employees had progressed 8.6 percent. Yet, when these data were converted into the Dual Payline, the relationship was inverted and the indicated increase of a clerical employee at GS-1 was 8.10 percent, while that of professional employees at GS-15 was placed at 9.99 percent.

The Need to Remedy the Dual Payline and the Present Intergrade Differential System

The basic distortions so obvious this year derive from a series of incorrect assumptions, unexamined facts, and a questionable methodology inherited from the past.

INCORRECT ASSUMPTIONS

One of the incorrect assumptions, producing the paradox this year, is that the present system of computations would invariably correctly produce the appropriate aggregate or global rate of increase (i.e., determine the overall payroll budget increase) as well as provide the proper intergrade differential (the distribution of salaries among grades). This assumption has now been proven to be manifestly incorrect, so far as the Dual Payline is concerned.

The following questions, therefore, now need to be examined: Can *some other single system of computations, based perhaps on other intergrade differentials*, establish the appropriate grade results? Or do the complexities and equities involved necessitate the installation of at least a two-phase system—one to determine the appropriate global increase and the second to assign pay according to equitable intergrade differentials?

UNEXAMINED FACTS

As its justification for the Dual Payline, the Agent has repeatedly asserted that it had no alternative but to proceed to its installation in order to achieve a genuine comparison of "average pay" in the federal

government with "average pay" in the private sector. This argument will be shown to be faulty for a variety of reasons.

First, the BLS has never gathered together, in the PATC survey, the "actual average" of private enterprise rates. At the best, the BLS rates are merely "representative averages" and not actual averages. Consequently, it is statistically fallacious to claim that the Dual Payline is based on a comparison of "actual Federal averages" with "actual private enterprise averages."

This fallacy is apparent to anyone who examines the data included in the current Agent's Report for 1975. For example, the BLS reports *no* certifiable rates at all for GS-8 and GS-10; and, at GS-6, there are only 288 matches of Key punch Supervisor IV. There are so few that the GS-6 rate cannot be used in composing the payline. (The rate for Key punch Supervisor IV, incidentally, is \$14,310, which is \$1,044 higher than the average for GS-7.)

Under this system of drawing the payline, the Agent consequently uses no datum at all for private enterprise pay in GS-6, GS-8, and GS-10. Consequently, there is no "average" in private enterprise to match. Yet, on the federal side of the ledger, the Agent has counted the pay of every employee, including those on special rates, in determining that the median step has to be moved.

Let us then examine the existing situations so far as median step and "average" salary go and what impact these grades have on both. Table 4 tabulates the median, the mean, the mode step, and the averaged mean step for all grades.

This table reveals that the highest median, mean, mode, and weighted mode steps are precisely in GS-6, GS-8, and GS-10, *for which there is no datum whatsoever used in constructing the PATC payline*. Since there is no datum in private enterprise with which to compare these grades, why then are the data of "average salaries" in GS-6, GS-8, and GS-10 used in developing the alleged "median, mode, and weighted mode steps" for federal employees? The answer, of course, is simple: *to drive the pay increase downward*. This becomes even more apparent when one realizes that the only BLS data available for GS-6 (Key punch Supervisor IV at \$14,310) is \$1,044 higher than the BLS average for GS-7 (\$13,266).

In Table 5, the median, mean, mode, and weighted mean of the three grades are compared with their totals for all 18 grades. The total number of federal employees in GS-6, GS-8, and GS-10 exceeds 130,000. Collectively, the total exceeds the population of GS-7, which is 129,502, and employees in these three grades comprise 10 percent of the entire General Schedule work force. A statistical distortion of the magnitude of 10 percent is scarcely permissible in a system pretending to the degree of refinement claimed for the Dual Payline.

TABLE 4
 CPDF General Schedule Computation Summary:
 Full-Time Employment as of March 1975^a

Grade	Median Step	Mean Step	Mode Step	Weighted Mean Step
01	1	1.6058	1	1.6523
02	1	1.8533	1	1.8700
03	2	3.1340	1	3.1512
04	4	4.4621	1	4.4828
05	5	4.9759	1	5.0679
06	6	5.5689	4	5.5849
07	4	4.5680	1	4.6775
08	6	5.6656	4	5.6753
09	4	4.5590	1	4.5787
10	6	5.7099	7	5.7138
11	5	4.7921	1	4.8145
12	5	4.7078	4	4.7303
13	5	4.8862	4	4.9148
14	5	4.9464	4	4.9844
15	5	5.3294	4	5.0567
16	5	5.0619	4	2.1382
17	4	3.6905	5	1.0000
18	1	1.0000	1	1.0000
ALL	4	4.6201	1	4.6442

^a This computational method takes special and saved rates into account by using average salary to determine mean step.

QUESTIONABLE METHODOLOGY

The most subtle flaw in the agent's payline slope and diminishing contour both reflect and reinforce the gravest problem to be resolved in the entire General Schedule—the disparate step and grade procedures used in establishing discriminatory pay rates in the lower grades.

In part, this flaw is the result of a failure to take proper statistical note of the actual dollar relationships of the steps to each other at different grade levels. It is forgotten that precisely because the rates of progression from Step 1 to Step 10 are identical in percentage terms throughout the entire system, the rates of progression in absolute dollar terms are not identical.

To produce a proper payline, this important circumstance should be kept constantly in mind in moving from grade to grade. The magnitude of the problem is illustrated in Table 6, where the actual dollar

TABLE 5

	All 18 Grades	GS-6	GS-8	GS-10
Median	4	6	6	6
Mean	4.6201	5.5689	5.6656	5.7099
Mode	1	4	4	7
Weighted mean	4.6442	5.5849	5.6753	5.7138

TABLE 6
Relationships of Grades in Terms of Steps Producing Discrimination
Against Lower Grades

	Step 10 Dollar Rate	Falls Between Following Steps of the Next Higher Full Grade
GS-1	7,481	Step 1 (7,350) and Step 2 (7,595) of GS-3
GS-3	9,555	Step 2 (9,544) and Step 3 (9,852) of GS-5
GS-5	12,008	Step 2 (11,811) and Step 3 (12,192) of GS-7
GS-7	14,859	Step 2 (14,417) and Step 3 (14,882) of GS-9
GS-9	18,137	Step 3 (17,943) and Step 4 (18,504) of GS-11
GS-11	21,870	Step 3 (21,399) and Step 4 (22,068) of GS-12
GS-12	26,082	Step 4 (26,075) and Step 5 (26,865) of GS-13
GS-13	30,815	Step 4 (30,578) and Step 5 (31,505) of GS-14

rate at Step 10 of each full grade is displayed along with the actual steps in the next higher grade between which that Step 10 falls in dollar terms.

From the foregoing, it will become evident that in seeking to draw any pay schedule based on constant intergrade percentage differentials, a major problem would be created in establishing the constant payline at the appropriate step. The reason is that the actual medium, or environment, at the lower grades has been structured significantly differently from the environment in the higher grades. Moving a constant percentage payline from the middle grades to the lower grades produces an effect similar to plunging a straight rod partially into water. The rod will appear to be bent!

The proper manner to construct a payline with constant intergrade differentials will be the subject of a separate discussion. It would provide an alternative to the present system of construction based on a formula of $\hat{y} = ab^x$, now used, or a proposed formula of $\hat{y} = ab^{kx}$.

Note: Robert McKersie, Cornell University, and Frederick Kistler, U.S. Civil Service Commission, also participated in this panel discussion but did not submit summaries of their remarks for publication.

VIII. ADJUSTMENT ASSISTANCE FOR IMPORT-IMPACTED WORKERS

Trade-Related Injuries and Adjustment Assistance*

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I. Trade-Related Worker Injuries

Academics traditionally begin their discussions with questions of definition. In this particular case, the topic at hand is a specific program aimed at providing assistance for worker injuries arising from international trade. Hence, it seems useful to look at alternative types of injuries.

Injuries can be broken down into two main types: those which are income-related and those which are unemployment-related. Income-related injuries mean decreases in real wages for those who are employed (or a slower rate of real wage increase than might otherwise take place). These can be subdivided into long-run/macro and short-run/micro injuries. Unemployment-related injuries are those which flow from loss of a job and/or failure to find a job. Such injuries can be subdivided into demand unemployment and structural-friction categories.

INCOME-RELATED INJURIES: LONG RUN/MACRO

Trade textbooks concentrate on the gains from trade based on simple comparative advantage examples. The student may be given the impression that if a country gains from trade, all the major groups within a country also gain. This attitude persists despite the fact that the textbook models imply that in the long run, trade may shift income distribution between "labor" and "capital."

What is even more peculiar is that the Heckscher-Ohlin model, found in any trade textbook, actually predicts that labor would be hurt by trade in the long run in capital-abundant developed countries and that

* The author wishes to thank the National Manpower Policy Task Force for its support. Opinions expressed, however, are solely his responsibility.

capital would gain.¹ In simple terms, the theory suggests that the comparative advantage of such countries will be in capital-intensive products, i.e., those which employed a high ratio of capital to labor. Labor-intensive products would be imported. The tilt in output toward capital-intensive products yields a reduction in the demand for labor. In the long run, the result is not unemployment, but rather a lower real wage. The implication is, of course, that trade restrictions, by limiting imports of labor-intensive products, will tend to repair the income-related injury to labor brought about by trade.

There are two probable reasons why this particular prediction of the Heckscher-Ohlin model is downplayed. First, the model makes us uncomfortable. Second, until recently it was empirically contradicted. The model makes us uncomfortable since it pits capital against labor domestically, and labor against labor internationally. Capital and labor are in conflict because if capital gains from trade, labor loses, and vice versa. Labor is pitted against labor internationally because if trade restrictions are used in developed countries to raise real wages, the impact is to lower real wages in the labor-abundant, less-developed countries that export labor-intensive goods.

The empirical contradiction came early in the postwar period when Leontief found that U.S. imports were in fact capital-intensive relative to exports.² The finding suggested that, if anything, trade restrictions would hurt labor and help capital. As a result of the Leontief "paradox," many empirical studies were undertaken pointing to forces that could determine the structure of trade other than factor supplies. Some of the candidates included the education and training embodied in the labor force, the availability of natural resources, technological advantages, etc.

More recent work covering the late 1960s indicates that the paradox either evaporated during that period or at least was on the road to doing so.³ That is, imports were becoming labor-intensive relative to exports, in line with the old Heckscher-Ohlin theory. It could be conjectured that this finding was the result of the rise of multinational corporations whose efficiencies reduced the transactions costs barriers to trade, the reduction in trade restrictions due to the Kennedy Round tariff negotiations, the recovery of Europe and Japan from the effects of war, and their catch-up in technology with the U.S. All of these influences make the world somewhat more like the theoretical model of Heckscher-Ohlin.

¹ For example, see Charles P. Kindleberger, *International Economics*, 5th ed. (Homewood, Ill.: Irwin, 1973), pp. 27-31, 111-112.

² Wassily Leontief, "Domestic Production and Foreign Trade; The American Capital Position Re-examined," *Economia Internazionale*, vol. 7 (February 1954), pp. 3-32.

³ Daniel J. B. Mitchell, "Recent Changes in the Labor Content of U.S. International Trade," *Industrial and Labor Relations Review*, vol. 28 (April 1975), pp. 355-75.

It is, therefore, unwise to assume that labor's real income could not be hurt by trade (or not be helped by trade restrictions), since at least one simple model predicts such an effect, and has some empirical support. And, of course, it is clear that the assistance program for trade-impacted workers does not address this type of long-run injury at all.

On the other hand, there is not enough evidence to state that trade is definitely a potential source of long-run, income-related injury to labor. Statements from the AFL-CIO in recent years have presented a nightmare vision of the U.S. as an economy of "hamburger stands," living off agricultural exports and foreign dividends, and importing virtually all manufactures. The U.S., of course, has for many years been heading toward a service economy. But it could be argued that trade tends to limit productive diversity, particularly if some import-competing industries are completely eliminated.⁴

INCOME-RELATED INJURIES: SHORT RUN/MICRO

In the short run, trade can have an effect on the incomes of particular groups within the labor force. Foreign competition constrains the pricing policies of both exporting and import-competing industries. Where collective bargaining is involved, the constraints may limit the "ability to pay" of employers.

Tariff protection, incidentally, does not solve this "problem" for unions in import-competing industries, since unless the tariff is prohibitive, the domestic price is linked to the world price, and potential wage increases will be limited by prices prevailing in international markets. This may explain the current orientation by organized labor toward protection via quotas rather than tariffs. Quota arrangements sever the link between domestic and world prices. Once the quota has been sold in domestic markets, local producers have the remains of that market to themselves. Where collective bargaining exists, workers may be able to share in this advantage.

The existing program of adjustment assistance clearly does not provide compensation for such short-run, income-related injuries. Workers who remain employed, but whose unions lose bargaining power, are not its target group.

⁴The phrase in quotes is from a statement by Nathaniel Goldfinger on behalf of the AFL-CIO in U.S. House, Committee on Foreign Affairs, *Trade Adjustment Assistance* (Washington: Government Printing Office, 1972), pp. 52-53. In a recent letter to the author, Mr. Goldfinger made the point about diversity. Part of the shift to service employment stems from relatively rapid rates of productivity growth in the industrial and agricultural sectors. Capacity remains, although relative employment demand decreases. In contrast, the trade effect may eliminate productive capacity. Of course, the gains from trade are usually attributed to precisely this specialization. The issue is what value to put on a diversified industrial base as a goal in itself.

UNEMPLOYMENT-RELATED INJURIES: DEMAND

In Keynesian models, imports have the same effect as saving, and exports have the same effect as investment. An increase in imports or decrease in exports will tend to depress demand, *if* no counteracting action is taken. Under modern circumstances, however, aggregate demand policy is centered on monetary and fiscal instruments.

Because of the development of monetary and fiscal tools, import restrictions will simply spread demand unemployment from one sector to another, but will not lower it in aggregate. Governments establish demand and unemployment targets as they try to deal with inflation and the level of economic activity. If a particular sector, through political pressure, succeeds in stimulating itself by obtaining import restrictions, the monetary and fiscal authorities presumably must make their overall policies somewhat less stimulatory. The result is more unemployment in the less politically potent sectors, and somewhat less in the favored sector.

In summary, adjustment assistance is not aimed at general demand problems that might arise from foreign trade. But unlike the previous two cases, there are alternative instruments available: monetary and fiscal policies.

UNEMPLOYMENT-RELATED INJURIES: STRUCTURAL/FRICTIONAL

The existing program of adjustment assistance is aimed *only* at structural/frictional unemployment problems arising from imports. Workers receive weekly unemployment compensation payments above what state unemployment insurance systems normally provide. Those who are displaced, but are able to find new jobs after a search period, receive some compensation and support between employment. For those who have trouble finding new positions, the program provides for training, relocation allowances, and job-search travel expenses.

II. Background of the New Program

As early as 1939, Samuelson suggested that the "gainers" from trade could compensate the "losers."⁵ However, the types of losses Samuelson had in mind were income-related. The first suggestion of a government program to deal with structural/frictional unemployment problems arising from imports was made in 1954 by United Steelworkers president David McDonald.⁶

⁵ Paul A. Samuelson, "The Gains from International Trade," reprinted in American Economic Association, *Readings in the Theory of International Trade* (Homewood, Ill.: Irwin, 1950), p. 251.

⁶ Commission on Foreign Economic Policy, *Report to the President and the Congress* (Washington: Government Printing Office, 1954), pp. 54-58.

In 1962, various forces joined to promote the Trade Expansion Act (TEA). These forces included the creation of the European Common Market which posed a potential danger to U.S. export interests. There was fear, particularly in the farm sector, that the "trade diversion" effect of this new bloc would limit sales abroad. Also important was the rise of U.S.-based multinational corporations. Multinationals represented a domestic interest group that favored freer trade, and that began to counterbalance the political influence of protection-oriented local firms. (This change in political balance and its effects on U.S. trade policy may be the most important economic effect that multinationals have had.)

To draw labor support, the Kennedy administration included an adjustment-assistance program for workers and firms injured by trade concessions. Until that time, the AFL-CIO had generally favored freer trade, but the issue had never been a "hot" topic. Nevertheless, the inclusion of adjustment assistance attracted the AFL-CIO and was a crucial factor in passing the TEA. At the time adjustment assistance first became law, its primary purpose was already accomplished: the passage of a trade bill.

When a program is proposed primarily to win support for some other program, there is little concern about content. The TEA adjustment-assistance program was flawed by sloppy drafting and neglect. It geared aid to proof that a worker's injury was due to an import *concession*, i.e., an international agreement to reduce a tariff. But there had been no concessions of importance immediately prior to the TEA, and none would occur until the negotiations authorized by the TEA were concluded. Thus, it is not surprising that no workers received aid until 1969.

The TEA established a governmental patchwork to administer the worker program. Applicants first had to prove to the Tariff Commission a causal connection between import concessions and injury. The Commission would forward its findings to the President who, in the case of tie votes, would make the final determination. He, in turn, would forward a finding of injury to the Labor Department, where another investigation would determine which subgroups of workers were eligible. Finally, individual workers had to demonstrate personal qualifications to state unemployment insurance authorities. These procedures involved an average time from injury to compensation of over one year.

It was natural that the Tariff Commission became a scapegoat. There were certainly grounds for criticizing the Commission. For example, there was no standard application form until 1972. But the Commission was bound by the wording of the law, which included parallel language

for two types of cases. The first type was worker (and firm) adjustment assistance. The second was "escape clause" relief for industries seeking tariff protection from injurious imports. This left the Commission with a dilemma. If it was "liberal" with workers, it also had to be liberal in recommending tariff increases. Liberality with respect to tariff increases could have undermined the Kennedy Round.

The next time worker adjustment assistance helped pass a trade bill was in 1965. In the automobile industry, the major firms—which operate on both sides of the U.S.–Canada border—wished to "rationalize" their production, by having the two governments remove tariffs on new cars and parts. The American portion of this arrangement was implemented through the Automotive Products Trade Act (APTA). This act included adjustment assistance for dislocated workers, winning support for the APTA from the United Autoworkers. Under the APTA, the Tariff Commission was demoted to fact-finding. Determination of injury was left to a sympathetic President. Workers were eligible for the same benefits as under the TEA, but the proof required to demonstrate injury was made less stringent. Some \$4.1 million was distributed under the APTA provisions which expired in mid-1968, proving to Tariff Commission critics that adjustment assistance could "work" if the Commission were eliminated from decision-making.

By the late 1960s, organized labor's position on foreign trade had changed drastically. The AFL-CIO supported the Burke-Hartke bill which proposed an elaborate quota system on imports. But there was pressure to liberalize trade still further outside the labor movement. The Common Market was expanding, by absorbing Britain, Ireland, and Denmark. Again, the spectre was raised of loss of markets for U.S. exports unless new negotiations took place. Concern was mounting over the effects of nontariff barriers such as quotas. Thus, there was pressure to give the President negotiating authority with respect to both tariff and nontariff barriers.

Worker adjustment assistance was brought into play a third time to pass a trade bill. Business groups, particularly those representing multinational firms, became proponents of liberalized adjustment assistance. Multinationals saw adjustment assistance as a way of blunting labor's opposition to trade liberalization. Labor, meanwhile, had backed itself into a corner. Adjustment assistance had been denounced as "burial insurance," making active participation in redesigning the program difficult. Support for adjustment assistance as it was taking shape in the Trade Act of 1974 risked compromising support for Burke-Hartke.

With business behind an enlarged program of adjustment assistance, and with labor not opposing it, a liberalized program was inevitable.

The Tariff Commission was removed from the administrative process. Administration of the worker program was put in the hands of the Labor Department, which was more likely to look kindly on its constituents. Assistance criteria were substantially eased. For example, injury must be due to increased imports, not a trade concession.

III. Evaluating the New Program

As was noted in the first section, adjustment assistance does not deal with all types of injuries which workers might suffer from trade policy. It covers only those injuries involving structural/frictional unemployment. Even so, it has the potential of becoming a large program.

It is hard to understand why all unemployed workers in import-competing industry do not file for aid. Once a request is received, the Labor Department handles the investigation. If it is determined that imports "contributed importantly" to the injury, more generous unemployment payments and other benefits are gained. If not, nothing is lost.

There are probably two factors holding down the number of petitions. The program is so new that word may not have gotten out. But as well-publicized awards occur, the ignorance effect will wear off. A second factor is that during the 1973-1975 recession, Congress provided for extended unemployment benefits under regular state systems. One of the attractive features of adjustment assistance is that benefits extend over a longer duration than most states provide. But that advantage has temporarily diminished.

Probably, the key cause for unease about the program is the difficulty in reconciling it with a sound manpower approach. Workers injured by imports are as equally worthy of assistance as workers injured by anything else. It is hard to justify singling out of an individual by the cause of his injury, particularly when the causal connection between imports and unemployment is so hard to establish. Congress should consider whether causal manpower programs—as opposed to a generalized approach—represent good public policy.

Trade Adjustment Assistance

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U.S. Department of Labor

It is appropriate for me to outline the new trade adjustment assistance program, particularly the benefit structure and the criteria governing worker access to the program. But, before doing that I will attempt to place adjustment assistance policy in the context of trade policies designed to deal with problems created by increased import competition. The Trade Act provides for remedies to problems created by increased imports resulting from fair and unfair foreign competition. The latter involves subsidies or predatory pricing practices which under the rules governing international trade provide an unfair advantage to the exporting country or company. These unfair practices which may result in injurious import competition are specifically dealt with in the Trade Act provisions dealing with antidumping and countervailing duty procedures. I won't discuss those provisions here. I note only that adjustment assistance could be available to workers injured because of unfair foreign competition.

Import competition consistent with the rules governing international trade which results in injury to domestic industries may be dealt with by trade adjustment assistance policy and what is commonly referred to as "escape clause" policy. Escape clause procedures in the Trade Act provide that industries injured by import competition may be protected by import quotas, higher tariffs, or orderly marketing arrangements for the purpose of providing an industry in the United States a respite from import competition. Trade adjustment assistance may be used in conjunction with escape clause policy or in lieu of quotas or tariffs. The International Trade Commission in its finding with respect to a particular escape clause petition may recommend that the proper remedy should be trade adjustment assistance. The Trade Commission in its actions to date under the Trade Act has not found injury to an industry and has not had occasion to recommend an appropriate remedy to import injury.

Trade adjustment assistance is available to workers, firms, and communities. The rationale for the adjustment assistance program is that it is less costly to finance special programs to facilitate the adjustment of capital and labor resources to more productive endeavors in cases where it is clear that they are not competitive than to protect marginal

firms and industries by restricting trade. It is commonly held that expanded trade results in benefits to the United States as a whole; to restrict trade by means of quotas or higher tariffs would entail costs far in excess of the adjustment cost that would be involved in assisting injured parties to make the requisite adjustments. Adjustment costs are presumed to be one-time costs, whereas costs attributable to quotas and tariffs are continuing costs, that is, costs that persist as long as the escape clause action is in effect. There is also a strong political rationale for the program that Dan Mitchell has described in his paper, which provides the basis for a limited program of adjustment assistance.

With that as introduction, I will now present the details of the new program and outline our experience to date.

The criteria determining eligibility for trade adjustment assistance for groups of workers have been eased considerably from the standards that applied in the Trade Expansion Act of 1962. Under the Trade Act, increased imports, either actual or relative to domestic production, must contribute importantly to both an absolute decline in the sales or production of a firm or a subdivision of a firm and to the total or partial separation of a significant number or proportion of the workers in a firm or a subdivision of a firm. The criteria allow for injury findings in cases where imports are falling but falling less rapidly than domestic production. According to the law, for imports to "contribute importantly," imports may be a cause that is important but not necessarily more important than any other cause. The legislative history indicates that an important cause must be more than de minimus and further states that the program is not intended to cover displacements attributable to seasonal, cyclical, or technological factors. In contrast, the Trade Expansion Act required that a tariff concession had to be the major cause of increased imports and that increased imports had to be the major cause of injury to workers. A "major" cause under the Trade Expansion Act was defined in practice as a cause that was more important than all other causes combined.

Indicative of the easing of program access has been the volume of petitions filed with the Department of Labor since the program became effective in April 1975. From April 3, 1975, through December, the Labor Department received and instituted investigations on 528 petitions involving about 335,000 workers. Under the Trade Expansion Act program, encompassing a period from October 1962 through April 2, 1975, a total of 260 worker petitions were received and investigated by the Tariff Commission involving approximately 114,000 workers. In his paper, Dan Mitchell notes that there is little expense involved in filling a petition, so why not file. Workers are doing as he suggests.

As to the number of workers certified to date, through December, 123 groups of workers involving about 51,200 workers have been certified eligible to apply for adjustment assistance benefits. Another 111 groups involving about 56,500 workers have been denied certification. Currently in process are 284 investigations involving about 225,000 workers. Under the Trade Expansion Act, a total of 110 groups of workers were certified eligible to apply for adjustment assistance benefits. Approximately 54,000 workers were covered by those certifications. The biggest cases to date under the Trade Act adjustment assistance program involve petitions filed by the United Auto Workers on behalf of employees of the three largest automobile manufacturers. The Office of Trade Adjustment Assistance is currently investigating to determine whether automobile imports have contributed importantly to the unemployment of employees of General Motors, Ford, and Chrysler who produced full-size and subcompact automobiles. Approximately 78,000 workers are involved in these investigations.

It might be of some interest to indicate the type of problems that petitioning groups have encountered under the new program, as reflected in decisions issued by the Labor Department to date. Many workers have been denied certification because of the statutory requirement that imports be "like or directly competitive" with the article produced by the petitioning workers. The definition of "like or directly competitive" is very narrow. Under the Trade Act, components are not considered like or directly competitive with the finished article unless the component is essentially one stage removed in the production process from the finished article. For example, an unglazed cherry would be considered like or directly competitive with a glazed cherry. The narrow definition was troublesome to petitioning groups under the Trade Expansion Act program and is currently creating great difficulty for petitioning groups under the Trade Act program. A group of shoe workers appealed a decision by the Tariff Commission under the Trade Expansion Act in which the Commission ruled that shoe components were not like or directly competitive with finished shoes imported into the United States. The court upheld the Tariff Commission decision, and that court decision is cited in the legislative history attendant to the Trade Act of 1974.

To complicate this particular issue further, we denied petitions from workers producing bumpers for automobiles who alleged that the finished automobile was like or directly competitive with the bumpers being produced by the workers. If the bumpers were manufactured by a subdivision of one of the auto manufacturers, the issue of like or directly competitive would not have arisen. In the petitions we are cur-

rently investigating involving the big three automobile manufacturers, we are encompassing in our investigation automobile components that are produced by subdivisions of the corporation because we consider the component production as part of an integrated production process, the final product of which is the finished automobile. Should we determine injury in that case, the decision would be in terms of injury caused by imports of the finished automobile that are like or directly competitive with the domestic production of the three automobile manufacturers. With regard to the components, we would consider component imports, if they exist; but in the absence of component imports, we would relate our finding on the finished automobile through the production process to encompass plants dedicated to the production of parts.

When the Trade Act was being considered, efforts were made to liberalize the definition of "like or directly competitive." The difficulty that immediately became apparent was that there was no convenient or agreeable way to limit the definition. For example, in the case of shoes, one may argue that the economic impact of shoe imports extends to the farmer who raises grass to feed cattle from which hides are obtained to produce, among other things, leather shoes. Congress wrestled with the issue and resolved that we are best left with the definition that has persisted through the years.

Another issue, first posed by a petition filed by the Teamsters Union on behalf of employees of the Pan American Corporation, involves the question as to whether services are covered by the worker adjustment assistance provisions of the Trade Act. The Pan Am workers were engaged in cargo handling and passenger-related services. Our decision on the Teamster petition was that services are not an "article" of commerce and that services are not covered by the worker provisions of the Trade Act notwithstanding the fact that services are covered in other parts of the legislation. Our view was that had Congress intended that workers in the service sector be covered by the program, they would have specifically stated so in the adjustment assistance provisions. But similar to the "like and directly competitive" issue, should workers engaged in service occupations be adversely affected by imports of articles like or directly competitive with articles produced by their firm, the provisions of the program would extend to those services. It is only in the case where workers' employment is related solely to services—i.e., transportation services, shipping services, etc.—and the company for which they work is not engaged in manufacturing an article that the adjustment assistance provisions do not apply.

Both of these issues may ultimately be brought to the courts for resolution. Given the intense feelings on these issues, it is appropriate that

the courts be allowed the opportunity to rule on the manner in which the Department is interpreting the law.

I would like now to turn briefly to the benefit structure of the program. Substantial modification and revision of the old benefit structure was made by the Trade Act. The amounts of cash allowances were increased. The cash allowance benefit duration for older workers and for workers in training was increased. A job-search grant was provided for the first time, and relocation assistance was made more generally available. Specifically, workers may receive cash allowances equal to 70 percent of their average weekly wage up to the average weekly wage in manufacturing. The current maximum benefit is \$176 a week for weeks of unemployment occurring after April 3, 1975. The job-search grant consists of a payment up to \$500 for workers unable to obtain jobs in their area of displacement to seek employment in other areas. Workers must pay 20 percent of their job-search expenses.

Similarly, with relocation benefits a worker unable to find employment in the area of his displacement and who has obtained a bona fide job opportunity in another locality may receive relocation assistance consisting of the reasonable and necessary expenses to transport himself and his family and his household goods to the new location. The worker is obligated to pay 20 percent of his moving expenses. Once he has relocated, the worker may also receive a lump sum cash payment equal to three times his average weekly wage up to a maximum of \$500. In addition to the cash benefits and the relocation benefits, workers may receive the training, counseling, and placement services available from State Employment Security Agencies and prime sponsors under the CETA program.

Under the Trade Expansion Act program, expenditures for benefits ranged between \$5 and \$15 million a year. Under the provisions of the Trade Act, we are estimating benefit costs to range between \$300 and \$400 million a year. One important difference between the benefits structures of the Trade Expansion Act and the Trade Act is the fact that under the Trade Act, unemployment insurance received by workers or unemployment insurance to which a worker is entitled is deducted from his trade readjustment allowance amount.

My remarks have just touched upon the dimensions of the adjustment assistance program. The success or failure of the program carries substantial implications for future direction in both trade policy and manpower policy. The program will be closely evaluated by the Congress in 1981 at which time the Congress will decide whether or not the program should be continued and in what fashion.

Adjustment Assistance for Import-Impacted Workers

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American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) policy on adjustment assistance and on international trade has changed in the past 20 years because the world has changed. When the AFL-CIO first supported adjustment assistance proposals in the mid-1950s, adjustment for frictional unemployment caused by import competition was supposed to solve most trade problems affecting relatively few U.S. workers in a dynamic economy. Economic conditions have changed.

The original adjustment assistance proposals were based on economic theories that assume that full employment exists or is attainable. Twenty years ago, in 1954, the unemployment rate averaged 5.5 percent in recession. In 1975, the unemployment rate ranged from 8.2 percent to 9.2 percent throughout the year.

This means that the idea of *adjustment*—that unemployment will be temporary and new jobs will absorb the displaced worker—has been lost. In the 1950s and early 1960s AFL-CIO emphasis was on such adjustment. (Floods of imports as in garments, shoes, or electronic components were to be regulated.) Current emphasis is on *assistance*. But even that assistance is minimal and its delivery has been more theoretical than real.

The experience with adjustment assistance made it a cruel hoax in the 1960s, and burial insurance for a very few workers in the 1970s. Throughout the 1960s no adjustment assistance payments were made under the Trade Expansion Act of 1962.

Labor Department Reports Are Misleading

Under the Trade Act of 1974, the Labor Department's published reports give the media and the public the misleading impression that a great number of workers (about 50,000) receive at least \$170 a week under the new program. Press releases are many, and payments are few.¹

¹ 1975 press releases from Department of Labor, Office of Information. In addition, International Labor Affairs Bureau, U.S. Department of Labor, provided reports on adjustment assistance certifications. Employment and Training Administration, Department of Labor, provided reports on payments. These have not been published. By December 29, 1975, an estimated 54,946 workers who petitioned had been denied adjustment assistance while 50,780 had been certified. But over 300,000 had applied.

Even if 50,000 workers received adjustment assistance, this would be a long way from solving even "frictional" problems from import dislocation. With \$62.3 billion worth of imports of manufactured goods in the year 1974, for example, dislocation of one million workers would be a minimal estimate of the actual impact.

But the fact is that 50,000 workers did not receive adjustment assistance in 1975. The reports from the Labor Department merely relate to the numbers of workers who were "certified as eligible to apply for adjustment assistance." By November 28, 1975, 138,331 workers reportedly had sent in 367 petitions after the new program started in April 1975. Labor Department reports on certifications show that the majority of workers petitioning were denied certification. A total of 103 petitions resulted in certifying 44,450 workers eligible to apply, while denials of 74 petitions turned down 47,775 workers. (An unknown number of workers were not certified even in the cases where some partial certification of the group has been made. Thus if 2,000 workers apply for certification and 1,500 are certified, 500 are lost in a numbers game.) Petitions covering another 45,000 workers were in process or withdrawn.

Fewer than 10,000 workers had received any payment at all by the end of November when over 40,000 had been certified. Thus fewer than one of four workers certified actually received any assistance. In some states, such as Illinois, the preliminary unpublished figures showed an even more serious result: Of 2,054 workers certified, 1,155 had applied for adjustment assistance and only 221 had actually received payments.

Reports about the size of trade adjustment assistance benefits are also misleading. Widely advertised as "trade adjustment allowances" that provide 70 percent of the average weekly wage that has been lost, up to 100 percent of the average manufacturing wage or about \$170 a week, the benefits sound very attractive. The law, however, provides for a deduction of unemployment insurance from that total. Thus in states where wages and unemployment insurance are high, the trade benefit may amount to a few dollars a week or nothing at all.

Reports of Easier Legal Tests Are Misleading

Aside from the cruel hoax of the public reporting on statistics, reports of easier legal requirements under the new Trade Act are also misleading. The Trade Act of 1974 provides complex and subjective tests for certification of injury from imports:

First, imports must increase. The period during which they increase is not clear. Labor Department interpretations of this one provision have made results uncertain, regardless of whether or not imports have

increased. A specific import can cost jobs even if overall imports of the item have declined in recent years.

Second, an absolute decline in the U.S. plant's production or sales of the article imported must occur.

Third, imports must "contribute importantly" to the unemployment. The meaning of "contributed importantly" has been interpreted inconsistently. It is not a clear test. But it is fair to say that each of these tests has been subjected to a variety of inconsistent interpretations by the Labor Department.

In addition, the Labor Department must find that a "significant" number of workers is displaced. The article imported must be "like or directly competitive with" displaced production.

The Labor Department has interpreted the law as meaning that an import of a finished product that displaces production of components of that product is not "like or directly competitive." Thus if imports of automobiles displace production of bumpers, no injury can be found even though imported automobiles contain bumpers. The courts made decisions to this effect under the Trade Expansion Act of 1962.

All of these legal hurdles must be surmounted before certification of eligibility to apply for adjustment assistance occurs. After certification, a new set of legal conditions must be fulfilled before any payments can be made. The state employment services administer the program.

These legal requirements are not supposed to be burdensome, but they have created disputes and delays. In some cases workers who have been declared eligible may have left the community by the time certification is granted. The worker must be within a designated group that has been displaced by the import. Company, union, and Labor Department numbers vary considerably. In one case, for example, the Labor Department certified 30 workers, the company said 12 had been affected, and the union claimed that 200 workers were affected. For the individual worker this can become a serious problem.

Identifying the workers eligible to receive payments is therefore an important question. Seniority and bumping also confuses the issue of who is eligible among the working group. Some companies have had people working on two different products—one affected by imports the other not. Those who have worked on the product affected by imports theoretically can receive assistance.

In order to qualify, the worker must have had, in the 52 weeks preceding unemployment, at least 26 weeks of employment. Thus employment records must be made available and checked. The unemployment insurance law provides for computation of benefits under a system that is different from the computation of trade adjustment allowances. These

and other legal and administrative obstacles have caused additional delays and frustrations.

Even academic experts are misled by the public reports on the law. For example, Professor Daniel Mitchell of the University of California at Los Angeles stated, "It is hard to understand why all unemployed workers in import-competing industry do not file for aid." The short answer is that all unemployed workers are not eligible even if imports cost their jobs.

James E. McCarthy, who prepared a case study of trade adjustment assistance in the shoe industry in Massachusetts under the Trade Expansion Act, made this comment about the new program: "The benefits theoretically available to workers under the Trade Act are quite good. They include cash and every conceivable service. The problem lies in the delivery of the services and in motivating the workers to make use of them."²

The benefits are not, if measured against potential losses, "quite good." As we have noted, the loss of a job in a period of high unemployment cannot be compensated by a tiny payment.

Adjustment Assistance Is Burial Insurance

The tiny program, full of legal technicalities and administrative delays, obviously cannot meet the vast problems created by rapid changes in the world economic environment. The above evidence suggests that even the program now underway will fail to make a dent in compensating those affected by unemployment caused by imports.

Despite the law's improvements in the amount of the benefits, the changes in the criteria in the law, and the government publicity about its success, there is no reason to expect adjustment assistance to accomplish much. Nor is there any reason to expect a result very different from the experience reported by McCarthy under the Trade Adjustment Program in the Massachusetts shoe industry under the Trade Expansion Act of 1962:

This study has shown that import related layoffs cause hardships to numerous individuals and that those hardships persist over long periods of time. One-fourth of the sample members never found another job. Only one half of them were employed full-time when interviewed an average of 3 years and 4 months after layoff. Real wages for those who were employed had decreased 16 percent from their pre-impact levels. Women and older workers suffered even larger losses.³

² James E. McCarthy. *Trade Adjustment Assistance: A Case Study of the Shoe Industry in Massachusetts* (Boston: Federal Reserve Bank of Boston 1975), p. 52.

³ James E. McCarthy. *Trade Adjustment Assistance* . . . , p. 188.

The study also shows that real wages were not the only loss. Pensions, health and welfare, seniority and other benefits, as well as future wages are important losses not included in estimates of the cost of job losses to workers. Obviously unemployment was not "frictional" for many of the workers even in that particular case study. McCarthy's study merely documents what American trade unionists have long contended—the adjustment assistance mechanism in 1975 cannot compensate for the losses now suffered by an increasing number of workers.

The industries now affected by international change range across the board in American industrial life—even including service industries. In fact, more automobile workers and electrical workers have applied for adjustment assistance since the Trade Act of 1974 was passed than workers in apparel, shoes, and the industries usually identified in the textbooks as those subject to "import competition."

By the end of November 1975, petitions had been received in aerospace, air transportation, advanced machinery, and other products affected by importing competition. As we have seen, many of them have been denied, and most of those who applied received no compensation.

The Meaning of Adjustment

These facts and the failure of U.S. policy to keep up with change cause much confusion about adjustment assistance mechanisms. The traditional analysis in economic theory that balances import-related jobs against export-related jobs does not relate to the realities of delivering adjustment help to the people affected by international change. As Duane Kujawa of Georgia State University has pointed out, the new jobs created by exports are not necessarily in the same location or in similar industries as the jobs displaced by imports. The "balance" does not take care of individual adjustment. New job-creation entails costs.⁴ Therefore the costs of adjustment are understated even in trade-related analyses.

An increasing number of cases today show that multinational firms are beneficiaries of adjustment assistance. In effect, the law allows multinational firms to charge the public for the cost of their private gains. Most of the workers applying for adjustment assistance in 1975 work for multinational firms, often for firms, such as auto companies, which have shifted production to the lowest wage economies of the world.

⁴ Duane Kujawa. Book Review of Tariff Commission Report on Implications of Multinational Firms for World Trade and Investment and for U.S. Trade and Labor, *Law and Policy in International Business*, vol. 6 (Georgetown University, Spring 1974), p. 624.

The World Has Changed

Adjustment assistance cannot meet the volume of problems in a changed economic environment. In the 20 years since the program was begun the following changes have dictated new AFL-CIO policy directions on trade.

* The composition, volume, and impact of U.S. trade has changed. Imports of components and finished manufactures now affect jobs in most manufacturing industries, from apparel to aerospace. The United States exports more farm products, raw materials, semiprocessed goods, and high-technology equipment. Merchandise imports as a share of gross national product has changed from less than 3 percent in 1955 to over 7 percent in 1974.⁵

* The United States trades with new industrial powers abroad: Japan, the European Economic Community (trading both as a group and as nine individual countries), and the Soviet Union are now important world traders. So-called "developing countries" accounted for about 39 percent of total U.S. imports and 19.5 percent of U.S. imports of manufactured goods by 1974.

* Managed national economies, with state trading units, or regulated internal economies are the rule rather than the exception in the world. Most countries guarantee internal production by requiring production within their borders and by controlling foreign trade through regulations or fiat. The oil crisis of 1973 and other shocks in international relationships gave further impetus to this trend.

* Foreign direct investment by U.S. firms accelerated in the 1960s and early 1970s. U.S. firms' investments in manufacturing abroad was over one-fifth of similar investment at home in the early 1970s and has increased since then.

* Technology has been transferred by direct investment, licensing, and other means.

* Multinational firms and banks now dominate world economies. They often move factories and parts of factory production units to other countries to supplant exporting.

Economists have begun to talk about these changes and the changes in international economic theory over the years. But it is disturbing to find that economists have not adjusted their thinking and their policy proposals.

As Professor Daniel Mitchell has pointed out, both modern economic

⁵ AFL-CIO estimate based on data in *International Economic Indicators and Competitive Trends*, U.S. Department of Commerce, Sept. 1974, p. 58. Ratio of imports to production of goods (a more realistic comparison) rose from 10.2 percent in 1967 to 17.1 percent in 1973 according to the same publication, p. 59.

theory and empirical evidence show losses for labor.⁶ Modern theory and facts show why AFL-CIO policies are appropriate.⁷ But policy-makers have not shifted their traditional approaches.

Why Unions Apply for Adjustment Assistance

Instead, policy-makers offer unemployed workers a promise of "adjustment assistance" that has proved both too little and too late. Working people are practical. They will apply for "burial insurance" and will be glad for help in finding new jobs if any are available. But they would prefer not to "die," that is, to become jobless. Clearly international trade will continue to cost jobs. Unions will therefore continue to seek adjustment assistance while urging more realistic and comprehensive foreign economic policies.

⁶ Daniel J. B. Mitchell. "Recent Changes in the Labor Content of U.S. International Trade," *Industrial and Labor Relations Review*, vol. 28 (April 1975).

⁷ John H. Dunning. *Economic Analysis and the Multinational Enterprise*, (New York: Praeger, 1974), compared with Peggy B. Musgrave, *Direct Investment Abroad and the Multinationals: Effects on the United States Economy*, Subcommittee on Multinational Corporations, Senate Foreign Relations Committee (Washington: U.S. Government Printing Office, 1975).

DISCUSSION

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Corbett, Welden, Kane & Berk

Financial adjustment assistance for workers injured in whole or in part by the impact of imports by the United States was a federal program with which I was unacquainted until I read Professor Mitchell's paper on the subject. Yet I discovered upon investigation that either the program had escaped the notice of those who might have benefited or the criteria for benefit eligibility were such that entitlement was not readily attained by the economically injured. Beginning with the Trade Expansion Act of 1962, history of the legislation discloses that adjustment assistance was the political grease used to slip through tariff reduction and import concessions. That only a token number of workers received any assistance at all was a secondary consideration to the trade expansion objective of the legislation, and quite possibly this result was of political design.

In April 1975, when the Trade Act of 1974 became effective, the criteria for eligibility for assistance were liberalized so the Act now applies to "workers adversely affected by lack of work to which increased imports have contributed importantly." No longer do workers have to obtain certification by proving that import concession by the United States is the major reason or the most significant factor in reduction of full-time jobs or the elimination of full-time jobs altogether. For example, in California in the seven years prior to April 1975, only three groups were certified for benefits, whereas in the eight months following April 1975, when the criteria were changed, two groups were certified and eight more are pending approval. In the same comparative periods of time, approximately the same number of workers actually received assistance nationally. Consequently, the word appears to be out and worker assistance is now susceptible of attainment to a somewhat greater degree.

Yet this politically motivated legislation provides supplemental unemployment benefits for a narrow classification of workers who appear to be no more worthy than those displaced by automation, mechanization, and business competition within the several states. The classification of import-impacted workers, although not challenged on constitutional grounds, is nevertheless unequal in application since it interacts differently upon workers suffering the same conditions of unemployment and among workers similarly situated. Congress would better serve the public interest by reexamining the needs of the unemployed and the basic reasons for their condition so that a broader, fairer, and more meaningful distribution of available assistance could be implemented throughout the nation.

Note: Robert E. Baldwin, University of Wisconsin-Madison, also participated in this panel discussion but did not submit a summary of his remarks for publication.

IX. THE ECONOMIC EFFECTS OF UNEMPLOYMENT INSURANCE

The Unemployment Caused by Unemployment Insurance

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Under the economic conditions that have prevailed in the postwar period, our current system of unemployment compensation is likely to have increased the average rate of unemployment. The common presumption, that unemployment compensation reduces unemployment because it automatically increases government spending when unemployment rises, is really irrelevant. The same fiscal stimulus would now be provided through other expenditure increases or tax cuts by a government committed to maintaining aggregate demand. The primary effect on aggregate unemployment of our current system of unemployment compensation is not its contribution to aggregate demand but its adverse impact on the incentives of employers and employees. As a result, unemployment compensation is likely to increase nearly all sources of unemployment: seasonal and cyclical variations in the demand for labor, weak labor force attachment, and unnecessarily long durations of unemployment.

Our current system of unemployment has two distinct but related bad incentives. First, for those who are already unemployed, it greatly reduces and often almost eliminates the cost of increasing the period of unemployment. Second, and more generally, for all types of unsteady work—seasonal, cyclical, and casual—it raises the net wage to the employee relative to the cost to the employer. The first of these effects provides an incentive to inappropriately long durations of unemployment. The second provides both employers and employees with the incentive to organize production in a way that increases the level of unemployment by making the seasonal and cyclical variation in unemployment too large and by making casual and temporary jobs too common. Both of these disincentive effects require further explanation.

First, however, I will describe how unemployment insurance now replaces a much larger fraction of lost income than is commonly believed.

The High Rate of Wage Replacement

The reform of unemployment insurance is fundamentally impeded by the false notion that unemployment benefits replace only a small fraction of lost wages. The most common assertion is that benefits provide only about *one-third* of the unemployed individual's usual pay. For example, a *New York Times* editorial cited this figure in praising a proposed increase in unemployment compensation: "The present national average benefits of roughly \$55 a week is just a little over one third of usual pay, a gap that causes unfair hardship to many."¹ With this figure of one third in mind, much of the legislative pressure has been to increase the replacement rate.

A more accurate description is that unemployment insurance currently replaces *two thirds* or more of lost net income. In some extreme cases, the individual may receive more net income by being unemployed than by returning to work at the previous wage.

To understand the high replacement rate, it is useful to examine a detailed example. Consider a worker in Massachusetts in 1975 with a wife and two children. His gross earnings are \$120 per week or \$6,240 per year if he experiences no unemployment. She earns \$80 per week or \$4,160 per year if she experiences no unemployment. If he is unemployed for 10 weeks, he loses \$1,200 in gross earnings but only \$227 in net income. How does this happen? A reduction of \$1,200 in annual earnings reduces his federal income tax by \$194, his Social Security payroll tax by \$71, and his Massachusetts income tax by \$60. The total reduction in taxes is \$325. Thus net after-tax wages fall by only \$875.

Unemployment compensation consists of 50 percent of his wage plus dependents' allowances of \$6 per week for each child. Total unemployment compensation is therefore \$648. These benefits, which are not taxable, replace 74 percent of the net wage loss of \$875. Viewed slightly differently, *the combination of taxes and unemployment compensation imposes an effective marginal tax rate of 81 percent*—i.e., the man's net earnings fall by only 19 percent of his gross pay (by \$227 out of \$1,200) when he is unemployed for 10 weeks. Moreover, part of this difference in income would be offset by the cost of transportation to work and other expenses associated with employment.

Because of the original one-week waiting period, even these remarkable figures understate the effect of unemployment compensa-

¹ *New York Times*, 17 April 1973.

tion on the cost to the individual of remaining unemployed longer.² If he stays unemployed for 11 weeks instead of 10, he loses an additional \$120 in gross earnings but only \$15.50 in net income. The reward for working is less than \$0.50 per hour. The implied tax rate is 87 percent.

These astounding figures are not very sensitive to the specific details of the family in the example or to the use of Massachusetts rules. For a wide variety of representative unemployed men in the nation, the compensation benefits replace more than 60 percent of lost net income; for women who are unemployed, the typical replacement rates are close to 80 percent. In the more generous state, the rate of replacement of net earnings is generally over 80 percent.³

The common statistic that average benefits are only about one third of average covered wages is a misleading observation for two reasons. One reason is that the average benefit refers to those who become unemployed, while the average wage refers to all covered workers. Since the lower paid workers are more likely to become unemployed, the average wage overstates even the *gross* earnings of these unemployed. The other reason is that the figure of one third is a ratio of *nontaxable* benefits to gross wages. The incorrect perception of the relative level of unemployment compensation reflects a failure to recognize the high *marginal* tax rates currently paid by individuals in the middle and low income ranges. The combination of federal and state income tax and the social security payroll tax generally makes the marginal tax rate of such individuals 30 percent or even higher. The majority of unemployment compensation recipients collect benefits that are at least 50 percent of their previous gross wage. These benefits are not taxed, so a 30 percent marginal tax rate on earnings (or a 70 percent net income) implies that the ratio of benefits to net earnings is five sevenths, or that benefits replace more than 70 percent of the net wage.

These very high replacement rates are quite unintentional. They reflect the fact that the system of taxation has changed dramatically since the origin of the unemployment insurance program. The federal income tax was then very small and restricted to high income families: in the 1930s only 4 percent of the total population was covered by taxable returns, and the tax rate at the 1938 median taxable income was only 4 percent. State income taxes were virtually nonexistent when unem-

²There is typically a one-week waiting period *per benefit year*. An individual with more than one spell in 12 months only has to "forgo a week's benefits" during the first spell.

³For a detailed analysis, see my article, "Unemployment Compensation: Adverse Incentives and Distribution Anomalies," *National Tax Journal* (June 1974), p. 231; these replacement rates are based on typical earnings for men and women in each state.

ployment insurance began. By 1974 the percentage of the population covered by taxable returns had increased to over 80 percent, and the federal income tax rate at the median taxable income was over 19 percent. In addition, there are sizable state income tax rates and an 11.9 percent social security payroll tax.

Effect on Temporary Layoffs

Although most discussions of the adverse impact of unemployment insurance focus on the prolonged duration of job search, I believe that the effect on the frequency and duration of temporary layoffs is at least as important. The high level of untaxed benefits and the inadequate system of experience rating used in the financing of unemployment insurance provide very strong incentives for an excessive volume of temporary unemployment.

The temporary layoff is the most neglected form of unemployment in economic analysis. The common picture of the unemployed worker is someone who has lost his job and is looking for new employment. Even economists who should know better are surprised to learn that this description is appropriate for less than a third of all those who are officially classified as unemployed. Among men and women aged 25 to 64, nearly half of those who have been laid off are not looking for work because they expect to be recalled by their employer.

The official terminology is a source of confusion. First, the Bureau of Labor Statistics defines someone to be unemployed only if he has looked for work within the past four weeks *unless the individual is on temporary or indefinite layoff*.⁴ Second, when the unemployed are classified as "job losers," "job leavers," "reentrants," and "new entrants," the group of "job losers" includes many who have not lost their job but have been laid off and are awaiting recall. Because the Department of Labor does not publish any information on temporary layoffs, I recently prepared some special tabulations using the March 1974 Current Population Survey, the official survey used by the Bureau of Labor Statistics to measure unemployment.⁵

During the survey week in March 1974 there were some 950,000 unemployed men aged 25 through 64 who were officially classified as job losers. An additional 350,000 were unemployed new entrants, reentrants, and job leavers. Among those officially listed as job losers, i.e., the

⁴There is another small group who are classified as unemployed even if they are not looking for work, i.e., those who have a *new* job and expect to start work within 30 days.

⁵A full summary of this study will be published in my "The Importance of Temporary Layoffs: An Empirical Analysis," *Brookings Papers on Economic Activity*, 1975: 3.

950,000 who had been laid off, more than 40 percent considered themselves to "have a job" and were therefore classified by the BLS as on layoff awaiting recall. Less than 12 percent of this group had been looking for work during the previous week.

Employees on layoff receive a substantial subsidy from the unemployment insurance system because of the ineffective method of experience rating. Employers now contribute to their state's unemployment insurance fund on the basis of the unemployment experience of their own previous employees. Within limits, the more benefits that these former employees draw, the higher is the firm's tax rate. The theory of experience rating is clear. If each employer paid the full cost of the benefits that his employees receive and if the benefits were treated as taxable "wages" to the employee, unemployment compensation would provide no incentive to an excessive use of unstable employment. While it would not reduce the duration of unemployment of a person who was changing jobs, it would reduce the frequency and duration of temporary layoffs.⁶ In practice, however, experience rating is a very imperfect check on the substantial subsidy entailed by unemployment compensation. A crucial feature of the unemployment insurance tax is that there is a relatively low maximum rate and a positive minimum rate. As a result, many firms with high layoff rates have "negative balances" in their accounts, i.e., have paid less in taxes than their employees have received in benefits. These firms with high unemployment rates face the maximum tax rate; an increase in layoffs causes no increase in tax payments. Similarly, the large number of firms with substantial positive balances face the minimum rate and would continue to do so even if their rate of layoffs increased, as long as that increase was not too great. Joseph Becker, in a detailed study of experience rating,⁷ presents extensive evidence of the importance of firms that pay no effective marginal tax. For example, in New York in 1967 some 59 percent of all benefits were related to firms with negative balances while 28 percent of firms paid the minimum tax. In Massachusetts, the corresponding figures were 57 and 18 percent.

With effective experience rating, the frequency and duration of temporary layoffs would reflect the employers' attempts to produce at minimum cost and the employees' balancing of higher wages and periods of temporary layoff. In contrast, the current inadequate experience rating and the tax-free status of unemployment compensation

⁶ A full analytic model of temporary layoffs and experience rating is presented in my "Temporary Layoffs in the Theory of Unemployment," *Journal of Political Economy* (June 1976 forthcoming).

⁷ Joseph Becker, *Experience Rating in Unemployment Insurance* (Baltimore: Johns Hopkins University Press, 1972).

induce employers and employees to organize production and work rules in ways that create excessive unemployment. It is not surprising that temporary layoffs are such an important part of unemployment in an economy in which a spell of temporary unemployment is almost costless to both the worker and the firm.

Unnecessary Job Loss and Excessive Job Search

Unemployment insurance also increases the frequency of actual job loss and induces undesirably long durations of job search. Consider first the duration of unemployment. As we have seen, a man who normally earns \$120 per week will lose only about \$16 of additional net income if he remains out of work for 11 weeks instead of 10. The cost is even less than this if there are expenses for traveling to work, union dues, and other outlays connected with employment. The unemployed person who does not anticipate being recalled by his previous employer can expect to find a better job by search and waiting for a longer time. Because the cost of additional waiting time and searching time is so very low, the unemployed worker is encouraged to wait until there is almost no chance of a better job. For example, since finding a job that pays as little as 5 percent more means an increase in net income of approximately \$200 per year, even an additional 10 weeks of unemployment would pay for itself within a year. It is clear that an individual who is actively searching for a better job in this way is neither loafing nor cheating. He is engaged in trying to increase his long-run income. *His search is economically rational from his personal point of view but inefficiently long for the economy as a whole.* The unemployed individual loses valuable productive time in order to achieve a slight gain in future income because taxpayers provide a \$1000 subsidy during his 10 weeks of increased search.

Not all the increased duration of unemployment is due to the search for a better job. When the return to work adds less than \$20 to the week's net income, there is certain to be a strong temptation to use some time for doing repairs and other tasks at home or simply taking a short period of additional vacation. Some who are waiting to be recalled to a previous job may also engage in casual work for unreported income. All of these temptations are likely to be even stronger when there is another person in the family who is employed. Glaring evidence of this type of voluntary unemployment is found in the "inverse seniority" provisions that are now part of the employer-employee agreements in several industries; these provisions give workers with more seniority the privilege of being laid off *earlier* than other workers and rehired later. The more general effect of unemployment compen-

sation is to increase the seasonal and cyclical fluctuations in the demand for labor and the relative number of short-lived, casual jobs. It does this by raising the employee's net wage for such unstable jobs relative to the cost to employers. This distortion in the cost of unstable employment influences the patterns of production and consumption in the economy. *Because the price of unstable labor has been artificially subsidized, employers organize production in a way that makes too much use of unstable employment.* Similarly, the economy as a whole consumes relatively too much of the goods that are produced in this way.

A worker who accepts a seasonal job knows that he will be laid off (or will have a much greater risk of being laid off) when the season ends. Similarly, a worker in a casual or temporary job or in a highly paid cyclical industry knows that he is much more likely to be laid off than a worker with a regular job in an industry that is not cyclically sensitive. If there were no unemployment compensation, workers could be induced to accept such unstable jobs only if the wage rate were sufficiently higher in those jobs than in the more stable positions in which they could find alternative work. The pay differentials among jobs would reflect the chances of being laid off and the expected duration of unemployment after being laid off. The higher cost of labor in unstable jobs would induce employers to reduce the instability of employment by greater smoothing of production through increased variation in inventories and delivery lags, by additional development of off-season work, by incurring costs to improve scheduling, by less cyclical sensitivity of employment to changes in production, by the introduction of new techniques of production (e.g., new methods of outdoor work in bad weather to reduce seasonal layoffs), and so on. The higher wages in unstable employment would also increase the prices of the output produced by such firms and industries. The higher prices of these goods and services would reduce the demand for them. This would further reduce the amount of unstable employment in the economy.

In the absence of subsidized unemployment compensation, the amount of unstable employment would reflect the employees' balancing of higher wages and employment stability, the employers' attempts to produce at minimum cost, and the consumers' choice among goods and services at prices that reflect their cost of production. The effect of subsidized unemployment compensation is to offset the market forces that would otherwise prevent an excessive amount of unstable employment. Because unemployment compensation provides a subsidy to workers in unstable employment, it reduces the wage differential re-

quired to attract workers to seasonal, cyclical, and temporary jobs. Because employers pay a relatively small premium for their unstable employment, there is little incentive to reduce this instability. Finally, the prices of these goods and services do not reflect the higher social cost of production with unstable employment. The taxpayers subsidize the consumption of those goods whose production creates the unstable employment.

The Magnitude of the Problem

There is little room for doubt about the qualitative conclusion that our current system of unemployment compensation increases the rate and duration of unemployment. Although the magnitude of this effect is unknown, it should be emphasized that rather small changes in the duration of unemployment, the cyclical and seasonal fluctuation in labor demand, and the frequency of temporary jobs can have a very important impact on the overall rate of unemployment.

In my study of this question for the Congressional Joint Economic Committee, I hazarded the guess that the present form of unemployment insurance may contribute 1.25 percent to the permanent rate of unemployment.⁸ Although the statistical basis for estimating this effect is still extremely weak, the evidence presented in the past few years tends to confirm my view about this order of magnitude.

Of the recent work on this subject, Stephen Marston's study for the Brookings Institution has received the most attention.⁹ Marston estimated that the average duration of completed spells of unemployment is 31 percent greater for the insured unemployed than for the uninsured unemployed. Since approximately 50 percent of the unemployed are covered by unemployment insurance, Marston's estimate implies that eliminating the adverse effect of unemployment insurance would reduce the mean duration of unemployment for *all* the unemployed by 12 percent. With a "full employment" rate of unemployment of 5 percent,¹⁰ a 12 percent reduction would lower it by 0.6 percentage points. For the current labor force of approximately 90 million, this entails additional unemployment of 540,000 man-years annually.

Although the statistical basis for Marston's estimate is very weak,¹¹

⁸ See Martin Feldstein, *Lowering the Permanent Rate of Unemployment*, A Study Prepared for the Joint Economic Committee (Washington: U.S. Government Printing Office, 1973).

⁹ Stephen Marston, "The Impact of Unemployment Insurance on Job Search," *Brookings Papers on Economic Activity*, 1975: 1.

¹⁰ Recall that the average unemployment rate has been 4.8 percent from the end of World War II to the beginning of the current recession.

¹¹ See my comment in the same issue of the *Brookings Papers on Economic Activity*.

this 540,000 man-year increase in unemployment indicates the effect of what he and others regard to be a "small" increase in average duration. Moreover, Marston's method is likely to understate the effect of unemployment insurance on duration because he ignores its effect on temporary layoffs. Since those who are temporarily laid off have shorter spells of unemployment than those who must find a new job,¹² an increase in the number of temporary layoffs would tend to *lower* the duration of insured unemployed relative to the duration of uninsured unemployed. The comparison of actual average duration therefore understates the effect of unemployment compensation on the duration of those who would have been unemployed even in the absence of unemployment insurance.

There has been no statistical analysis of the effect of unemployment insurance on the volume of temporary layoffs. If half of the unemployed who are on layoff awaiting recall are unemployed as a result of the substantial subsidy provided by unemployment compensation, this contributes 0.46 percent to the "full employment" rate of unemployment. There are also workers in industries like construction who have technically lost their jobs but, because of union seniority, are effectively on temporary layoff.

Finally, there are those who are unemployed and looking for a job because the current unemployment compensation system induced them to prefer unstable employment. Since 30 percent of the laid-off unemployed are without a job, if even a small fraction are the result of unemployment insurance, the total contribution to unemployment is large. For example, if one sixth of job seekers would not have been unemployed—i.e., would previously have chosen jobs with a lower probability of layoff—this contributes 0.25 percent to the permanent rate of unemployment.

It seems likely, although it is far from a firmly proven fact, that the current adverse incentives in unemployment insurance add more than one million people to the permanent number of unemployed.¹³

¹² Evidence of this is reported in my "The Importance of Temporary Layoffs: An Empirical Analysis."

¹³ For a brief discussion of possible changes in unemployment insurance that will reduce these adverse incentives, see my "Unemployment Insurance: Time for Reform," *Harvard Business Review* (March-April 1975).

Impacts of Unemployment Insurance on the Duration of Unemployment and the Post-Unemployment Wage*

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Introduction

The recent economic recession has occasioned alarming increases in the costs of various public assistance and social insurance programs. Budgetary pressures brought on by recession cum inflation have rekindled criticism of the scope and variety of existing social programs. Such programs are undergoing intense scrutiny, which places their advocates on the defensive in terms of having to justify their program's scope, if not its very existence in some cases. Part of this process of reevaluation involves an examination of the actual effects of a public program in comparison with its intended effects as defined by legislative intent. Among those programs experiencing a revival of interest in their actual functioning is the Unemployment Insurance (UI) system.

Intuitively, one would expect that the UI system leads to more unemployment and longer durations of unemployment than would occur in the absence of a UI system. This is, of course, an implication of standard job-search models. Empirical studies support the hypothesis that UI benefits lead to more unemployment and longer durations of unemployment.¹ However, job-search models also imply that increases in UI benefits will raise an individual's expected post-unemployment wage. It is reasoned that the income maintenance afforded by UI benefits encourages the unemployed to engage in productive job-search. In short, UI benefits enable unemployed workers to hold out for jobs

* This paper summarizes the results of research supported under U.S. Department of Labor Contract L74-49; however, the views expressed here are solely the responsibility of the authors.

¹ See Gene Chapin, "Unemployment Insurance, Job Search and the Demand for Leisure," *Western Economic Journal*, vol. 9 (March 1971), pp. 102-107; and Raymond Munts, "Partial Benefit Schedules in Unemployment Insurance: Their Effect on Work Incentives," *Journal of Human Resources*, vol. 5 (Spring 1970), pp. 160-76.

that are more commensurate with their skills. This aspect of the UI benefits/job-search process has until recently been subordinate to the unemployment duration side of the picture. The potential impact of UI benefits on the post-unemployment wage has not enjoyed the attention equal to that generated by previous studies of the effects of UI benefits on the unemployment rate and the duration of unemployment.

A knowledge of the wage-gain aspect of a UI system is essential to public policy regarding the choice of optimal UI benefit levels. The social costs and social benefits of replacing a portion of an individual's pre-unemployment wage while he/she is unemployed need to be compared. The social costs can be measured by the present discounted value of the output forgone during the additional job-search period engendered by the availability of UI benefits. Social benefits can be measured by the present discounted value of the additional future earnings made possible by longer search.²

Our study of the UI system is directed toward estimation of the effects of UI benefits on the expected duration of unemployment and on the expected post-unemployment wage. These effects are estimated separately for various demographic groups. An important aspect of our study is the recognition of the interdependence between the functional forms of the expected duration of unemployment and the expected post-unemployment wage relationships.

Conceptual Framework³

We assume that the labor market operates as if each firm offers a single wage rate based on the minimum skill level required by the firm. Thus, for example, any firm with minimum skill requirement K_s would be prepared to offer a wage W_s to any potential employee with skills $K > K_s$. Individuals are assumed to behave as if they possessed knowledge of the shape of the wage-offer distribution but do not know in advance the exact wage any given firm will offer in any given period. The individual's job-search is treated as a random sampling from the wage-offer distribution. Suppose that the unemployed worker applies to only one firm per period and must accept or reject a job-offer when it is made. Since the individual cannot accumulate job-offers and select the best one, a rational strategy is to adopt an acceptable wage in advance of the search process. The first wage offered at or above the acceptance wage will be taken, and all other wage-offers will be rejected.

² Assuming of course that the wage truly reflects productivity.

³ What follows is only an example of a model that might underlie the job-search process. The representative type of model from which our example is drawn is found in Dale Mortensen, "Job Search, the Duration of Unemployment and the Phillips Curve," *American Economic Review*, vol. 60 (December 1970). pp. 847-62.

Once the individual selects an acceptance wage, the following are determined: the probability of finding employment in any period (hence, the expected duration of unemployment), and the expected post-unemployment wage.

To illustrate the above propositions with a simple example, suppose the wage-offer distribution is perceived as a uniform distribution:

$$f(W) = 1/(b-a) \quad , \quad 0 < a < W < b \\ = 0 \quad \quad \quad \text{otherwise}$$

An unemployed worker with skill level K_s is eligible for all jobs paying wages between a and W_s but will accept only those jobs paying in excess of \hat{W} . Therefore, the conditional mean wage \bar{W} is calculated as

$$\bar{W} = \int_{\hat{W}}^{W_s} W f(W) dW / \int_{\hat{W}}^{W_s} f(W) dW = (W_s + \hat{W})/2.$$

The probability of finding employment in each period (P) is calculated as

$$P = \int_{\hat{W}}^{W_s} f(W) dW = (W_s - \hat{W})/(b-a).$$

The expected duration of unemployment is merely the reciprocal of the probability of finding employment in each period:

$$\bar{D} = (b-a)/(W_s - \hat{W}).$$

For analytic convenience, we assume that an individual selects the acceptance wage that maximizes the expected present value of his/hcr net earnings. The objective function is expressed as

$$\text{Max}_{\hat{W}} E[PV] = \sum_{D=1}^n [\int_0^n \bar{W} e^{-rt} dt - \int_0^D ce^{-rt} dt] P(1-P)^{D-1}$$

where n is the length of the individual's horizon, D is the duration of unemployment, \bar{W} is the expected post-unemployment wage, r is the discounting rate of interest, c is the net cost of job-search per period, P is the probability of finding employment in any period, and $P(1-P)^{D-1}$ is the probability that the individual first becomes employed in period D . If for mathematical convenience we consider an infinite horizon, it can be shown that

$$E [PV] = [P(c + \bar{W})/(e^r - 1 + P) - c]/r.$$

The value of the acceptance wage which maximizes the objective function is obtained by setting $d E[PV]/d\hat{W} = 0$ and solving for \hat{W} .

When the solution for the optimal acceptance wage is substituted back into the equations for the expected duration of unemployment and the expected post-unemployment wage, a two-equation system is generated: $\bar{D} = h(c,n,s,r,d)$ and $\bar{W} = g(c,n,s,r,d)$, where s indexes the individual's skills, d represents factors that influence the parameters of the wage-offer distribution, and the other variables are defined as above. For the most part, the theoretically expected impacts of the variables or their proxies are straightforward. Anything that lowers the cost of job-search, such as UI benefits, will raise both the expected duration of unemployment and the expected post-unemployment wage, i.e., $h_c, g_c < 0$. Anything that decreases the number of periods over which an individual can collect the benefits from search, such as age, will lower both the expected duration of unemployment and the expected post-unemployment wage, i.e., $h_n, g_n > 0$. Anything that raises an individual's skill level, such as educational attainment, will raise the expected post-unemployment wage but will have an ambiguous effect

on the duration of unemployment, i.e., $g_s > 0, h_s \begin{matrix} > \\ < \end{matrix} 0$. An increase in one's skill level increases the proportion of jobs he/she is eligible for, but by raising the acceptance wage it also increases the proportion of low-wage offers that are rejected.

If we continue to characterize the wage-offer distribution as a uniform distribution, the optimal acceptance wage can be shown to be the solution to the following equation:

$$\hat{W}^2(k - 0.5) - \hat{W}(e^r - 1 + kW_s) + 0.5W_s - c(e^r - 1) = 0$$

where $k = 1/(b - a)$. The solution to this equation does not lead to a simple functional relationship between \hat{W} and the variables of interest. Consequently, the substitution of this solution into the expected duration and expected wage equations does not yield specifications amenable to direct least-squares estimation.⁴ We, therefore, are forced to approximate the solution for the optimal acceptance wage.

One approximation is to express the acceptance wage as a proportion of the maximum wage a worker could command on the basis of his/her skill level: $\hat{W} = \theta W_s, 0 < \theta < 1$. Upon substituting for \hat{W} in

⁴ Solutions were also generated for other wage-offer distributions, including the Pareto distribution. None of these produced tractable results.

the expected duration and expected post-unemployment wage equations, we arrive at $\bar{W} = 0.5(1 + \theta)W_s$ and $\bar{D} = (b - a)/(1 - \theta)(W_s)$. Replacing expected values by their actual values, we have $W^t = \bar{W}\epsilon_w$ and $D = \bar{D}\epsilon_d$, where W^t is the actual post-unemployment wage, \bar{D} is the actual duration per spell of unemployment, and ϵ_w and ϵ_d are log normally distributed error terms. Next we substitute for \bar{W} and \bar{D} , take natural logarithms, and approximate $\log(1 + \theta)$ and $\log(1 - \theta)$ by θ and $-\theta$, respectively, to obtain $\log(W^t) = \log(0.5) + \theta + \log(W_s) + \epsilon_w^*$ and $\log(D) = \log(b - a) + \theta - \log(W_s) + \epsilon_d^*$ where ϵ^* denotes the natural logarithm of ϵ . Our approximation to the solution of W involves replacing θ by a linear equation of its determinants. Similarly, $\log(W_s)$ can also be replaced by a linear equation of its determinants. Ignoring the disturbance terms, we have $\log(W^t) = \sum_j a_j x_j$ and $\log(D) = \sum_j b_j x_j$, where x_j is the j th variable and a_j and b_j are coefficients. As long as θ and $\log(W_s)$ are influenced by some variables in common, the coefficients of these variables can differ in magnitude and sign between the two equations. The important restriction is that the same variables appear in both equations.⁵

Our estimating equations are given by $\log(W_i^t/W_i^{t-1}) = a_1 F_i + \sum_j a_j x_{ij} + u_i^w$ and $\log(D_i) = b_1 F_i + \sum_j b_j x_{ij} + u_i^d$, where i represents the i th individual, W^{t-1} is the pre-unemployment wage, F_i is the ratio of UI benefits to pre-unemployment wages, and u_i is a disturbance term. We expect on theoretical grounds that $a_1, b_1 > 0$.⁶

Data Source

Our data are taken from the National Longitudinal Survey (NLS). Four cohorts of approximately 5,000 individuals each were surveyed annually over the period 1966-71. These cohorts are as follows: males 45-59 years of age in 1966; females 30-44 years of age in 1967; males 14-24 years of age in 1966; and females 14-24 years of age in 1968. The general restrictions we placed on the subsamples for this study required that (1) the respondent be employed at two consecutive survey dates with reported spells and weeks of unemployment between

⁵ The semi-log functional forms of these equations can also be deduced from a Pareto distribution of wage offers. Naturally, the restrictions on the coefficients across equations would differ, but we have not imposed any such restrictions in the actual estimation.

⁶ The proper theoretical specification of the net costs of job search should be the difference between after tax potential wages and UI benefits. We approximated the potential wage by the pre-unemployment wage. In those cases in which we experimented with the difference form of the search cost variable, we found that it was marginally dominated by the ratio form of the variable in terms of explanatory power. Other preliminary findings revealed that marginal tax rates did not vary sufficiently to affect the results.

the survey dates, (2) the respondent's hourly wage be reported at each of the two consecutive survey dates. Additional restrictions were imposed separately on each of the four demographic groups depending on circumstances specific to the group.⁷

Empirical Results

Table 1 summarizes the results of selected regressions for each of the four age/sex groups. To conserve space, only the coefficients on the replacement wage variable (UI benefits/pre-unemployment wages) are reported.⁸ Our findings are that UI benefits lead to longer durations of unemployment for all of the groups in our study. These effects are statistically significant. UI benefits also lead to larger wage increases for all groups, but these effects are statistically significant only among females aged 30-44 and older males.

One measure of the impact of UI benefits is the amount by which they raise the average duration of unemployment and average percentage wage gain above what they would be in the absence of UI benefits. Since our samples include many individuals who did not receive UI benefits, the sample average wage replacement ratios are far below the actual average among UI recipients. We find that the presence of UI benefits raised the average duration of unemployment among males 45-59 by one week and less than a week for the other groups. The presence of UI benefits raised the percentage wage gains above what they would be in the absence of benefits by nine percentage points and three percentage points for older males and females aged 30-44, respectively. The effects of raising UI benefits as a fraction of the pre-unemployment wage from 0.5 to 0.6 are to raise the duration of unemployment by almost two weeks for older males and less than a week for the other groups. This increment in the wage-replacement ratio would lead to an increase in the percentage wage gain of seven percentage points among older males and about one and a half percentage points for females aged 30-44. Raising the wage-replacement ratio can be interpreted as an increase in actual benefits or in the present context as an increase in the coverage of the UI system.

The ratio of the percentage wage-change effects of UI benefits to the change in duration of unemployment caused by UI benefits yields the percentage wage change per week of unemployment. Thus, for

⁷ The details of the selection criteria used in defining the various subsamples in the study will be found in Ronald G. Ehrenberg and Ronald L. Oaxaca, *The Economic Effects of Unemployment Insurance Benefits on Unemployed Workers Job Search*, final report to be submitted to the U.S. Department of Labor under contract L74-49.

⁸ The complete regression results are available from the authors upon request.

TABLE 1
Estimated Impacts of Unemployment Insurance Benefits

Coefficient on F (t-value)	Males 45-59 ^a			Females 30-44 ^b			Males 14-24 ^c			Females 14-24 ^d		
	log D		$\Delta W/W$	log D		$\Delta W/W$	log D		$\Delta W/W$	log D		$\Delta W/W$
	(1)	(2)	(3)= (2)/(1) (%)	(1)	(2)	(3)= (2)/(1) (%)	(1)	(2)	(3)= (2)/(1) (%)	(1)	(2)	(3)= (2)/(1) (%)
	1.65 (2.6)	0.68 (3.6)		0.48 (2.0)	0.14 (3.7)		0.65 (2.4)	0.08 (0.8)		1.22 (3.8)	0.04 (0.4)	
$\Delta F = \bar{F} - 0.0$	1.0	0.09	9.0	0.6	0.03	5.0	0.2	0.006	3.0	0.1	0.001	1.0
$F = 0.6 - 0.5$	1.9	0.07	3.7	0.4	0.014	3.5	0.3	0.008	2.7	0.6	0.004	0.7
\bar{F}	0.13			0.18			0.07			0.03		
\bar{D}^e	5.37			6.17			3.56			2.56		
Sample Size	40			110			292			507		

^a One spell of unemployment, laid off and changed employers, 1966-67.

^b Changed employers, 1969-71.

^c Changed employers, not enrolled in school, 1966-67, 1967-68, and 1968-69.

^d Not enrolled in school, 1967-68, 1968-69, and 1969-70.

^e Geometric mean duration per spell of unemployment (weeks).

example, an increase in the wage replacement ratio from 0.5 to 0.6 implies that each week of unemployment (job search) leads to an increase in the percentage wage change by 3.7 percentage points for older males, 3.5 percentage points for females aged 30–44, 2.7 percentage points for males aged 14–24, and 0.7 percentage points for females aged 14–24.

Summary and Conclusions

Our study confirms that UI benefits lead to longer spells of unemployment. While UI benefits also raise post-unemployment wages, these wage effects are statistically significant only in the cases of older males and females aged 30–44. Thus the predictions of the search model are satisfied for these older groups of workers, but not for the 14–24 year old cohorts. At the margin, the percentage wage gain for each additional week of unemployment is larger among older workers and among males.

At this time we can only speculate as to why UI benefits have no statistically significant effect on the post-unemployment wages of younger workers. It is possible that UI benefits are used by younger workers to subsidize nonmarket activities rather than job search. A second explanation is that younger workers are not very productive searchers. A third explanation may be that many of the younger workers who receive UI benefits choose to search for more pleasant jobs which also pay lower wages because of compensating differentials. A fourth possibility is that many of the younger recipients of UI benefits may search for jobs offering better opportunities for on-the-job training (OJT). If this is true, we would expect their post-unemployment wages to be relatively low because of worker investment in OJT. Consequently, concentration on the post-unemployment wage is myopic, and the returns to job-search would be appropriately measured by examining changes in lifetime earnings streams. Additional research is needed on the apparent failure of UI benefits to raise post-unemployment wages among younger workers. It is important for policy purposes to know why there is no short-run impact of UI benefits on the wages of younger workers. The case for providing UI benefits would undoubtedly be strengthened if the fourth (and possibly the third) explanation given above turned out to be true.

Insured Unemployment Rates, Extended Benefits, and Unemployment Insurance Exhaustions*

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In the United States, financial assistance to the unemployed is provided under what are basically state programs. Each state has an unemployment insurance law which sets the eligibility requirements and the rules governing benefit levels and weeks of benefits provided. These programs are financed from taxes levied on employer payrolls. In addition, when insured unemployment rates reach prescribed levels, the federal government provides monies to the states to pay for weeks of benefits beyond those provided by state laws.¹ The additional weeks of benefits provided by these federal programs increase the probability that benefits will cover the entire period of an individual's unemployment. Thus, the percentage of unemployment recipients who exhaust their benefits should be lowered as a result of the federal programs.

In this paper we use time-series data from two states to estimate the relationship among the exhaustion of benefits, insured unemployment rates, and the duration of benefits. Not surprisingly, our results indicate that exhaustions do rise as insured unemployment rates rise, and that the provision of longer durations of benefits reduces exhaustion rates. Moreover, the federal programs may actually serve to increase the differences in exhaustion rates among the states.²

* The author acknowledges the research assistance of Gloria Lessington of the Office of Assistant Secretary for Policy, Evaluation, and Research, U.S. Department of Labor.

¹ The insured unemployment rate is defined as the number of individuals receiving benefits under the regular UI programs as a percent of average covered employment in a 12-month period ending 6 to 8 months prior to the week of reference. See *Employment and Earnings*, Vol. 21 (May 1975), pp. 163-64, for further elaboration.

² By exhaustion rate we mean the percentage of individuals who exhaust all their benefits within their benefit year, i.e., the exhaustion rate at a given date would be equal to the number of individuals who had established a benefit year beginning 12 months earlier and had exhausted all their benefits at some time during that benefit year divided by the number of individuals with that same benefit year. However, throughout the paper we measure the exhaustion rate as the number of final payments of benefits in a calendar quarter relative to the number of first payments in a calendar quarter lagged by an amount equal to the average potential number of weeks of benefits provided by unemployment insurance programs including weeks provided by any federal program for extended benefits. By final payment we mean the last payment to which an individual is entitled, whether it is forthcoming from the regular state UI program or from a program of extended benefits. Our use of the term exhaustion rate differs from that often used in discussions concerning UI. Usually, the term is applied to exhaustions of the regular UI programs of the states and does not include programs of extended benefits as we are doing here.

In section I, we briefly describe the unemployment insurance Extended Benefit and Federal Supplemental Benefit programs. In section II, we present some recent data on insured unemployment rates and exhaustion of benefits in two states—Pennsylvania and Georgia. In section III we present the results of regressions of exhaustion rates on insured unemployment rates, duration of benefits, and benefit levels for those two states. Section IV provides a summary and conclusions.

I. Regular and Extended Benefit Programs

When an individual files a valid claim for unemployment insurance (UI) benefits he establishes a benefit year, and according to the provisions of the state UI law under which he files, he becomes eligible for *regular* benefits of a specified dollar amount for each week of unemployment within that benefit year up to a maximum of total benefits. If an extended benefit payment period is in effect, or becomes effective during the benefit year, he becomes entitled to additional benefits for weeks of unemployment which could extend beyond his established benefit year. Presently, there are two programs that provide for weeks of benefits beyond those provided by regular benefits. These are generally referred to as Extended Benefits or EB and Federal Supplemental Benefits or FSB.

The EB program is provided under authority of Public Law 91-373, enacted in August 1970. Under this program an unemployed individual who has exhausted regular benefits becomes entitled, during an extended benefit period, to additional weeks of benefits equal to one-half the number of his regular benefit weeks. However, no more than 13 full weeks of EB or 39 full weeks of total (regular plus extended) benefits are allowed under this program. An extended benefit period "triggers" on and remains in effect for at least 13 consecutive weeks in all states when the seasonally adjusted insured unemployment rate (IUR) for the nation is 4.5 percent or more for each of three consecutive months. EB triggers off if that rate falls below 4.5 percent for three consecutive months.³

If a national EB period is not in effect, a state will have an EB period go into effect if the IUR (not seasonally adjusted) for the state averages 4 percent or more for 13 consecutive weeks.⁴ Once an EB period triggers on in a state, it must remain in effect for at least 13 consecutive weeks; thereafter it triggers off when the latest consecutive

³ Once an individual begins receiving EB payments, he maintains his entitlement to the full duration of his benefits whether or not an EB period continues in effect.

⁴ Originally, this 13-week moving average IUR also had to be 120 percent of its average value for the corresponding 13-week period of two preceding years. However, subsequent amendments have repeatedly suspended this 120 percent requirement.

13-week average IUR falls below 4 percent. Fifty percent of the EB payments are paid from the federal share of the UI tax and fifty percent from the state share of the tax.

The FSB program is provided under authority of Public Law 93-572 of December 1974 and Public Law 94-45 of June 1975. This is a temporary program in that present provisions call for operation of the program only through March 1977. Originally, an FSB period triggered on and off in a state or for the nation under the same conditions as for an EB period. During an FSB period, an individual who had exhausted his regular benefits and his EB became entitled to additional weeks of benefits equal to the number of weeks of his regular benefits. However, in no case could the total number of weeks (regular plus EB plus FSB) exceed 65.

Recently, some changes have been made in the FSB program. As of January 1976, an FSB period is in effect in a state when the IUR for the state is at least 5 percent for 13 consecutive weeks. When this rate is between 5 and 6 percent, an individual can receive weeks of entitlement to FSB equal to one-half the number of his regular benefit weeks. When the rate is 6 percent or more, FSB is payable for weeks equal to the number of regular benefit weeks. When the latest 13 consecutive week IUR falls below 5 percent, the program triggers off. FSB payments are financed by advances from federal general revenues. These advances are to be paid back at the discretion of the Secretary of Labor from revenues from the federal share of the UI tax.

In summary, we have a UI system which entitles the insured unemployed to a number of regular benefit weeks determined by state UI laws and not dependent upon unemployment rates. When insured unemployment rates reach given levels, additional benefit weeks are triggered on in three states—at an IUR of 4 percent, 5 percent, and 6 percent. Presumably, the reason for increasing benefit weeks as unemployment rates increase is to influence the numbers and/or percentages of UI recipients who exhaust their benefits before finding employment. However, there is little quantitative information concerning the relationship among exhaustions, insured unemployment rates, and the number of benefit weeks provided by UI. Using time-series data, we estimate the relationship among these variables in two states—Pennsylvania and Georgia.

II. IUR and Exhaustion of Benefits, 1972-1974

In Table 1 we present some data on the insured unemployment rate and the rate of exhaustion of UI benefits (ER) in Pennsylvania and Georgia for the period 1972-1974. In general, the IUR is greater and

TABLE I
Insured Unemployment Rates and U.I. Exhaustion Rates
in Pennsylvania and Georgia
1972-1974

(1) Yr:Qtr ^a	Pennsylvania		Georgia	
	(2) IUR %	(3) ER ^b %	(4) IUR %	(5) ER ^b %
1972: 1	5.3	11.3 (20.6)	1.6	6.2 (28.3)
2	3.9	11.0 (20.5)	1.3	29.2
3	4.0	12.4 (18.5)	1.4	31.6
4	3.2	19.3	.9	35.2
1973: 1	4.2	17.8	1.2	37.9
2	3.1	17.0	1.0	43.4
3	2.8	15.3	.9	46.3
4	2.8	17.6	1.0	40.8
1974: 1	4.8	22.4	1.9	34.6
2	3.5	18.3 (22)	1.7	28.1
3	3.4	15.8	2.0	45.6
4	4.5	20.8	2.9	35.8

Source: Unemployment Insurance Statistics Washington: U.S. Department of Labor, 1972-1975.

^a EB was in effect from March 1971 through October 1972 and for the last two months of the second quarter of 1974 in Pennsylvania, and by reason of the national trigger, during the first quarter of 1972 in Georgia.

^b The figures in parentheses are measures of exhaustion rates for regular UI, i.e., it is regular program final payments relative to regular program first payments lagged by an amount equal to regular program potential duration. For those periods when extended benefits are not in effect, this is the measure of the exhaustion rate used in the text. However, when extended benefits are in effect ER is final payments of extended benefits relative to regular program first payments. See footnotes 2 and 6 of the text for definition and discussion of ER.

the exhaustion rate is lower in Pennsylvania than in Georgia. These data reflect the fact that the number of weeks of benefits within the benefit year to which claimants are entitled, i.e., the potential duration of benefits, is greater in Pennsylvania. From 1972 on, in Pennsylvania UI recipients were entitled to 30 weeks of regular UI benefits, while in Georgia during the same period recipients were entitled to about 20 weeks on an average.⁵

The longer duration of benefits in Pennsylvania affects both the insured unemployment rate and the exhaustion rate. Longer duration affects exhaustions, since the greater the number of weeks of benefits forthcoming, the greater the probability that benefits will cover the entire period between jobs. Longer duration also affects the IUR, since only the unemployed who are receiving benefits are counted (those who exhaust benefits are not counted) among the insured unemployed.

⁵ Pennsylvania is a uniform duration state; thus all eligible claimants are entitled to the same number of weeks of benefits. Georgia is a variable duration state with weeks of benefits dependent upon earnings in the base period (the first four of the five quarters just prior to the start of the benefit year).

The figures in parentheses in columns (3) and (5) of Table 1 show for those periods when EB was in effect the exhaustion rate for the regular UI program. The figures adjacent to those in parentheses show the exhaustion rate resulting from the duration provided by the regular and EB programs. During the second and third quarters of 1972 and the first quarter of 1974 in Pennsylvania exhaustion rates ranged from 11.0 to 18.3 percent. The exhaustion rate for the regular UI program during that same period in Pennsylvania ranged from 18.5 to 22.0 percent. During the same period, Georgia's exhaustion rate was on the order of 30 percent, and EB still did not trigger on longer duration of benefits. As a result, the differences in the exhaustion rates between the two states increased. Exhaustion rates in Pennsylvania, which were lower than those in Georgia, were reduced further by the EB program.⁶

In section III, below, we explore the relationship among exhaustions, duration, and insured unemployment using regression analysis.

III. Regression Results

Equations (1) and (2) are the result of regressing the logarithm of the exhaustion rate on the insured unemployment rate, the average potential duration of benefits in weeks, the ratio of the average weekly benefit amount to the average weekly wage in covered employment (*BW*), and the percentage of claimants that are female (*FEM*).⁷

⁶ In a study of extended benefits in Nevada, Hanna, Butler, and Steinman [3] found evidence that the presence of extended benefits increases regular program exhaustions. Hence, the exhaustion rates in parentheses in Table 1 would likely have been lower in the absence of extended benefits, and the change in the difference in exhaustion rates between the two states is probably overstated.

⁷ The data are quarterly covering the period 1950-73 and are constructed from monthly data from the following sources: *Unemployment Insurance Statistics*, 1964-1975; *Labor Market and Employment Security*, 1950-1963; and *Employment and Wages*, 1950-1975. All these series are publications of the U.S. Department of Labor, Washington. The data on final payments for the various extended benefit programs were from unpublished sources at the U.S. Department of Labor. The variable *FEM* prior to 1964 is actually the percentage of initial claims that are female, and for subsequent years it is the percentage of all claimants that are female. The exhaustion rate was calculated as the ratio of final payments of UI—regular program, or an extended benefit program if it were in effect—to regular program first payments lagged by an amount equal to the length of average potential duration measured in quarters or fractions thereof. Our data on first payments and final payments of UI include payments to eligible unemployed ex-servicemen and federal government employees. These latter groups are entitled to benefits under the programs generally referred to as UCX and UCFE.

For the Pennsylvania equation the variables *FEM* and *BW* were lagged two quarters. For Georgia the variable *FEM* was lagged one quarter. The reason for the lag was to associate the exhaustion rate for the current quarter with the values of these variables when current exhaustees first became claimants. It is unclear whether this is appropriate for the *BW* variable; hence regressions were obtained for *BW* lagged and unlagged and the one with the higher R^2 reported.

The regression included quarterly dummy variables Q_2 , Q_3 , and Q_4 , designating the second, third, and fourth quarters, respectively.

The results for Pennsylvania are given in equation (1) and for Georgia in equation (2) (standard errors are in parentheses).

$$(1) \log ER = 2.648 + .135IUR - .042PD + 2.90BW \\ (.016) \quad (.005) \quad (.704) \\ - .004FEM + .206Q_2 - .063Q_3 - .172Q_4 \\ (.003) \quad (.063) \quad (.080) \quad (.068) \\ R^2 = .757 \quad n = 96$$

$$(2) \log ER = 3.779 + .166IUR - .072PD + .806BW \\ (.026) \quad (.011) \quad (1.685) \\ + .011FEM - .016Q_2 - .009Q_3 \\ (.003) \quad (.061) \quad (.062) \\ + .151Q_4 \quad R^2 = .512 \quad n = 96 \\ (.067)$$

For both states the signs of the regression coefficients on IUR , PD , and BW are as expected on the basis of a priori reasoning. In particular, the negative sign of the coefficient for PD and the positive sign for the coefficient of BW are consistent with predictions forthcoming from the job-search literature,⁸ though the standard error of the coefficient of BW for Georgia is such that one can have little confidence that it is different from zero.

Using the regression results of equations (1) and (2), we constructed Table 2 which gives the weeks of potential duration required to achieve various exhaustion rates for alternative values of IUR .

In Table 2, we can readily observe the estimated weeks of potential duration needed to maintain exhaustion rates at constant levels. For example, in Pennsylvania to maintain a constant exhaustion rate of 15 percent, the estimates imply potential duration would have to be 30 weeks at a 2 percent IUR and be increased by 3 or 4 weeks for every one percent increase in IUR . To maintain the same exhaustion rate in Georgia, potential duration would have to begin at 33 weeks and increase by 2 or 3 weeks for every one percent increase in IUR .⁹

The present UI program in Pennsylvania, which gives 30 weeks of potential duration of regular UI, appears to be sufficient to keep the exhaustion rate (as we have measured it) at 15 percent when the IUR

⁸ For example see Mortensen [5].

⁹ Since we have not tested for the statistical significance of the difference in the estimates for the two states, we are placing little emphasis on this difference.

TABLE 2
Weeks of Potential Duration Needed to Achieve Given Exhaustion Rates
at Various Insured Unemployment Rates

State	<i>IUR</i> <i>ER</i>	2%	3%	4%	5%	6%	7%	8%
Potential Duration								
Pa.	10%	40	43	46	49	53	56	59
Ga.		38	41	43	45	48	50	52
Pa.	15%	30	33	37	40	43	46	49
Ga.		33	35	38	40	42	44	47
Pa.	20%	23	26	30	33	36	39	43
Ga.		29	31	33	36	38	40	43
Pa.	25%	18	21	24	28	30	34	37
Ga.		26	28	30	33	35	37	40

Source: Constructed from regression equations (1) and (2) of the text. For this purpose, we set the variables *BW* and *FEM* equal to their average value over the 1972-73 period and $Q_2 = Q_3 = Q_4 = 0$.

is 2 percent. At an *IUR* of 3 percent, the exhaustion rate might rise slightly, since our results suggest 33 weeks of potential duration would then be necessary. However, at 4 percent *IUR*, EB would trigger on to allow a total of 39 weeks of benefits. This would be sufficient to keep the exhaustion rate at around 15 percent. Above 5 percent *IUR*, FSB would trigger on to allow first up to 52 weeks and then 65 weeks of total benefits, significantly more than necessary to maintain a 15 percent exhaustion rate.

In Georgia, the UI program is insufficient to maintain exhaustion rates at 15 percent or less except at an *IUR* of 5 percent or above when the FSB program is triggered on in that state. In recent years the potential duration of benefits has averaged around 20 weeks for UI beneficiaries in Georgia. At an *IUR* of between 4 and 5 percent, EB would add 10 additional weeks on average to this figure, bringing the total to 30 weeks. However, between 38-40 weeks would be needed to maintain an exhaustion rate at 15 percent.

In both Pennsylvania and Georgia, our estimates imply that a program that provided about 30 weeks of benefits at insured unemployment rates below 4 percent, 40 weeks at rates between 4 and 5 percent, and 50 weeks at rates of 6 percent or above would be sufficient to maintain exhaustion rates at or near the 15 percent mark.¹⁰

¹⁰In using our results in this way we are glossing over the fact that our regressions included quarterly dummies; hence our figures in Table 2 of the text are applicable to the first quarter only. However, seasonal effects can be accounted for by using the seasonally adjusted *IUR* in any trigger formula. Also, our results in Table 2 depend on specific levels of *BW* and *FEM*, and should be interpreted as applying for the given levels of *BW* and *FEM* in each of the states.

IV. Summary and Conclusions

Insured unemployment rates differ among the states at least partly as a result of differences in state UI programs. In particular, state programs differ in the number of weeks of potential benefits provided. The differences in potential duration of benefits is one factor that causes differences in UI exhaustion rates among the states even at similar insured unemployment rates.

The present practice of triggering on federal programs which add weeks to the number of weeks provided by the state programs can serve to increase the disparity in exhaustion rates, since states with longer potential durations are more likely to trigger on to the federal programs. In order for these federal programs to work toward equalizing exhaustion rates, i.e., equalizing the probability that benefits will be sufficient to cover the period of unemployment, the state programs will first have to be made to cover the same number of weeks in all states.

Finally, our estimated equations suggest that in Pennsylvania the regular UI program plus EB is sufficient to maintain exhaustion rates at a reasonably low 15 percent, while FSB would lower exhaustion rates even below this. In Georgia, exhaustion rates wouldn't fall to 15 percent until FSB triggered on. Our results suggest a program of 30-week duration at IUR below 4 percent, 40 weeks between 4 and 6 percent, and 50 weeks above that would maintain exhaustion rates at around 15 percent for the two states.

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DISCUSSION

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Just a few years ago, not many people would have questioned the role played by UI during a period of high unemployment. A high rate of unemployment was largely an aggregate demand problem, and UI put money into the hands of the unemployed to prevent further collapse of the economy. Economists are now focusing on the control that the individual exerts over his own unemployment. With that kind of focus, it is natural to examine the role that UI plays in raising the level of unemployment. This is an important issue, especially now, when we have high unemployment and more liberal benefits.

UI benefits have been liberalized significantly since December 1974. We need to know how much this liberalization has contributed to continuing high rates of unemployment. Fiscal and monetary policies designed to cure aggregate demand failures will not be appropriate for unemployment induced by UI. If benefits are very liberal, the cost of reducing unemployment may be unacceptable inflation.

The papers presented today are important to our understanding of how UI affects labor markets.

Martin Feldstein provides some striking illustrations of the incentives inherent in UI. His 1973 report to the Joint Economic Committee and the papers he wrote later have stimulated serious study of the effects of the UI system on individual and firm decisions.

Feldstein estimates that UI raised the permanent national unemployment rate by 1.25 percent in 1973. I am sure he would agree that the effect in 1975 is much greater. Since December 1974, both the number of covered workers and the duration of benefits have increased significantly. (As Joseph Hight shows, the average claimant can now draw benefits for as long as 65 weeks; in 1974, the average limit was about 24.¹ Approximately 12 million workers in previously uncovered sectors, including agriculture, are now eligible.)

Feldstein points out that, to the degree the federally financed new benefits attract new workers to the seasonal industries in this group, the rate of unemployment will rise. Barry Chiswick, in an empirical study, showed that the agricultural unemployment rate and the number of agricultural workers hired in the on-season did, in fact, rise when

¹ U.S. Department of Labor, *Unemployment Insurance Statistics* (Dec. 1974), p. 6.

unemployment compensation payments became available to hired agriculture workers.²

The increase in the duration of benefits increases the unemployment rate; not only do some people prolong their unemployment, but others who have dropped out of the labor force report themselves as unemployed in order to collect benefits.

Hight's paper points out that lengthening the duration of benefits also lowers the benefit exhaustion rate. The duration of unemployment is sensitive to the level of economic activity; accordingly, benefits are extended during periods of high unemployment. We do not know, however, the extent to which an increase in potential duration of benefits will increase the duration of unemployment. Table 1 in Hight's paper tells us how many claimants exhausted regular benefits when extended benefits were available. The availability of these extended benefits probably induced more people to exhaust their regular benefits.

Hight's regression could be used to estimate what the regular exhaustion rate would have been if only regular benefits were paid. Presumably the exhaustion rate would have been lower. His regression results, however, predict that in many instances, the exhaustion rate would have been higher. The reason for this peculiar result is that the regressions hold the insured unemployment rate constant. As Hight explains in his paper, the insured unemployment rate is a function of the exhaustion rate. Since this simultaneous interaction is omitted from the estimating equations, the equations and the table that results must be interpreted with care. This does not diminish the value of his major point. Insured unemployment rates reflect not only economic conditions but also state decisions about the duration of benefits. The use of local unemployment rates, which are derived from insured rates, has caused many problems for other federal programs that consider the unemployment rate in their allocation mechanisms.

Ronald Oaxaca, noting the UI payments may lengthen the duration of unemployment, points to a possible increase in the wages earned on the job that follows. His paper with Ronald Ehrenberg is a first-rate attempt to measure both these effects, but I am disturbed by the implications of this paper and the apparent magnitude of the wage increases.

Oaxaca's regressions indicate that an additional week of unemployment would be very profitable for individuals even *without* UI payments. He estimates that someone in his older-men sample who is receiving \$50 a week in benefits and who could find work at \$100 a week would, on average, find a job paying about \$104 if he searched for an additional

² Barry R. Chiswick, "The Effect of Unemployment Compensation on a Seasonal Industry: Agriculture," *Journal of Political Economy* (forthcoming).

week. Since the man's forgone income is less than \$50, he can pay for the search in less than 13 weeks. But Oaxaca finds that it would take an additional \$10 a week in UI benefits to induce the man to search for an additional week. This seems odd, and I cannot agree with Oaxaca's conclusion that predictions of search models are satisfied for the older workers.

I suspect that part of the difficulty lies in the data. The low replacement ratios for his samples are in striking contradiction to Feldstein's calculations. One problem may be that many of the people in the sample report no UI benefits, perhaps because they returned to work before the end of the mandatory waiting period. These people will have replacement ratios equal to zero. The effect of the waiting period on benefits received will produce a spurious correlation between replacement ratios and durations. It will also bias the estimated effect of benefits on subsequent earnings.

Oaxaca's discussion of the social returns to search could also point to a misleading conclusion. He says that the social cost of UI payments is output forgone during the additional periods of search induced by UI and that the social benefit is the increase in future earnings. Assuming, as he does, that wages reflect productivity, the private costs of search equal the social costs, and the private benefits of search equal the social benefits. In the framework of the paper, people who would optimize their search behavior without UI must make socially inefficient decisions when UI benefits are provided.

UI payments lower the private costs of search but not the social costs. Since the UI recipient receives the returns from search and does not bear all the cost, he will search until his expected gain in wages is less than his forgone wages, by an amount equal to UI payments. By Oaxaca's criterion, then, the optimal UI payment would have to be zero. Clearly, other aspects of UI must be considered.

What all three papers tell us is that there is still much to be learned about how UI affects the labor market. More should be done to measure the influence of UI on job-search behavior. But many other effects of UI deserve further research, as well. We really know very little about the factors that influence the incidence and duration of unemployment.

The empirical work presented here also demonstrates that important statistics about the unemployed are not readily available. Unemployment statistics do not tell us how many of the unemployed are waiting for recall. Nor do the statistics tell us anything about family earnings, or even how to compare one state with another. Before sound decisions can be made about how—or whether—to reduce all kinds of unemployment, we really have to know more about it.

DISCUSSION

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The three papers presented at the above panel are very germane to the current national discussions involving the economic implications of unemployment insurance (UI). The strengths of all three papers are obvious and consequently do not require any further comment. As such, my comments will generally be limited to what I feel are possible weaknesses in the approaches or areas which could result in overall improvements.

The Feldstein paper is particularly interesting in that the author is perhaps the best known critic of the current UI system. The paper presented is essentially a pulling together of some of his previous work and is rather broad in nature. The general theme, however, attributes some of the current unemployment to the increasing proportion of wage loss replaced by the UI benefit. He argues that this is essentially the result of the increasing influence of the various tax structures and their impact on the net wage. One weakness of this approach is that it views a job in terms of a paycheck and excludes both pecuniary and nonpecuniary factors. Included in these groups would be such things as health and pension plans, as well as the social connections, etc., that employment often provides. In all fairness, however, it should be noted the above criticism applies to most of the research in this area.

In focusing on the tax structure as the variable that has changed over time, the paper overlooks the fact the composition of the labor force has also changed considerably since the UI program was initiated, with both youth and women gaining in relative importance. The implication here is that both these groups have a tendency to be secondary workers and as such would react differently to the loss of employment than, for example, a primary wage earner. In addition, it can be argued that the social stigma toward drawing UI has also decreased over time as a result of the growing proportion of society drawing some type of transfer payment, plus the increasing publicity in recent years that unemployment is associated with all occupational and skill levels (e.g., the aerospace layoffs and more recently those in the public sector) and not just the unskilled. While changing attitudes toward UI cannot necessarily be considered negative, they nevertheless would increase both the incident of drawing UI and the duration. The relevance of the above is that by stressing the changing structure of the labor force and perhaps

attitudes toward UI, the increase in insured unemployment Feldstein attributes to the disincentive effects of the benefit amount can, to some degree, be accounted for. While the end result may be the same, it appears the Feldstein approach could be strengthened by incorporating these factors.

From a first approximation, the paper by Ronald Oaxaca presents empirical evidence that tends to contradict the hypothesized impact of the UI benefit as stated by Professor Feldstein. Not only does the author indicate a positive influence on both duration and post-UI wages resulting from the presence of UI, but also similar results for older males and females, 30-44, when the benefit amount was increased relative to the wage loss. Unfortunately, however, the length limitation of the paper does not allow a thorough discussion of the particulars of the empirical model. Questions such as the similarity of the regression planes between groups receiving UI and not receiving UI, the influence of economic conditions, etc., are left unanswered. In addition, the fact the National Longitudinal Sample does not contain an age-sex cohort for prime age males also limits the results. Rather than speculate on these matters, interested readers should obtain the full report from which this paper was extracted.

The paper by Joe Hight is interesting in that it indirectly provides a justification for the current extensions in UI duration and the means by which these extensions are made operable. With regard to the empirical model, one possible improvement would be the inclusion of time as a catch-all variable for such things as the changing composition of the labor force, attitudes, etc. Regressing national data on the rate of exhaustion against the insured unemployment rate (IUR), potential duration, and time reveals the positive influence time has on the rate of exhaustion. While omission of the variable does not present any major limitation for short-run policy decision, it does have implications over time. In addition, its omission could contribute to a lack of understanding of the dynamics of the UI system.

From a policy implication, the major limitation of the model is that it views the rate of exhaustion as being from UI programs in general and not differentiating between state programs and those that are either totally or partially federally funded. Since the model operates on an exhaustion rate which is defined as the final payment from any program, it hides both the impact extensions of duration have on job-search behavior and the resulting cost implications—especially with regard to state funded programs.

From the standpoint of a state UI program, the “triggering on” of federally funded extensions beyond the normal 26 weeks may have sub-

stantial cost implicators. While most state administrators view the cost of these extensions as limited to the state portion (i.e., 50 percent for Extended Benefits and zero for Federal Supplemented Benefits), this may grossly understate the real cost. Such a view implicitly assumes that claimant job search behavior is not changed by extensions in the potential compensable period. The key point here is that the extensions potentially apply to all claimants and not just those who exhaust their benefits. For example, if a regular UI claimant knows he potentially has 39 weeks of UI compensation instead of the normal 26, he may be less compelled to either search or accept an offer of employment. If this is the case, and there is some evidence to indicate it is, then the result will be an increase in regular duration over and above what it would have been in the absence of an extension past the regular 26 weeks.¹ The cost implications to a state are obvious; whereas the extensions past the normal 26 weeks are either partially or totally federally funded, any increase in regular UI duration is paid for entirely out of state UI trust funds.

¹James S. Hanna, Robert T. Butler, John P. Steinman, *The Socio-Economic Impact of Extended Benefits* (Carson City: Nevada Employment Security Department, 1975).

X. COLLECTIVE BARGAINING IN THE UNIVERSITIES

The Development of Collective Bargaining in Canadian Universities

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While the movement toward formal collective bargaining procedures in Canadian universities began in 1971, somewhat later than in the U.S., faculty associations are now certified as trade unions in all regions of the country. As of this writing, a total of 14 universities have certified bargaining agents, one each in British Columbia (Notre Dame), Manitoba (University of Manitoba), and Nova Scotia (St. Mary's), four in Ontario (Ottawa, Carleton, York, and Algoma), and seven in Québec (the University of Québec at Chicoutimi, Rimouski, Three Rivers, and Montréal plus the universities of Sherbrooke, Laval, and Montréal). These institutions range in size from 39 faculty members to over 1100, and their faculty comprise approximately 27 percent of all Canadian university professors. In addition, a petition for one other university is before a labor relations board and should result in certification. The faculty association at one institution in Nova Scotia (Cape Breton) was voluntarily recognized as a legal bargaining agent by the administration. Finally, four universities, three in Alberta and one in British Columbia, have entered into private agreements with their faculty associations, permitting bargaining outside labor relations acts over salary and related matters, culminating in arbitration.¹

This rapid change in patterns of university governance raises several questions of interest to academics and industrial relations scholars on both sides of the border and presents interesting insights into the growth of unionism among professionals. Before discussing these questions, a brief survey of the background of bargaining in Canadian universities is necessary.

¹The Alberta and British Columbia arrangements resemble the Scranton University plan described in Dexter L. Hanley, "Issues and Model for Collective Bargaining in Higher Education," *Liberal Education*, vol. 57 (March 1971), pp. 5-14.

Background to Collective Bargaining

By law, Canadian universities² are autonomous self-governing bodies; in practice all rely heavily on provincial government grants for their financial support. Some universities, particularly in the West, have always depended on public funds, while older eastern institutions, especially those with denominational ties, have only recently begun to receive substantial government subsidies. Since both education and labor relations are responsibilities of the provinces in Canada, universities are regulated by provincial legislation. In every province save Alberta,³ legal opinion now holds that university faculty come under provincial labor relations acts that govern private sector collective bargaining. Thus the law does not preclude certification by faculties who so elect.

Virtually all Canadian universities have a bicameral system of governance. Boards of governors composed principally of government-appointed laymen exercise jurisdiction over finances and nonacademic matters, with the formal right to approve academic decisions. Responsibility for academic questions rests with senates, made up of academic administrators, elected faculty members, students, and alumni. Persons holding faculty rank normally belong to a local faculty association, which had traditionally represented the interests of faculty to administrators in a manner aptly described as "collective begging."⁴ Local associations in turn are affiliated with the Canadian Association of University Teachers (CAUT), for many years a professionally oriented group primarily concerned with protection of academic freedom. In Québec, the French-language universities have formed their own federation and maintain a cordial yet nonconstitutional relationship with CAUT.

In 1973 the CAUT adopted a guideline recognizing collective bargaining as "an effective means for faculty associations" to achieve certain CAUT constitutional objectives.⁵ Although the majority of all Canadian teachers below university level are unionized, neither their

²The term "university" includes all degree-granting post-secondary institutions in Canada. Some of the smaller Canadian universities would be classed as colleges in the United States.

³The Alberta precedent was issued in 1962 holding that the University Act precluded collective bargaining by the Board of Governors in a case involving nonprofessionals. Many authorities expect the existing rule to be overturned should the issue be raised again. Cf. Bernard Adell, "Collective Bargaining Rights at the University of Alberta" (Edmonton: Association of Academic Staff of the University of Alberta, 1974).

⁴J. H. G. Crispo, "Collective Bargaining by Professionals," *CAUT Bulletin*, vol. 23 (May 1975), p. 12.

⁵Canadian Association of University Teachers, *Handbook*, 2d. ed. (Ottawa: CAUT, 1973), p. 126.

organizations nor other public sector unions have seriously attempted to enroll teaching university faculty.⁶ CAUT is thus the only national body interested in the adoption of collective bargaining in Canadian universities, but lacks the resources to mount an organizing campaign. As a consequence, on most larger campuses certification campaigns or the formulation of extra-legal collective bargaining mechanisms have been undertaken with only limited outside assistance.

The basic structure of certified bargaining units in Canadian universities has been well established. Each unit is limited to a single university, and only one professional faculty has been granted separate bargaining status. Membership in bargaining units is limited to teaching faculty and professional librarians only.⁷ Department heads normally have been included in bargaining units in certified units, but non-certified bargaining arrangements cover higher levels of administration. The employer in every case is identified as the university, as represented by the board of governors. Negotiations have taken place between university administrators or governors and local faculty association officials, each assisted by outside advisers, including CAUT officials in the case of faculty groups. There has been no meaningful intervention by government in negotiations.

Causes of Collective Bargaining

Collective bargaining seems to have appeared in Canadian universities for the same reasons as in the U.S., namely, the poor academic job market, the erosion of rights and perquisites lacking legal protection, budgetary cutbacks, the increase in size and remoteness of university administrations, and the growth of unionism in the public sector.⁸ In the French-speaking areas of Canada, an additional cause of faculty unionism probably was the relatively restricted mobility of French-speaking academics. These factors are rather obvious, though seldom tested empirically. However, most tend to be national or international in their scope, leaving unanswered the intriguing question of which

⁶ CAUT and several public sector unions have attempted to organize professional librarians. The emerging pattern is that librarians in English-speaking areas join a CAUT affiliate, while in French-speaking areas they affiliate with a public employees union.

⁷ At St. Mary's University in Halifax, Nova Scotia, and the University of Ottawa, Labour Relations Boards established separate units for professional librarians. In the former case, the faculty association was selected as the bargaining agent, while in the latter, librarians chose a public employees union.

⁸ B. I. Adell and D. D. Carter, *Collective Bargaining for University Faculty in Canada* (Kingston: Queen's University Industrial Relations Centre, 1972), esp. pp. 3-30; Gérard Bélanger, "La syndicalisation des professeurs d'université," *Relations Industrielles*, vol. 29, no. 4 (December 1974), pp. 857-64; for U.S. data, see Joseph W. Garbarino, "Precarious Professors: New Patterns of Representation," *Industrial Relations*, vol. 10 (February 1971), pp. 1-20.

variables caused individual universities to opt for collective bargaining, while others, often in the same jurisdiction, did not. This discussion is particularly appropriate in the Canadian context, since the legal restrictions that confound such issues in the U.S. are largely absent there. Moreover, the relatively small number of institutions involved facilitate the collection of data.

The most important single factor in the decision to adopt collective bargaining in Canadian universities has been the fear of layoffs, even among tenured faculty members. Under the paternalistic industrial relations system that formerly characterized most Canadian universities, a high degree of job security was the norm (as is the case with any form of paternalism) within the university system if not within a single institution.⁹ When this norm was threatened, the conflicting interests of faculty and other interest groups within the university became manifest. Notre Dame University became the first four-year institution in English Canada to be certified while the institution was reverting from private to public status. The very survival of the university was (and still is) in doubt, and one legal effect of certification was to ensure that faculty members would retain job rights even if the university was merged with another institution. Similarly, smaller eastern universities face possible amalgamation as they become more dependent on government financing. Threats to faculty security have been especially important in Ontario, where enthusiasm for higher education in the 1960s has resulted in an overbuilt university system and chronic financial crises at some institutions. Announcements of impending layoffs at Carleton University in Ottawa stimulated a certification drive there, and the successful conclusion of that effort in turn caused a parallel development at the nearby University of Ottawa. Agreements negotiated at Carleton, Notre Dame, and St. Mary's contain extensive provisions for dealing with mergers or financial stringency. Active campaigns to acquire bargaining rights now underway at other Ontario universities have similar motivations. Conversely, the older and more prestigious universities in Ontario, and the large public universities in British Columbia, have little immediate fear of redundancies among faculty and hence have been less enthusiastic about collective bargaining.

A second factor accounting for the rise of collective bargaining has been the arbitrary actions of administrators. In several cases, the shift to collective bargaining was a reaction to administrative policies.

⁹ Cf. Mark Thompson, "Paternalism and the Rise of Collective Bargaining in Canadian Universities," *Proceedings of the Third Annual Conference, Canadian Association of Administrative Sciences, 1975* (Kingston: Queen's University School of Business, 1975), pp. 5-77-5-82.

At the University of Manitoba, a new president installed a centralized administrative system that cut him off from faculty concerns at a time when the university was facing financial problems. The university administration refused to provide budgetary data when discussing faculty salaries or academic programs. The faculty association turned to collective bargaining when other means of securing collegial governance failed.¹⁰ The smaller eastern universities had traditions of authoritarian presidents and a history of faculty grievances over issues of academic freedom and university governance.¹¹ When movements to secure bargaining rights began at some universities, administrative opposition solidified faculty support for certification. At Carleton, for instance, the president announced an impending deficit and his decision that layoffs would be necessary to cope with it. He further reserved to himself and the board of governors the final right to determine how layoffs would occur. As the university assumed public status, the chairman of the board of governors at Notre Dame assessed the new administration with several years "back pay" charges for the services of faculty members who were clerics and had previously received a nominal salary.

Few Canadian academics have embraced collective bargaining eagerly, even on those campuses where certification or formal bargaining rights ultimately prevailed. An important consideration in several universities was the apparent lack of any viable alternative mechanisms to collective bargaining as a means of voicing faculty concerns. At three universities, administrators refused faculty requests for voluntary recognition, after which local associations sought certification.

The only existing body with a role for faculty in most institutions is the university senate. The roles and composition of senates vary considerably in Canada, but generally they are dominated by administrators.¹² Teaching faculty are a majority in approximately one-half of all senates, but even in those cases faculty views tend to be submerged by politically sophisticated administrators, who typically comprise almost 50 percent of senate membership. While a firmly united faculty can normally veto administrative actions, the structure of senates, plus the diverse nature of faculty interests, virtually guarantee the absence of the necessary degree of unity, especially where issues of the distribution of power and resources arise.

¹⁰ *The Financial Post*, June 28, 1975.

¹¹ Donald M. Savage, "Special Report: Faculty Collective Bargaining in Canadian Universities," *CAUT Bulletin*, vol. 22 (September 1974), pp. 10-12.

¹² *University Government in Canada: Report of a Commission Sponsored by the Canadian Association of University Teachers and the Association of Universities and Colleges of Canada* (Toronto: University of Toronto Press, 1966), pp. 5-9.

Ironically, efforts in the late 1960s to increase the constituencies represented in senates, principally by adding student members, resulted in a dilution of faculty participation when the number of senators was raised.¹³ At the University of Manitoba the faculty had lost their majority position in the senate as a result of amendments to the Manitoba Universities Act. Thus when policy disagreements with the administration arose, the faculty turned first to the senate for action. When they were rebuffed, the faculty sought certification. There was no tradition of a strong faculty voice in senates at Notre Dame or St. Mary's, while the four new universities in the University of Québec system had no previous pattern of governance.

A third factor accounting for the movement to certification clearly is religion. Three of the certified universities in English Canada (Notre Dame, St. Mary's, and Ottawa), plus one university where the faculty is seeking certification (St. Thomas) were founded by religious orders or the hierarchy of the Roman Catholic church. In addition, the older Québec universities (Montréal, Laval, and Sherbrooke) for many years were under religious influence or control.¹⁴ Legally, all of these institutions, save St. Thomas, have been deconfessionalized, but traditions of clerical dominance have lingered. Thus these universities have been affected by the changing roles of laity and clergy within the Catholic church,¹⁵ in addition to faculty-administration issues mentioned elsewhere in this paper. At one university, lay faculty were convinced that their religious orthodoxy was a significant factor in promotion and tenure decisions. In the smaller English-speaking institutions, faculty qualifications tend to be lower than average for Canadian universities, thus inhibiting the mobility of discontented faculty.¹⁶ Moreover, disputes over academic freedom have been relatively frequent, presumably indicating a background of faculty-administration enmity.

A final, and less direct, factor accounting for the adopting of collective bargaining is the rise in provincial government intervention in university affairs. While Canadian universities are not normally subject

¹³ J. F. Houwing, L. F. Michaud, *Changes in the Composition of Governing Bodies of Canadian Universities and Colleges, 1965-1970* (Ottawa: Association of Universities and Colleges of Canada, 1972), p. 65.

¹⁴ Savage, p. 3; Marie-Claire Pommeze, "Le Syndicalisme dans les Universités: Francophones vs. Anglophone," *CAUT Bulletin*, vol. 21 (November 1973), p. 12; *A Commitment to Higher Education in Canada: The Report of a Commission of Inquiry on Forty Catholic Church-Related Colleges and Universities* (Ottawa: National Education Office, 1971).

¹⁵ Everett Carl Ladd, Jr. and Seymour Martin Lipsett, *Professors, Unions, and American Higher Education* (Washington, D.C.: American Institute for Public Policy Research, 1973) p. 101; Christopher Jencks and David Riesman, *The Academic Revolution* (Garden City, N.Y.: Doubleday, 1969), p. 363.

¹⁶ *A Commitment to Higher Education in Canada*, p. 173.

to direct legislative scrutiny, the very size of university budgets has virtually guaranteed the establishment of government financial controls, which inevitably lead to decisions affecting academic affairs. In several provinces, including Ontario and British Columbia, a government-appointed grants commission holds a veto power over the establishment of new programs, while the Manitoba body can eliminate academic departments. Government action in Québec has affected a range of academic decisions. The Ministry of Education forced the amalgamation of two English-language universities in Montréal, as well as the merger of two classics departments in the French-language universities in the same city. Provincial governments in Alberta and Québec have threatened attacks on matters of internal governance if universities did not adhere to salary guidelines.¹⁷

Collectively, these actions have deprived many faculty members of their sense of autonomy, but by negotiating legally binding agreements, they have gained a buffer against further government intervention. When certified, they have also acquired potential allies in the labor movement should a government seek to strip them of negotiated rights.

Impact of Bargaining

The impact of the shift to collective bargaining on universities has been the subject of frequent speculation. Although the Canadian experience is still relatively recent (in English Canada, only two universities have negotiated more than one collective agreement), some generalizations are now possible.

When faculty associations have decided to seek certification as a trade union, the senior administrators in virtually every English Canadian university have vigorously opposed this move. Most of their arguments have been of the most traditional sort, e.g., that unions impose "rules that hamper output, prevent promotions on merit . . . and bring on strikes."¹⁸ Many of their tactics are equally familiar to students of labor history, including meetings with individual faculty members, attacks on the professional competence of the proponents of certification, and extensive legal action challenging the possibility of certification or seeking substantial managerial exclusions from bargaining units. Negotiations have been protracted and difficult, with faculty seeking substantial improvements both in economic and noneconomic conditions and administrations demanding that existing conditions and benefits be abolished as a prelude to bargaining. However, after certification and

¹⁷ Adell and Carter, pp. 10, 16.

¹⁸ Selig Perlman, *A Theory of the Labor Movement* (New York: August M. Kelley, 1970), p. 215.

the successful negotiation of a first collective agreement, relations between the parties have tended to improve.¹⁹ Those faculties which have elected extra-legal bargaining have received little or no opposition from administrators.²⁰

An analysis of negotiated contracts²¹ reveals extensive treatment of procedures for granting promotion and tenure and for dealing with redundancies. There is scant mention of senates or other preexisting organs of university government, save to preserve their functions wherever these do not conflict with the collective agreement. Disputes over promotion or tenure and other grievances are channeled through separate settlement procedures, so that only procedural issues are arbitrable in promotion and tenure disputes (except where issues of academic freedom arise). Where reductions in faculty positions become necessary, the criteria are academic priorities *and* seniority, with severance pay and recall rights for faculty on layoff.

Salaries have been the subject of extensive negotiations, but little effort has been made to alter existing relationships, perhaps because no agreement yet covers the full range of university departments. Consistent with U.S. experience, faculties seem to have won above-average salary increases.

Certified faculty associations have engaged in two strikes, both in Québec, and both over a mixture of economic and noneconomic issues. Overall the faculty seem to have gained some advantages through their stoppages.

The Future

Although experience with collective bargaining at Canadian universities is still limited, the institution seems destined to spread. A number of faculty associations are actively considering certification. In general, its adoption results from acknowledgment that universities are governed politically, with various interest groups, students, administrators, or government, represented.²² A growing proportion of Canadian faculty apparently regard their position *vis-à-vis* competing interest groups as too weak to retain traditional forms of governance. In time of relative austerity, the unitary assumptions of a collegial model become less

¹⁹ Cf. E. D. Duryea and Robert S. Fiske, eds., *Faculty Unions and Collective Bargaining* (San Francisco: Jossey-Bass, 1973) for analagous experiences at several American institutions.

²⁰ See, for example, "Relations between the Board of Governors and the Academic Staff Association at the University of Alberta" (Edmonton, Alta.: ASAUA, 1970), p. 10.

²¹ This section of the paper refers to English Canadian universities only.

²² J. Victor Baldridge, "Models of University Governance: Bureacratic, Collegial and Political," Stanford University School of Education, ERIC No. E.D.60825.

tenable, though collective bargaining does coexist with other mechanisms of governance.

Analytically, the Canadian situation permits a focus on social, rather than legal, variables,²³ and these factors may provide the basis for future research on the impact of collective bargaining.

Whenever collective bargaining has been adopted by new groups of employees, there is an inevitable question of how much the character of these employees will affect the process and how the bargaining relationship will affect them. In their brief period of bargaining, faculty show signs of developing a new industrial relations system hopefully suited to Canadian universities.

²³ Joseph W. Garbarino, *Faculty Bargaining* (New York: McGraw-Hill, 1975), pp. 51-82, provides more data on nonlegal factors which do not predict the presence of unionism at a particular institution.

A Survey of Faculty Attitudes Toward Collective Bargaining

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Introduction

During 1972-73, the American Council on Education conducted a survey trying to determine the level of support for unionization among college faculty. Approximately 66 percent of the respondents disagreed with the statement: "collective bargaining by faculty members has no place in a college or university."¹ (The figure was 59 percent in a similar survey in 1969.²) In the 1960s the majority of the faculty at the University of Cincinnati would probably have agreed with the statement that unionization has no place in a university.

Many developments have taken place on our campus since the 1960s that have had an impact upon faculty attitudes toward unionization, such as the decline in job opportunities for faculty members, inflation, changes in the "environment of higher education,"³ budgetary difficulties, low salary levels, rapid expansion, and many changes in the administration of the university.

Development of Bargaining at Cincinnati

The University of Cincinnati is an urban, multicampus university, municipally owned and state supported. It has approximately 37,000 students.

The AAUP chapter at the University of Cincinnati has always been strong and active in traditional AAUP areas of concern such as tenure and academic freedom. It was one of the 15 largest chapters in the U.S. when, during the 1971-72 academic year, it began to study collec-

¹ Alan E. Bayer, *Teaching Faculty in Academe: 1972-73*, ACE Research Reports Vol. 8, No. 2 (Washington: 1973). Cited by Joseph W. Garbarino and Bill Aussieker, *Faculty Bargaining Change and Conflict*, Report prepared for the Carnegie Commission on Higher Education and the Ford Foundation (New York: McGraw-Hill Book Co., 1975), p. 52.

² Carnegie Commission on Higher Education, *National Survey of Faculty and Student Opinion* (Berkeley, Calif.: The Commission, 1969), cited by Garbarino and Aussieker, p. 52.

³ Garbarino and Aussieker, p. 252.

tive bargaining. By January 1974, the AAUP had received authorization cards from approximately 47 percent of the total faculty (56 percent if the Medical College were not included). The chapter voted to ask the Board of Directors of the university to agree to an election among the faculty to determine whether or not they wished to have the AAUP represent them in collective bargaining. On March 5, 1974, the University Board of Directors agreed to the request (even though it was not legally bound to do so in the absence of a state labor relations law).

One of the most significant decisions concerning any bargaining election is the determination of the bargaining unit. The AAUP proposed a unit that would have included all full-time faculty except for the Colleges of Medicine and Law, including department heads and the professional staff of the Library. Predictably, this was the unit that they felt would offer them the best chance for success, especially since they had only collected cards from approximately 20 percent of the Medical College. The administration solicited opinions about the unit from the entire campus and established a unit recommended by the Faculty Senate which included all full-time faculty of the university (including Medicine and Law), and department heads but excluded librarians who did not have faculty status. There was never any controversy about including faculty at the two-year branches of the university who were strong supporters of the AAUP.

The election was set for November 7 and 8, 1974, with the university agreeing to be bound by the results if at least 50 percent of the faculty voted and at least 50 percent of those voting expressed a preference for the AAUP as bargaining agent. There was no attempt by any outside organization to appear on the ballot.

Almost 90 percent of the faculty eligible to vote participated in the election, and the AAUP, to the surprise of many, won with 676 votes, while there were 583 votes for no agent and 69 challenged votes that were not counted.

Survey Methodology

Immediately following the announcement of the results of the election, a survey of faculty attitudes was undertaken in an attempt to determine what the faculty interests were in such areas as financial matters, academic freedom and security; to determine how they perceived the bargaining process and its possible ramifications; and why they voted as they did. Most of the work involved in designing the questionnaire, determining the sample, and in preliminary data reduction was done by graduate students in industrial relations with advice and assistance from several faculty members.

The questionnaire contained several demographic questions to identify the faculty member's affiliation, rank, and status. There were some "yes-no" questions and some "open-ended" questions such as "What are the sources of faculty bargaining power?" A stratified sample was chosen since it would give more information and reduce the size of sample needed since there was clear a priori indication (from the authorization cards) that there were significant differences among colleges and ranks in attitudes toward bargaining. The total sample included 211 faculty, randomly selected, all but one of whom agreed to be interviewed. Those surveyed who revealed how they voted indicated a "yes" response of 55.3 percent, which is statistically significant at the 90 percent level, given a stratified random sample. Lending more validity to the results of the survey is the fact that the actual election results showed 54.7 percent voting for bargaining, and the survey percentage is remarkably close to that proportion.

Survey Results

IMPORTANCE OF UNIT DETERMINATION TO ELECTION RESULTS

The survey shows that the major unit-determination fight over the status of the Medical faculty did not affect the results of the election. Of those who revealed how they voted, 51.3 percent of the Medical faculty stated they voted "yes" (a proportion not significantly different from the percentage support in the College of Arts and Sciences nor from the percentage voting "yes" in the entire bargaining unit). Faculty of the two-year schools, as expected, voted overwhelmingly for the AAUP.

Support for the AAUP was relatively low among the professional schools such as Engineering, Music, and Business Administration (although Design, Art and Architecture showed a sample survey response of over 70 percent "yes" votes). The strongest support came from the two-year schools and College of Education. There is some indication that such patterns prevail in general and choices of bargaining units can influence the election results in close elections depending upon which academic units are included and which are excluded.⁴

POSSIBLE REASONS FOR THE PRO-COLLECTIVE BARGAINING VOTE

Anti-administration Sentiment. Anti-administration sentiment was probably one of the major factors responsible for the favorable vote for collective bargaining. In our survey, we asked faculty to list some of

⁴See, for example, Everett C. Ladd, Jr., and Seymour M. Lipset, *Professors, Unions and American Higher Education* (Washington: American Enterprise Institute for Public Policy Research, 1973), pp. 38-40.

the administrative actions that they objected to most during the last few years.

The highest proportion of anti-administration comments (30 percent) can be classified under the heading of attitudes of the administration resented by our faculty. The following comments made by survey respondents reflect some of their views: "secrecy and concentration of power among senior administration officials. . . ," "top-heavy," "failure to communicate with faculty," "waste within administration," and "change of atmosphere to bigness."

The second largest proportion of criticism against the administration was in the area of salaries (19 percent of the comments), including concern about inequities within and among colleges, dissatisfaction with one's own salary level and disparity in faculty-administration salary levels.

The third category of anti-administration criticisms (7.1 percent of responses) focused on the development of new programs in the area of community involvement. A typical comment was: "fancy urban programs and window dressing." On the other hand, in a response to a question asking faculty to list some of the administrative actions that they favored strongly, 9.5 percent of the respondents expressed satisfaction with the administration's community activities.

The fourth category of anti-administration comments (5.7 percent of the responses) consisted of objections to the administration's attitude toward athletics.

The final category, miscellaneous comments made by 16 percent of the respondents, contained a broad spectrum of faculty concerns. Comments included criticisms of promotion and tenure procedures and objections to course evaluations and to the impact of affirmative action such as "reverse discrimination." Another indication of faculty dissatisfaction with the administration was the response to the question "list some of the administrative actions that you favored strongly during the last few years." In answering this question, a very high percentage of respondents replied "none" (22.4 percent) and another 21 percent did not answer this question.

The favorable actions that were attributed to the administration in response to the above question were concentrated in the following areas: "lobbying efforts to attain increases in financial subsidy from the state," "much more accessible . . . ," "attempts to become more student-oriented." The results of our study are reinforced by a survey on faculty morale conducted by the Faculty Senate during 1975.

Salaries. In a study by the Carnegie Commission on Higher Education, a statement is made that ". . . if the slackening in the academic

job market does actually result in an appreciable slowing down in the rate of increase in faculty salaries—and especially if financial stringency continues and faculty members find their employment conditions deteriorating in other ways as well—the spread of unionization among faculty members which has been a slow development in the last few years is likely to accelerate.”⁵

The relationship between salary levels and unionization can be clearly demonstrated at the University of Cincinnati. Responses to a number of questions in our survey reveal the significant impact of salaries on the pro-unionization vote.

In response to the question “In your opinion is the U.C. pay scale competitive (a) with other universities in Ohio, (b) with other universities in the nation?” 61.4 percent of the respondents expressed the view that their salaries were not at par with other Ohio universities and an even higher percentage, 64.3 percent, considered their salaries as noncompetitive with other universities in the nation. There was a very high level of response to this question, with 85 percent of the faculty in the sample expressing a choice. According to Table 1, the percentage of full professors who considered their salaries noncompetitive was 44.2 percent as contrasted with approximately 70 percent for all the other ranks. Disaggregation by salary levels indicated that approximately 70 percent of the respondents making under \$18,000 a year considered U.C. pay scale noncompetitive. This percentage dropped to about 40 percent for faculty making over \$18,000. According to the *Summer 1975 AAUP Bulletin* there are ten category I institutions in Ohio. A listing⁶ of median salaries in descending order at those 10 institutions reveals that the median salary at the University of Cincinnati is the lowest in the group. Thus our faculty members’ perceptions that disparities exist in salaries is borne out by reality.

The preoccupation with salary as an election issue appeared when, in the responses to the question “What were the most important reasons for your vote?” 31.4 percent of the respondents listed salaries. This percentage exceeded all the other individual responses to this particular question.

Inflation was another important factor influencing the vote. To the question “What events during the last few years had an impact on your vote?” 21.9 percent of the respondents cited inflation.

To the question, “What possible benefits do you expect from collective bargaining?” financial improvement in the short run (up to two

⁵ Carnegie Commission on Higher Education, *The More Effective Use of Resources: An Imperative for Higher Education* (New York: McGraw-Hill Book Co., 1972), pp. 87–88.

⁶ Source: AAUP News at the University of Cincinnati, Oct. 8, 1975.

years) ranked first with 58.1 percent of the respondents, while only 37.1 percent expected financial improvements in the long run.

Job Security. One of the reasons given by Professors Garbarino and Aussieker⁷ for faculty organization is job security. Security is also one of the concerns of our faculty.

In response to the question, "Are you concerned with the possible dismissal of non-tenured faculty?" 70 percent of the faculty on a university-wide basis answered this question in the affirmative (see Table 1), with 45.7 percent feeling the same way toward the possibility of dismissal of tenured faculty. Whereas the percentage of respondents troubled over potential dismissals was high, it cannot be concluded that faculty saw collective bargaining as the only remedy for concerns over job security. When asked to name the most important reasons for their vote, only 6.2 percent of the respondents cited security.

Over three-fourths of the faculty surveyed expressed concern over possible curtailment of academic programs. Yet, only 43.8 percent of the respondents indicated a willingness to submit the subject of curtailment of programs to the collective bargaining mechanism. The responses suggest that although our faculty were concerned with possible cuts in academic programs, they did not consider the bargaining table as necessarily the best mechanism for dealing with this particular issue.

POSSIBLE REASONS FOR THE ANTI-COLLECTIVE BARGAINING VOTE

Since a significant proportion of the U.C. faculty voted against the AAUP, we will discuss some of the reasons that may account for the negative votes. About 20 percent of our respondents stated that the most important reason for their vote was their opposition to collective bargaining. For some it was outright opposition to labor unions per se, while for others it was an opposition to the unionization of a college campus.

In response to the question, "What will be the effect of collective bargaining upon future faculty-administration relationships?" 45.2 percent of our faculty expected an adverse effect, with only 20.5 percent anticipating a beneficial result. Fears that unionization would contribute to the deterioration of faculty-administration relations were also expressed by 28.1 percent of the respondents when answering the question, "What possible drawbacks do you expect from collective bargaining?"

The impact of unionization on professionalism was another reason for some faculty being less than enthusiastic about collective bargaining. As shown in Table 1, the university-wide results indicate that 50 per-

⁷ Garbarino and Aussieker, p. 251.

cent of the respondents expressed the view that collective bargaining is indeed inconsistent with professionalism.⁸ Endorsement of this position was strongest at the highest rank and highest salary level. There were wide differences of views on this issue among the various colleges. Whereas the faculty of the College of Engineering found collective bargaining inconsistent with professionalism, not surprisingly the faculty of our two-year colleges had no difficulty reconciling professionalism and unionization. This response may be the result of different interpretations of professionalism by different groups of faculty.

A breakdown of responses to the question "Do you view collective bargaining as inconsistent with your ideas of professionalism?" indicates that about 38 percent of the respondents are concerned with such things as tyranny by the majority, restriction of academic freedom, decline in the value of merit, and impact of unionization on individualism.

It is interesting to note that while the total membership in the AAUP in November 1974 was approximately 390, 676 faculty voted for collective bargaining. Thus, the AAUP in order to win had to have a significant support at the polls from nonmembers. In our survey sample, 33.8 percent of the respondents stated that they were members of the AAUP (see Table 1). A significant proportion of the AAUP membership was concentrated in the higher ranks, with about 50 percent of the full professors surveyed being members of the AAUP. This was also the rank that gave the lowest percentage of yes votes to the AAUP.

WHAT SHOULD BE BARGAINABLE ISSUES?

The faculty were asked to indicate what issues in a given list should be subject to collective bargaining. The results are not surprising and do not vary significantly when disaggregated by rank, years of service, salary or tenure status.

The economic issues—salary (95.7 percent favored inclusion), hospitalization (86.2), and pensions (84.7)—were favored as bargaining subjects by a large percentage of the faculty. While many people feel that collective bargaining over salaries inevitably leads to "leveling" of salary differentials, more than 85 percent of the survey respondents expressed the desire to have merit increases in the contract. If the issues of layoffs (75.2), tenure procedures (70.4), curtailments of academic (49) and nonacademic programs (48.1) could be considered job-security-related, the support for bargaining over the first two, which directly in-

⁸ A similar percentage response was obtained by Kennelly and Peterson in a survey of faculty organization representatives and presidents of 244 institutions of higher learning. Jean R. Kennelly and Richard B. Peterson, "Attitudes, Experience, and Issues in Faculty Bargaining," *Industrial Relations*, vol. 13 (May 1974), pp. 202-207.

volve an individual's job security, was almost as high as for the economic issues. Most faculty hoped to retain all of the benefits and rights they enjoyed before bargaining. Thus the support for including topics such as tenure in bargaining basically reflects a simple desire to include current procedures in the contract rather than a willingness to trade tenure for other gains. The degree of support for including program-curtailement decisions was less, probably since these issues have only an indirect effect upon an individual person's security and they have traditionally been decided through other governance groups.

The issues involving conditions of work, teaching loads (63.3 percent), and office attendance (25.7) received less support. The teaching-load question would probably appeal to those faculty who feel they currently carry a very high load. Unfortunately, it is impossible to segregate out those persons and test that hypothesis. However, the percentages supporting inclusion of this issue were high in the two-year schools (71.9) and in the music school (90).

The remaining issues are directly concerned with the AAUP and collective bargaining. There was strong support for bargaining about a grievance procedure (83.8 percent). Apparently faculty felt that a contract would not be effective without some mechanism for enforcing its terms. A little more than half (55.7) of the faculty supported the dues check-off as a proper subject for bargaining. A contributing factor here is that the University has, for many years, had a voluntary dues check-off arrangement with the AAUP, which many members have found to be a convenient way to pay their dues. On the other hand, only a little more than a third (39.9) of the survey respondents supported even including an agency shop among bargainable subjects. This support is far less than the support for the AAUP as bargaining agent. There may have been some confusion as to exactly what an agency shop involves, but obviously the faculty has strong feelings against any form of compulsory union membership or financial support.

PERCEPTIONS OF THE BARGAINING PROCESS

Several questions involved faculty perceptions of the bargaining process and attitudes they had toward different methods of impasse resolution. Those surveyed were asked what in their view were the sources of faculty bargaining power. About one-third (33.8 percent) listed items that could be combined under the term "solidarity." Some of the advocates of collective bargaining had used this argument prior to the election, stating that the "faculty would speak with one voice." However, this position should be viewed along with the answer to the question, "Will there be conflicting objectives among faculty over bar-

TABLE 1^a

Survey Results Tabulated by Academic Rank, Years of University Teaching, Highest Degree, Salary Level, Tenure Status and by Colleges
(Percent of faculty interviewed responding with a "yes" or "no" to the questions)

	Did you vote in the election?		How did you vote?		Are you a member of AAUP?		Are you concerned with the possible dismissal of nontenured faculty?		Are you concerned with the possible dismissal of tenured faculty?		Are you concerned with the possible curtailment of academic programs?	
	yes	no	yes ^t	no	yes	no	yes	no	yes	no	yes	no
<i>Academic Rank</i>												
Instructor n = 33	90.9	9.1	75.8 (92.6)	6.1	18.2	81.8	63.6	30.3	27.3	60.6	66.7	27.3
Asst. Prof. n = 69	89.9	10.1	46.4 (62.8)	27.5	31.9	68.1	68.1	23.2	29.0	49.3	78.3	14.5
Assoc. Prof. n = 57	94.7	5.3	36.8 (42.0)	50.9	29.8	70.2	71.9	24.6	57.9	38.6	80.7	15.8
Full Prof. n = 43	93.0	7.0	34.9 (40.5)	51.2	51.2	46.5	74.4	23.3	60.5	32.6	79.1	16.3
<i>Yrs. of Univ. Teaching</i>												
Up to 7 n = 102	91.2	8.8	49.0 (62.5)	29.4	25.5	74.5	62.7	28.4	27.5	54.9	73.5	19.6
7-12 n = 48	91.7	8.3	39.6 (46.4)	45.8	39.6	60.4	79.2	18.8	54.2	39.6	77.1	20.8
Above 12 n = 60	91.7	8.3	41.7 (51.0)	40.0	43.3	55.0	75.0	23.3	70.0	25.0	83.3	11.7
<i>Highest Degree</i>												
Bachelor n = 9	88.9	11.1	33.3 (60.0)	22.2	11.1	88.9	66.7	33.3	77.8	11.1	66.7	11.1
Masters n = 63	90.5	9.5	63.5 (78.4)	17.5	30.2	69.8	69.8	27.0	39.7	55.6	74.6	20.6
Ph.D. n = 109	96.3	3.7	39.4 (45.2)	47.7	42.2	56.9	72.5	20.2	47.7	36.7	78.0	17.4
M.D. n = 17	82.4	17.6	23.5 (30.8)	52.9	5.9	94.1	52.9	41.2	23.5	64.7	76.5	17.6
Other n = 10	70.0	30.0	40.0 (80.0)	10.0	30.0	70.0	70.0	30.0	70.0	30.0	90.0	10.0
<i>Salary</i>												
Up to \$13,000 n = 72	90.3	9.7	61.1 (78.6)	16.7	30.6	69.4	59.7	30.6	29.2	54.2	75.0	19.4
\$13,000-\$18,000 n = 71	90.1	9.9	43.7 (54.4)	36.6	31.0	69.0	83.1	14.1	56.3	32.4	74.6	16.9
Above \$18,000 n = 67	94.0	6.0	28.4 (33.4)	56.7	40.3	58.2	67.2	29.9	52.2	41.8	82.1	16.4
<i>Tenure Status</i>												
Nontenured	88.9	11.1	54.4 (70.0)	23.3	25.6	74.4	62.2	28.9	24.4	56.7	71.1	20.0
Tenured	94.0	6.0	37.6 (44.9)	46.2	41.0	58.1	76.9	21.1	62.4	32.5	81.2	16.2
<i>College</i>												
Arts & Sciences n = 56	96.4	3.6	46.4 (52.0)	42.9	55.4	44.6	80.4	5.4	48.2	23.2	85.7	7.1
Medicine n = 47	89.4	10.6	42.6 (51.3)	40.4	10.6	89.4	61.7	36.2	40.4	55.3	76.6	21.3
Education n = 16	75.0	25.0	56.3 (90.0)	6.3	12.5	87.5	75.0	25.0	62.5	37.5	81.3	12.5
Engineering n = 14	100.0	0.0	21.4 (25.0)	64.3	21.4	71.4	64.3	28.6	57.1	35.7	85.7	7.1
DAA ^b n = 12	75.0	25.0	41.7 (71.4)	16.7	0.0	100.0	100.0	0.0	75.0	8.3	91.7	0.0
CCM ^c n = 10	80.0	20.0	20.0 (28.6)	50.0	60.0	40.0	70.0	30.0	50.0	50.0	90.0	0.0
Nursing n = 8	100.0	0.0	75.0 (85.7)	12.5	37.5	62.5	37.5	62.5	0.0	100.0	75.0	25.0
Business Admin. n = 7	71.4	14.3	0.0 (0.0)	85.7	14.3	85.7	57.1	42.9	57.1	42.9	57.1	42.9
Two-Yr. Colleges ^d n = 32	100.0	0.0	68.8 (78.5)	18.8	59.4	28.1	68.8	28.1	37.5	53.1	59.4	34.4
Other ^e n = 6	100.0	0.0	16.7 (25.0)	50.0	33.3	66.7	50.0	50.0	16.7	83.3	33.3	66.7
<i>Total Univ. Figures</i>	91.4	8.6	44.8 (55.3)	36.2	33.8	65.7	70.0	24.8	45.7	42.9	77.1	17.6

TABLE 1^a (continued)

	Is the U.C. pay scale competitive with other Universities in Ohio?		Is the U.C. pay scale competitive with other Universities in the nation?		Should the contract provide for merit increases?		Is collective bargaining inconsistent with professionalism?		Would you favor a strike as a last resort?		Would you favor binding arbitration in the event of an impasse?	
	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
<i>Academic Rank</i>												
Instructor n = 33	15.2	69.7	12.1	78.8	90.9	6.1	27.3	66.7	30.3	54.5	81.8	12.1
Asst. Prof. n = 69	26.1	63.8	21.7	66.7	84.1	13.0	43.5	52.2	27.5	66.7	87.0	11.6
Assoc. Prof. n = 57	22.8	68.4	24.6	68.4	82.5	15.8	56.1	42.1	19.3	78.9	71.9	26.3
Full Prof. n = 43	32.6	44.2	23.3	44.2	86.0	9.3	60.5	34.9	25.6	72.1	81.4	14.0
<i>Yrs. of Univ. Teaching</i>												
Up to 7 n = 102	25.5	59.8	20.6	67.6	81.4	14.7	45.1	50.0	25.5	64.7	88.2	8.8
7-12 n = 48	22.9	70.8	18.8	70.8	89.6	8.3	50.0	45.8	20.8	79.2	70.8	29.2
Above 12 n = 60	25.0	56.7	23.3	53.3	88.3	8.3	58.3	40.0	25.0	73.3	75.0	20.0
<i>Highest Degree</i>												
Bachelor n = 9	11.1	66.7	11.1	55.6	100.0	0.0	66.7	33.3	22.2	77.8	88.9	11.1
Masters n = 63	3.2	76.2	22.2	82.5	84.1	9.5	42.9	55.6	25.4	65.1	74.6	22.2
Ph.D. n = 109	5.5	54.1	22.2	52.3	83.5	13.8	53.2	42.2	27.5	68.8	85.3	11.0
M.D. n = 17	11.8	29.4	5.9	58.8	88.2	11.8	58.8	35.3	5.9	88.2	88.2	11.8
Other n = 10	0.0	90.0	20.0	90.0	90.0	10.0	30.0	70.0	20.0	80.0	50.0	50.0
<i>Salary</i>												
Up to \$13,000 n = 72	12.5	72.2	15.3	76.4	81.9	13.9	38.9	56.9	26.4	63.9	84.7	12.5
\$13,000-\$18,000 n = 71	23.9	70.4	12.7	71.8	87.3	11.3	47.9	46.5	22.5	74.6	73.2	26.8
Above \$18,000 n = 67	38.8	40.3	35.8	43.3	86.6	9.0	64.2	34.3	23.9	73.1	83.6	10.4
<i>Tenure Status</i>												
Nontenured	27.8	61.1	22.2	64.4	82.2	13.3	41.1	53.3	27.8	63.3	87.8	8.9
Tenured	23.1	61.5	20.5	63.2	87.2	10.3	56.4	41.0	22.2	75.2	75.2	22.2
<i>College</i>												
Arts & Sciences n = 56	25.0	58.9	19.6	58.9	75.0	19.6	46.4	50.0	33.9	58.9	87.5	8.9
Medicine n = 47	38.3	38.3	27.7	55.3	93.6	6.4	42.6	48.9	17.0	78.7	83.0	14.9
Education n = 16	18.8	81.3	0.0	93.8	93.8	0.0	50.0	50.0	18.8	81.3	37.5	56.3
Engineering n = 14	42.9	42.9	50.0	35.7	92.9	7.1	100.0	0.0	14.3	85.7	85.7	7.1
DAA ^b n = 12	0.0	100.0	0.0	58.3	66.7	8.3	58.3	41.7	8.3	91.7	16.7	83.3
CCM ^c n = 10	0.0	100.0	0.0	0.0	70.0	30.0	50.0	40.0	30.0	70.0	80.0	20.0
Nursing n = 8	25.0	62.5	25.0	62.5	62.5	37.5	37.5	62.5	37.5	62.5	100.0	0.0
Business Admin. n = 7	42.9	57.1	57.1	28.6	100.0	0.0	100.0	0.0	0.0	100.0	100.0	0.0
Two Yr. Colleges ^d n = 32	6.3	78.1	9.4	46.9	93.8	6.3	37.5	59.4	28.1	59.4	96.9	3.1
Other ^e n = 6	50.0	33.3	50.0	33.3	100.0	0.0	33.3	66.7	33.3	50.0	83.3	0.0
<i>Total University Figures</i>	24.8	61.4	21.0	64.3	85.2	11.4	50.0	46.2	24.3	70.4	80.5	16.7

^a The reason that the total of "yes" and "no" responses does not equal 100% is failure of some respondents to answer all survey questions. 100% - (%yes + %no) = No Response.

^b College of Design, Architecture, and Art.

^c College Conservatory of Music.

^d Includes University College, Raymond Walters, Ohio College of Applied Science (primarily a 2-year college, in 3 areas it offers a B.S. degree), and Clermont College.

^e Includes the Colleges of Law, Community Services, and Pharmacy. The sample in individual colleges was too small to yield statistically significant results.

^f Figures in parentheses are "adjusted yes votes," i.e., the ratio of "yes" votes to the total of "yes" and "no" votes.

gaining issues?" to which 92.2 percent of those expressing an answer said "yes." Some conflict over issues need not necessarily destroy the bargaining power solidarity of a union. Yet the response on solidarity may also reflect a certain naivety among the faculty who may not sense the many differences among them concerning distribution of pay raises (across-the-board, merit, cost-of-living), teaching loads, relative importance of research and teaching, class sizes, etc., will still be present except that under bargaining some of them will have to be resolved within the bargaining unit rather than by administrative decision. The second most frequently mentioned source of bargaining power was the strike with 18.1 percent expressing that view. Some who expressed this choice qualified their statement with the phrase "if legal." Since public employee strikes are currently illegal under Ohio law, this qualification would reduce the number apparently willing to use such a weapon and also reduce the effective bargaining power which it would create. This result is fairly consistent with the answer to the question, "Would you favor a strike as a last resort?" to which 24.3 percent answered "yes."

The only other major category of answers about sources of faculty bargaining power was publicity, which ranged from actual picketing, news releases, and lobbying to other forms of public information. Interestingly, 20.5 percent of the persons answering the question about faculty bargaining power said there were *no* sources of such power. One respondent stated, "Faculty bargaining power is like a car without a motor."

As indicated above, few of the faculty surveyed felt that the strike was a source of bargaining power or a feasible way of resolving impasses. While the percentage of support by lower ranked, nontenured, lower salaried respondents was slightly higher than for other faculty, the differences were not statistically significant. In contrast, more than 80 percent of the surveyed faculty stated that they would favor binding arbitration in case of impasse. There certainly is strong evidence that the faculty would hope to have a peaceful resolution of conflict, either by the parties themselves at the bargaining table or by third-party intervention.

A surprising set of answers was given to the question, "What would you be willing to exchange for higher salaries?" Fifty-seven percent stated *nothing!* There were several possible trades mentioned with the largest number being in the area of higher teaching loads, although the number willing to make that exchange was only 15.7 percent of the survey. Many respondents did not answer this question, with the result that of those who did, approximately two-thirds would not trade anything for higher salaries.

Conclusion

Garbarino and Aussieker summarize many reasons why faculty choose collective bargaining.⁹ They find bargaining more likely where: (1) the school is a public institution—true for Cincinnati; (2) it is a four-year institution (as distinct from two-year)—true for Cincinnati; (3) there is a state labor relations law—not true for Cincinnati; (4) it is in the lower tier of quality—not true for Cincinnati (in the 1973 rankings, Cincinnati ranks 58th out of 234 public institutions and 11th out of 41 Ohio institutions);¹⁰ (5) it is an “emerging institution”—not true for Cincinnati. Our school would have to fit into their “miscellaneous” category—“. . . individual institutions that organize for a variety of reasons tied to special circumstances on their particular campuses . . .”¹¹

To conclude, the pro-collective bargaining vote at the University of Cincinnati cannot be specifically attributed to any one particular factor. External and internal forces such as inflation, tight job market, environment conducive to unionization, fiscal difficulties, very rapid expansion of the campus during the 1960s, administrative changes, low salaries, anti-administration sentiment, and some concern with job security all played a part in the pro-collective bargaining vote. If we had to single out the two most important factors responsible for the election results, low salaries and anti-administration sentiment would lead the list. We detected a sufficient degree of hesitancy about collective bargaining among survey respondents to conclude that there was a fairly large percentage of faculty members who were disturbed with the negative impact of collective bargaining. Some of these probably voted in favor of the AAUP despite their concern about the implications of collective bargaining. For some faculty, salary inadequacies and anti-administration attitudes may have been stronger than concerns about the negative impact of collective bargaining. Since the vote was close, it is possible that better faculty-administration relations and improved salaries could have reversed the election results.

⁹ Garbarino and Aussieker, ch. 3.

¹⁰ College Rater, Inc., *Where the Colleges Rank* (Allentown, Pa.: College Rater, Inc., 1973).

¹¹ Garbarino and Aussieker, p. 81.

Recent Trends in Collective Bargaining in Higher Education

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During the late sixties and early seventies, considerable attention was focused on the embryonic movement of college faculties seeking collective bargaining rights with their employers.¹ The movement was nurtured by economic pressures on faculties including the erosion of real wages, added work loads, and a growing supply of PhD manpower increasing competition for jobs and adversely affecting competitive salary positions.² Additional factors encouraging faculty members to seek union protection included abuses of the tenure system and growing student unrest and militancy on campus.³

In recognition of these growing pressures, the legal environment has steadily changed to accommodate the organization of faculty members and the development of faculty collective bargaining. In general, faculties in public institutions were the first to gain the right to bargain with university administrators as the result of legislation and judicial rulings. By 1971, 29 states had statutes extending bargaining rights to public employees. While only eight of these expressly cover professors, bargaining in public universities has proceeded in more than eight states despite prohibitions.⁴ And in several states where the matter has been contested, courts have brought publicly employed teachers under the law.⁵

Faculties at private institutions were given the right to bargain col-

¹ See M. G. Scully and E. Sievert, "Collective Bargaining Gains Converts Among Teachers, Three National Organizations Vie to Represent Faculties," *Chronicle of Higher Education* (May 10, 1971). Also, D. Wollett, "The Status and Trends of Collective Negotiations for Faculties in Higher Education," *Wisconsin Law Review* (1971), and J. Garbarino, "Emergence of Collective Bargaining," in *Faculty Unions and Collective Bargaining*, eds. E.D. Duryea and R.S. Fisk (San Francisco: 1973).

² C. Schramm, "The Effect of the AAUP on Academic Salaries since 1958," Master's thesis, University of Wisconsin, 1969, Ch. 3; "Demographic Changes Exert Impact on Schools, Students and Teachers," *New York Times*, January 16, 1974; J. Garbarino, "Precarious Professors: New Patterns in Representation," *Industrial Relations* vol. 10 (February 1971), pp. 1-20.

³ "Tenure in Trouble," *Newsweek*, June 10, 1974.

⁴ F. R. Livingston and A. Christensen, "State and Federal Regulation of Collective Negotiations in Higher Education," *Wisconsin Law Review* (1971).

⁵ *State Board of Regents v. United Packerhouse Workers*, 62 CCH Lab. Cas. 52,239 (Iowa 1970).

TABLE 1
Number of Institutions of Higher Education, With Faculty Unions, 1966-1974

Year	All Institutions	Percentage Change Over Previous Year	All Faculty	Four-Year Schools	Percentage Change Over Previous Year	Four-Year Faculty
1966	23		5,200	1		200
1967	37	60	7,000	2	100	300
1968	70	89	14,300	10	500	3,300
1969	138	97	36,100	26	160	16,100
1970	177	28	57,300	40	53	23,400
1971	245	38	72,400	84	110	45,400
1972	285	16	84,300	102	21	54,600
1973	310	8	87,700	121	18	57,400
1974	326	5	91,400	132	9	60,600

Source: J. Garbarino, "Faculty Union Activity in Higher Education-1974," 14 *Industrial Relations* 111 (1975).

lectively in the 1970 *Cornell University* case,⁶ when the National Labor Relations Board (NLRB) reversed its previous reasoning for disallowing bargaining in private institutions, i.e., that such institutions needed special economic protections.⁷ Prior to *Cornell*, bargaining in private institutions, although not unknown, was a very rare phenomenon,⁸ and that decision was attended by predictions that faculties would now seek to formalize their employment relationships through collective bargaining with much the same speed that public school teachers did under the public bargaining statutes developed during the 1960s.⁹

Have faculty members used the statutory protections accorded them during the last few years in establishing collective bargaining on campus? Table 1 shows the growth in all faculty bargaining units established during the period 1967 to 1974, and Table 2, beginning with 1970 (when the Board asserted jurisdiction over private institutions), shows NLRB representation elections at private colleges and universities. As the data indicate, most of the growth in faculty bargaining has occurred at public colleges and universities. Thus, in the period from 1970 to 1974, whereas a total of 149 new faculty units were formed, only 35 sought protection under the Board's *Cornell* authority.¹⁰ More important, however, the data indicate a decline in the amount of all union organizing activity on campus during recent years. In 1969, the number of faculties bar-

⁶ 183 NLRB 41 (1970).

⁷ *Trustees of Columbia University*, 97 NLRB 424 (1951).

⁸ Livingston and Christensen, p. 101.

⁹ R. Doherty and W. Oberer, *School Boards and Collective Bargaining: A Changing of the Guard* (Ithaca, N.Y.: 1967).

¹⁰ By the close of 1974, only about 20 percent of full-time faculty members were represented by unions. J. Garbarino, "Faculty Union Activity in Higher Education-1974," *Industrial Relations*, vol. 14 (February 1975), p. 111.

TABLE 2
NLRB Representation Elections Conducted at Private Colleges and Universities
July, 1970 to December, 1974^a

Year	Number of Elections	Number Involved In Elections ^b	Number of Faculty Units Contested	Number of Faculty Members In Units	Wins/Losses In Faculty Units
1970	3	4,320	0	0	0
1971	47	10,144	10	1,435	5/4
1972	69	10,092	8	681	2/6
1973	80	10,016	6	959	3/3
1974	66	7,943	11	1,748	6/5

^a Data from NLRB Election Reports.

^b Includes nonprofessional employees as well as faculty members in private colleges and universities.

gaining with administrators was nearly double that of the previous year. In the last two years, the number of new units formed under both state and NLRB jurisdiction has been negligible.

What explains the seemingly less than enthusiastic development of collective bargaining on campus and its retardation in recent years? The first reason is the negative attitude on the part of professors toward unionism. Despite repeated and widespread calls for unionism as the proper vehicle for improving the relative wage level of professors and resisting the erosion of the traditional system of job security, represented by tenure, faculty members have offered stiff resistance to the idea of changing the employment relationship from individual to collective bargaining. The major source of this resistance is the professional self-image—a feeling of participating in the management of the institution, the traditional paternal interest shown the faculty by administration, and frequently, identity with a separate scientific discipline. That faculties are willing to sacrifice the higher salaries and fringes that might be obtained through collective bargaining in the name of their status as professionals is reflected in a recent statement by Professor Sanford Kadish of the Berkeley Law School.

The move from the academic senate to collective bargaining backed by the strike is a move to the marketplace, and the spirit of the marketplace is that you are entitled to what you can exact, and what you can exact is what you are entitled to I have in mind the potential destructiveness of the collective bargaining strike to the cooperation and shared decision-making between the faculty and the administration and the governing board of the university.¹¹

¹¹S. Kadish, "The Strike and the Professoriate," *AAUP Bulletin* (1958), p. 160.

The second reason for the slow growth of faculty unionism is economic. In recent years, the labor market for professors has been faced with severe pressures of supply and demand serving to undermine faculty bargaining power. In terms of supply, professors have recently felt growing wage competition due to an oversupply of new PhDs as shown in Table 3 which gives various labor market indicators for the period 1960 to 1973. In that period undergraduate enrollment grew 58 percent whereas the number of PhDs increased by 205 percent, and the ratio of faculty employed to students enrolled increased from 7.5 in 1960 to 11.3 in 1973. According to recent projections, 44,000 PhDs will be awarded in 1985 when fewer than 1,000 new teaching jobs are expected to open.¹² In addition to the threat posed by the oversupply of PhDs, demographic change and the current recession beginning in 1972 have caused the growth in college enrollments to decline. These market pressures have produced genuine cause for professors to feel job-insecurity as institutions have abandoned the tenure system, instituted tenure freezes, or terminated faculty positions altogether.¹³ Union organizing traditionally suffers in times of market uncertainty, and university faculty unionism is no exception.

TABLE 3
Supply and Demand Factors in the Labor Market for College Faculties,
1960 to 1973

Year	Number of Students At All Undergraduate Levels	Number of Faculty	Number of New PhDs Produced
1960	2,874,000	381,000	9,000
1966	4,944,000	495,000	16,100
1968	5,653,000	759,000	20,200
1970	6,308,000	551,000	25,900
1972	6,892,000	603,000	27,500
1973	7,007,000	620,000	

Source: DHEW, Office of Education, Digest of Educational Status.

A final factor retarding union growth has been the difficulties experienced by unions in organizing professors. While over 70 percent of elections administered by the NLRB result in selection of a bargaining agent, faculty contests have produced an agent in only 50 percent of elections. This type of discouraging response may have resulted in unions directing their organizing resources to other more receptive industries. But a more fundamental difficulty met by unions has been the NLRB's

¹² Allan M. Cartter, as cited in "Graduate Work: Has It Lost Its Meaning?" *New York Times*, June 16, 1975.

¹³ "Faculty Fallout," *Wall Street Journal*, June 11, 1974; "All Professors Learning Relevant Economics," *New York Times*, January 6, 1974.

confused adjudication of several issues critical to organizing decisions. In the area of unit determination, for example, the Board initially excluded department chairmen from the bargaining unit.¹⁴ In more recent cases, however, the Board has included them.¹⁵ In another area of unit determination, the Board has treated faculties in schools of law and medicine as separate units,¹⁶ yet there are indications that not all professional schools will be so treated.¹⁷ In any event, the Board's inconsistent decisions in the area of private colleges and universities have raised the risks of litigation,¹⁸ making the simple but crucial determinations about bargaining units more unlikely so as to discourage union efforts.

In summary, faculty bargaining in colleges and universities has not grown at the rate anticipated despite the extension of protection to faculties in public and private schools. While one reason for the absence of widespread unionism is not likely to change rapidly, i.e., faculty members' rejection of bargaining as a threat to their professional self-identity, other factors such as the economic recession and the legal uncertainties growing out of early NLRB decisions will pass and faculty unionism may begin to grow in importance as a form of labor relations on campus.

¹⁴ *Long Island University (Brooklyn Center)*, 189 NLRB 110 (1971).

¹⁵ *Fordham University*, 193 NLRB 23 (1971); *University of Detroit*, 193 NLRB 95 (1971).

¹⁶ *Fordham University*, *supra* note 15.

¹⁷ E. Miller, "Is the NLRB Still Alive," remarks by NLRB chairman before the Texas Bar Association, July 6, 1973. NLRB release 1293, p. 10.

¹⁸ "The Appropriate Faculty Bargaining Unit in Private Colleges and Universities," *Virginia Law Review*, vol. 59 (1973), p. 492.

DISCUSSION

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The above papers concentrate primarily on explaining the incidence and pattern of the faculty bargaining movement in the U.S. and Canada. This paper will consider the extent to which the papers confirm or extend the current literature on this subject.

The United States Experience

Schramm accurately describes the slowdown in the growth of faculty bargaining over the past three years and the wide differences in the rate of unionization between public and private institutions. He attributes the causes for these events to negative professorial views toward unions, a loose faculty labor market, and National Labor Relations Board (NLRB) decision-making which tends to discourage the initiation of bargaining. While these factors are likely among those explaining the incidence and pattern of faculty unionism, the literature indicates that the following four factors are also important:

1. LEGISLATION

The organization of public institutions has been slowed by the absence of enabling legislation in key states. The public institutions in states with bargaining laws are now extensively organized so, obviously, growth has slowed. The University of Cincinnati is among the few public institutions (Ohio has several) to undertake an election without a bargaining law. The willingness of the administration in this instance to permit an election without undue delay substituted for the statutory requirement usually necessary in this country to overcome management resistance. In fact, systematic administration and faculty opposition at other institutions has been found to have been successful in preventing a vote for collective bargaining. The Herman and Skinner paper did not report a systematic, anti-union campaign by the Cincinnati administration, but there was a spirited anti-union campaign by a faculty group which probably was not discouraged by the administration.

2. ORGANIZATIONAL CHANGES

Schramm probably overemphasizes the contribution of economic factors to the faculty bargaining movement, particularly in its early

stages. While economic factors are more important now, faculty in the institutions unionized in the sixties and early seventies were responding to stress created by organizational change. Predominant among the first four-year institutions to organize were those experiencing changes in structure and function—the former teacher's colleges, the emerging universities, those institutions in developing state systems. As a body, the private institutions were spared the massive growth and reorganization of public institutions, and this likely contributes to the low rate of unionization. Moreover, the private institutions do not have the system linkages that may produce collective bargaining where it otherwise might not develop, for example, at Rutgers University and the State University of New York campuses at Stony Brook, Buffalo, Binghamton, and Albany. The system linkages tend to override quality differences among public institutions as a determinant of collective bargaining. In private institutions, however, the quality variable is likely to be a better predictor of unionization.

The important contribution of anti-administration sentiment in unionizing Cincinnati suggests that organizational change of a non-economic nature and the style with which administrations deal with change are also important in explaining the unionization of recent campuses. A more thorough discussion of the objective changes creating the faculty attitudes at that campus would have been useful.

3. PRIOR HISTORY OF FACULTY RELATIONSHIPS WITH POTENTIAL AGENTS

At Cincinnati, the local American Association of University Professors (AAUP) chapter was one of the strongest in the nation prior to bargaining. While the Herman and Skinner paper does not explain why, experience at other institutions, particularly those that were unionized early, indicates that prior faculty association with active, potential agents in their current institutions or in prior settings provided an important link. The existence of these prior relationships and faculty acceptance of the functions performed by the organizations eased considerably the transition into unionism by reducing faculty uncertainty about the "un-professionalism" of adopting collective bargaining techniques. The success of the AAUP in the private colleges reflects prior associations, just as the initial selection of the National Education Association (NEA), and sometimes the American Federation of Teachers (AFT), in the two-year colleges and the former or current teacher's colleges represents historical affiliations at those institutions.

But an important public-private difference that likely contributes to the lower unionization of private institutions is the fact that in private colleges there were few historical relationships with faculty organizations

outside the nonaggressive AAUP since the education of teachers has been mostly a public function. The fact that the AFT and NEA were well known at public teacher's colleges and two-year colleges eased the transition into bargaining of these institutions.

4. UNION COMPETITION

While the competition between the AAUP, AFT, and NEA has been identified as creating bargaining relationships at some colleges and universities where none might otherwise have developed, the faculty bargaining movement, when compared to the school-teacher bargaining movement, has not been marked with substantial competition. The AAUP has not responded strongly to the AFT or NEA competition, and this less aggressive stance by the organization most acceptable to large numbers of faculty might account in part for the slower rate of unionization of faculty, particularly in private institutions where the educational missions have not brought the faculty into frequent contact with the AFT or NEA.

In time, as suggested by the Cincinnati experience, faculty values with respect to unions will change as favorable faculty perceptions of bargaining experiences at other institutions break down attitudinal barriers to unionism. This change will reduce the need for active prebargaining relationships between faculty and potential bargaining agents (such as the AAUP at Rutgers University or the Legislative Conference at CUNY), since the prior adoption of bargaining at other institutions makes unionization a less unprofessional alternative. Furthermore, as values toward unions change, the level of faculty-administration tension required to produce unionism will diminish.

The Canadian Experience

Not surprisingly, the determinants of the faculty bargaining movement in Canada are substantially similar to those in the United States. However, the relative importance of the factors is affected by differing organizational characteristics and by time considerations. For example, economic factors seem to have been more important to the pioneer Canadian institutions, although organizational change certainly was not unimportant. Perhaps the later start of the Canadian bargaining movement placed it more directly in the declining market context than the earlier movement in United States institutions. A comparative analysis of the type and degree of organizational change experienced by Canadian and United States institutions would be useful in assessing the relative impact of economic and noneconomic causes of faculty bargaining between the countries.

The greater degree of faculty bargaining in Canada despite its later start can probably be attributed to: (1) complete statutory coverage (except for Alberta where the prohibition against bargaining may be tenuous); (2) the prior initiation of collective bargaining in the United States (which broke down social barriers), in combination with (3) the much smaller number of institutions to be unionized in Canada and (4) the dominant presence and faculty acceptance of the Canadian Association of University Teachers. One apparent difference between the United States and Canada was the impact of anti-union campaigns by administrations. In the United States it has been shown that, except where faculty-administration tension is substantial, these campaigns by administrations can be effective. But according to the Thompson paper, unionization came about despite anti-administration campaigns on most campuses. Perhaps a more extensive analysis of those campaigns would show that some or most of them fell short of those systematic efforts that were successful in the United States. On the other hand, faculty-administration tension may be higher in Canada, thus overriding administrative anti-union efforts.

In sum, the growth of the faculty bargaining movement in the United States and Canada described in these papers, along with the growing unionism of other professions and semiprofessions, seems to indicate that collective bargaining is one means being increasingly used by professionals to adapt to contemporary organizational change and stress.

DISCUSSION

ARCHIE KLEINGARTNER
University of California

I will approach this assignment by commenting briefly on each of the main papers, and will then offer some general observations on the topic of collective bargaining in universities.

Mark Thompson, in his overview of the Canadian experience, reports little that would suggest any fundamental differences between Canada and the United States in terms of the forces that are shaping the course of collective bargaining in universities. I would view that as the paper's major contribution. However, beyond this general conclusion, Thompson discusses some particular issues that are of considerable importance, such as the impact of bargaining on collegial decision-making. All in all, I found the paper interesting and valuable, but many of the propositions the author puts forth require a good deal of empirical testing. This would seem like a fruitful undertaking, especially if done on a comparative Canada-United States basis.

The Carl J. Schramm paper may be viewed as an attempt to identify (not measure) the factors that have influenced the growth of collective bargaining in higher education. He concludes that collective bargaining in higher education has not grown at the rate anticipated; however, he does not tell us who did the anticipating to which he refers. On my own part, I am quite impressed with the volume of bargaining activity going on in higher education.

Among the reasons given by Schramm as inhibiting the rate of growth of collective bargaining are the fear among faculty that bargaining will tarnish their professional self-image, the decline in demand for faculty, and the difficulties experienced by unions in organizing professors. I am sure all of the factors he cites are involved, but his analysis does not contribute much to our understanding of the interrelationship among them or of their impact on the growth of bargaining. Finally, Schramm attributes more inconsistency to the NLRB in this area since the Cornell case than is my impression of what has actually occurred.

I found the Herman and Skinner paper on how collective bargaining came to the University of Cincinnati an extremely interesting and valuable case study. There are several aspects of the Cincinnati experience that are of particular interest. The faculty election and subsequent recognition of the AAUP as a bargaining agent occurred not within a state statute, but through a framework developed by the university

itself. Unfortunately, the authors do not tell us much about why the university decided on this approach. Anti-administration sentiment and low salaries are suggested as the two most important reasons that the faculty voted for bargaining. I suppose that this is not surprising; however, I was startled nonetheless to learn that 43 percent of their respondents had nothing positive to say about the university administration. The authors point out that students gave strong support to faculty collective bargaining. I wish they had said more about what role, if any, the students themselves wished to play in faculty bargaining.

As someone who has paid fairly close attention to this subject for a number of years, I would like to close by offering the following observations: I believe there is developing a rather widespread feeling among faculty that, for good or ill (and faculty are far from united on this point), collective bargaining is here to stay and they must get prepared. Thus, the debates within academe will tend to center less on whether faculty want collective bargaining, and more on the kind of organization they want to have represent them, the role of the faculty senate, who should be in the bargaining unit, etc. So far as the question whether collective bargaining can work in higher education, the answer is simple—of course it can. On the other hand, there is a price to be paid. I, for one, have seen no evidence that collective bargaining contributes to the academic excellence of universities. My own tentative conclusion is that collective bargaining will not damage the quality of a university's mission if bargaining is restricted to a fairly narrow range of economic issues. On the other hand, I am not sanguine that collective bargaining can be contained in this manner. A critical element here will be the kind of organization that the faculty choose to represent them in the bargaining process.

Note: Robert Neilson, American Federation of Teachers, also commented on the papers in this session but did not submit a summary of his remarks for publication.

XI. IRRRA ANNUAL REPORTS FOR 1975

IRRA EXECUTIVE BOARD SPRING MEETING

May 10, 1975, Hartford

The Executive Board met at 7:30 a.m. Attending were President Gerald Somers, President-Elect Irving Bernstein, Secretary-Treasurer Richard U. Miller, Co-editor Barbara Dennis, and Board members Eileen Ahern, Arvid Anderson, Henrietta L. Dabney, Walter A. Fogel, Thomas W. Gavett, Graeme H. McKechnie, Herbert S. Parnes, Jerome W. Rosow, and Paul Yager. Also attending the meeting were Leonard Hausman, editor of the 1977 research volume, and David Pinsky and Peter Barth of the Hartford local arrangements committee.

Secretary-Treasurer Miller reported on memberships, dues collections, cash assets, and comparative financial reports since the last Spring meeting. He noted that the memberships and dues collections appeared to be down, but indicated that direct comparison with 1974 was difficult because of differences in billing dates.

Mr. Miller recommended a shift in the Association's fiscal year from December 1–November 30 to July 1–June 30 so as to permit a more accurate comparison of financial reports between years. Comparisons in the past have been beclouded by differences in the dates of billing and responses for dues payments at the end of each year. The shift was unanimously approved by the Board.

Mr. Miller announced the acceptance of the following slate of candidates for the election to be held in the fall of 1975 for officers in 1976: for President, Irving Bernstein; for President-Elect, F. Ray Marshall; for Executive Board, Harold W. Davey and Charles M. Rehmus, Raymond E. Miles and Thomas H. Patten, Jr., Ben Burdetsky and Ronald T. Weakley, Leon Greenberg and John M. Baitzell, Shirley B. Goldenberg and Felix Quinet. The Board approved the following Nominating committee to select candidates for the election to be held in the fall of 1976: Vernon M. Briggs, Jr., Laurence P. Corbett, Ernest Green, Rudolph A. Oswald, Morag M. Simchak, Mark E. Thompson, and Martin Wagner.

Mr. Miller reported the following results for the referenda on amendments to the IRRRA's Bylaws:

Total Referenda Ballots Cast	549	
I. Local Chapter Fees		
Yes	461	No 86
II. Precluding New Life Memberships		
Yes	424	No 122
III. Discretionary Dues Changes		
Yes	348	No 199

The Board discussed alternative dates for the Spring meeting to be held in Denver in 1976. A final decision was to be reached shortly in consultation with officers of the Denver chapter.

Co-editor Dennis reported on the status of the *Proceedings* of the last Winter meeting and indicated the customary plans for publication of the *Proceedings* of the current Spring meeting. President Somers reported that there was some delay in the final preparation of the volume, *Collective Bargaining and Productivity*, because of late submission of one of the chapters, but steps were being taken to insure distribution of the volume by the end of the year. The Board received the list of editors, chapter titles, and topics for the 1976 volume, *Federal Policies and Worker Status Since the Thirties*. Leonard Hausman discussed the composition of the editorial board for the 1977 research volume and, after receiving suggestions from Board members, indicated that a list of editors and authors would be distributed to the Board shortly.

Mr. Somers reported that the committee on National-Local Chapter Relations had not been able to function because of the illness of its chairman. However, he noted that steps were being taken to further the involvement of local chapters in national IRRA meetings and that the committee should soon be operative. In this connection, suggestions were received from the Board members for workshops at the Dallas meeting to be arranged by local chapter officers. Mr. Somers listed the topics already chosen for the regular Dallas sessions, discussed a number of alternative topics, and asked for Board suggestions for participants. There was a brief discussion of the possible establishment of a job placement roster for IRRA members. Further discussion and possible actions were postponed until the next Board meeting.

IRRA LOCAL CHAPTER REPRESENTATIVES MEETING December 28, 1975, Dallas

Representatives of the local chapters and officers of the national Association met at 12:30 p.m. National IRRA Secretary-Treasurer Richard U. Miller presided. Attending were President Gerald G. Somers, In-

coming President Irving Bernstein, 1976 President-elect Ray Marshall, and the following chapter representatives: James McBrearty, Arizona; Edward Sullivan, Boston; Sara Behman, California Central Coast; Helen LaVan, Chicago; Gordon Skinner, Greater Cincinnati; Gordon Brewer, Ethel Shrout, Carleton Wallmark, Greater Kansas City; Harish Jain, Hamilton; Irving Shapiro, New York Capital District; Harold Leeper, North Texas; Henrietta Dabney, New York; William Schoeberlein, Rocky Mountain; Robert Glover, South Texas; Mr. and Mrs. Thomas Adler, Eleanor Glenn, Southern California; Neil Palomba, West Virginia; and Harold Meloy, Wisconsin.

Mr. Miller and Mr. Somers led a discussion of the relationship between the local chapters and the national IRRA. Difficulties in applying the fee-credit procedure for assessment of local chapters were brought to the attention of chapter representatives, and there was an exploration of means of attaining the necessary information on chapter membership and the proportion of national members in local chapters. There followed a discussion of other procedures designed to bring the national office and the local chapters closer together. The workshops, arranged in cooperation with local chapters, were a successful innovation at the Dallas meeting and would be continued in the future. National Executive Board members were being solicited about their availability for talks at local chapter meetings, and the list of available speakers would be transmitted to the local chapters. This list would be augmented to represent a "Speakers Bureau" for local chapters. The June *Newsletter* would be expanded to include local chapter activities and would be reproduced in sufficient numbers for distribution to local chapter members.

Upon suggestion of a number of chapter representatives, it was agreed that the national IRRA would take steps to attain a favorable status for the local chapters with regard to Postal Service and the Internal Revenue Service through approval of the IRRA as a non-profit organization. The IRRA officers indicated their indebtedness to Carleton Wallmark of the Kansas City chapter for his efforts in obtaining favorable status for the local chapters.

IRRA EXECUTIVE BOARD WINTER MEETING

December 28, 1975, Dallas

The Executive Board met at 6 p.m. Attending were President Gerald Somers, Incoming President Irving Bernstein, 1976 President-Elect Ray Marshall, Secretary-Treasurer Richard Miller, Co-editor Barbara Dennis, and Board members John Baitzell, Ben Burdetsky, Henrietta Dab-

ney, Juanita Kreps, Graeme McKechnie, Robert McKersie, Herbert Parnes, Thomas Patten, David Salmon, George Strauss, and Paul Yager. Also present were Leonard Hausman, editor of the 1977 research volume, and William Schoeberlein, representing the Denver local arrangements committee.

Secretary-Treasurer Miller reported on the results of the annual election of IRRA officers, indicating that Ray Marshall had been elected to the position of President-Elect and the following were elected to three-year terms on the Executive Board: John Baitzell, Ben Burdetsky, Harold Davey, Shirley Goldenberg, and Thomas Patten. He reported the membership mailing list at 4010, an increase over the 3866 of 1974 and exceeding 4000 for the first time. He noted that a greater effort would be made to promote new membership in the coming year.

Mr. Miller reported that the Association's financial status was improved last year (see financial statement) and noted that the Association is in a solvent condition, somewhat better off this year than last. In spite of the inflationary rise since the last dues increase, which would permit the Board to raise dues under the automatic provisions that were passed in a referendum last fall, there is no need to do so in the coming year. However, IRRA dues continue to be among the lowest of all professional associations, and the Board may be forced to recommend a dues increase a year from now if inflation persists. Mr. Miller reported that the IRRA is going on to a new fiscal-year basis that will permit the officers to know more accurately the trend of the Association's financial condition at the time they report to the Executive Board next September and in the future. Future needs of the Association require the IRRA to continue to build financial reserves for the funding of life memberships, for the 1978 Directory, and for other possible contingencies.

Mr. Somers reported on a meeting with officers of the Allied Social Science Associations, indicating that meeting rooms for IRRA sessions at annual meetings would be concentrated in one hotel. The Association could encourage members to make reservations at that hotel and could facilitate the registration procedure of IRRA members so as to preserve the advantages of the Association's traditional procedural arrangements with ASSA.

In discussing the local-national IRRA relationship, Mr. Somers noted that only six chapters had paid fees to the national Association for 1975 in accordance with the fee-credit system provided by a membership referendum early in the year. Delays have been caused by difficulty in determining the number of chapter members and the proportion of chapter members who are also members of the national Association.

These were the criteria for establishing each chapter's net fee. It was anticipated that the required data will be forthcoming in January 1976. The maximum fee of \$100 will be charged those chapters that do not provide the data needed for determining an appropriate amount under the fee-credit schedule.

As part of the effort to develop an improved liaison with local chapters, several workshop sessions, arranged in cooperation with local chapters, had been included in the Dallas meeting for the first time, Mr. Somers reported. Communications also had been sent to the national Executive Board members and to local chapter officers in an effort to increase the number of talks by Board members at local chapter meetings. A supplement to the June *Newsletter* will cover local chapter activities and will be distributed to local chapter members. To further local-national relations, the Board approved a motion that arrangements be made to include two representatives selected by the local chapters to attend national IRRA Board meetings.

The Board approved the application of the West Virginia chapter for affiliation with the IRRA.

The Board authorized a request to the People's Republic of China for approval of a trip that would permit IRRA members to pursue relevant research interests during a 3-4 week visit.

Ms. Dennis reported that the volume on *Collective Bargaining and Productivity* had suffered some last-minute delays because of printing problems and would be distributed to members early in January. She also reported that the volume scheduled for publication in 1976, *Federal Policies and Worker Status Since the Thirties*, was progressing satisfactorily. The chairman of the editorial board, Joseph Goldberg, has indicated that plans are to complete the editorial review of the papers by March 1976. Leonard Hausman, chairman of the editorial board for the 1977 volume, *Equal Rights and Industrial Relations*, reported that the editorial board was still in the process of selecting authors for the volume. Mr. Somers reported on the status of the proposal to the U.S. Department of Labor for funding of a volume of case studies on collective bargaining in the U.S., for possible distribution as a special volume in 1978. After some discussion of the industries to be included, the Board gave Mr. Somers the authority to proceed with negotiations with the Department of Labor and to consummate an appropriate agreement for funding the volume.

Ms. Dennis noted that there had been a request that the names and itineraries of foreign visitors with industrial relations expertise be listed in the *Newsletter*; it was agreed that this practice should be followed.

After discussion of invitations from a number of cities for the location of the IRRA Spring meeting in 1977, the Board selected Phoenix, Arizona. It was suggested that the possibility of joint meetings between the IRRA, SPIDR, and ALMA be explored.

Mr. Bernstein reported on his program plans for the 1976 Spring meeting in Denver, and Mr. Schoeberlein reported on the plans for local arrangements for that meeting.

Mr. Bernstein then discussed his preliminary program plans for the September meeting in Atlantic City. It was agreed that the workshops, initiated at the Dallas meeting, were well received and should be continued as part of the Atlantic City program.

Rudolph Oswald, chairman of the Nominating committee, submitted a slate of nominations for the elections to be held in September 1976. The recommendations were approved unanimously.

IRRA GENERAL MEMBERSHIP MEETING

December 29, 1975, Dallas

The meeting was called to order by President Gerald Somers at 4:30 p.m. During the course of the meeting, he turned over the chairmanship to Incoming President Irving Bernstein.

Secretary-Treasurer Richard Miller reported that the membership mailing list, at 4010, was up slightly in 1975 and further promotion is under way. He noted that the Association's financial status improved last year and that the IRRA is now in a solvent condition. In spite of the inflationary rise since the last dues increase that would permit the Board to raise dues under the automatic provisions approved in a referendum last fall, there will be no need to do so in the coming year.

Mr. Miller reported that the Association is going on to a new fiscal-year basis that will permit the officers to know more accurately the trend of the IRRA's financial condition at the time the officers report to the Executive Board in September 1976 and in the future.

Mr. Bernstein reported on his program plans for the 1976 Spring meeting in Denver, and William Schoeberlein described plans for local arrangements for that meeting.

Mr. Bernstein then discussed his preliminary program plans for the September meeting in Atlantic City. It was agreed that the workshops, initiated at the Dallas meeting, were well received and should be continued as part of the Atlantic City program.

IRRA FINANCIAL REPORT

 INDUSTRIAL RELATIONS RESEARCH ASSOCIATION, Madison, Wisconsin
 STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
 For the Years Ended November 30, 1975 and 1974

	1975	1974	Increase (Decrease)
Cash and investments—December 1	\$15,408.62	\$ 8,363.79	\$ 7,044.83
Cash receipts			
Membership dues	\$40,186.53	\$43,881.50	\$ (3,694.97)
Subscriptions	8,610.00	7,279.50	1,330.50
Sales	8,973.10	5,970.48	3,002.62
Royalties	320.76	703.75	(382.99)
Mailing list	2,582.00	2,819.35	(237.35)
Travel, conferences, and meetings	3,391.39	4,134.47	(743.08)
Interest income	683.97	404.68	279.29
Gain on sale of securities		336.12	(336.12)
Miscellaneous	89.28	103.00	(13.72)
Total cash receipts	\$64,837.03	\$65,632.85	\$ (795.82)
Cash disbursements			
Salaries and payroll taxes	\$12,767.24	\$14,250.13	\$ (1,482.89)
Retirement plan	2,297.29	2,066.24	231.05
Postage	2,458.80	1,666.00	792.80
Services and supplies	2,297.14	3,574.34	(1,277.20)
Publications and printing	18,785.00	32,370.27	(13,585.27)
IRRA conferences and meetings	3,779.84	3,898.19	(118.35)
Telephone and telegraph	710.72	430.97	279.75
Miscellaneous	433.73	331.88	101.85
Total cash disbursements	\$43,529.76	\$58,588.02	\$ (15,058.26)
Excess of receipts over (disbursements)	\$21,307.27	\$ 7,044.83	\$ 14,262.44
Cash and investments—November 30	\$36,715.89	\$15,408.62	\$ 21,307.27

STATEMENT OF CASH AND INVESTMENTS, November 30, 1975 and 1974

Cash	1975	1974	Increase (Decrease)
Checking account—First Wisconsin National Bank of Madison	\$25,533.87	\$10,700.57	
Savings account—First Wisconsin National Bank of Madison	40.66	38.88	
Golden Passbook—First Wisconsin National Bank of Madison	7,246.86	774.67	
Total Cash	\$32,821.39	\$11,514.12	\$ 21,307.27
Corporate Bonds (at cost)			
\$3,000 United Gas Pipeline Co.—\$2,419.62 5%—3/1/78 (market value 11/30/75—\$2,756; 11/30/74—\$2,509) Bond Number B 218			
2,000 Commonwealth Edison 3%—\$1,474.88 2/77 (market value 11/30/75—\$1,907; 11/30/74—\$1,760)			
Total Bonds	3,894.50	3,894.50
Total Cash and Investments	\$36,715.89	\$15,408.62	\$ 21,307.27

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