

**INDUSTRIAL RELATIONS
RESEARCH ASSOCIATION SERIES**

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

**SEPTEMBER 5-7, 1980
DENVER**

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EDITED BY BARBARA D. DENNIS

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PREFACE

A number of the speakers at the IRRA's 1980 Annual Meeting in Denver were looking ahead—making some predictions about what directions industrial relations research might take in the present decade, or what collective bargaining might be like under adverse economic conditions, or what the climate might be for local government bargaining.

The forecasts were not confined to the United States and Canada. Four visiting European scholars, special guests of the Association, presented papers on the European scene, focusing on recent developments in particular countries and what they might mean in the future for various industrial relations systems in Western Europe.

Jack Barbash chose "Values in Industrial Relations: The Case of the Adversary Principle" as the topic for his Presidential Address. After examining how the adversary principle in labor-management relations had evolved over time—and survived—accommodating to altered circumstances and external forces, he suggested that "the time has come for a reevaluation of the adversarial principle in American industrial relations."

In another of the Annual Meeting sessions, "Stress in the Workplace: An Emerging Industrial Relations Issue," the speakers described current research in both the United States and Sweden in this important area. Other session topics were the prevailing wage concept in the public sector, the labor market, equal opportunity problems, behavioral approaches to industrial relations, public-sector bargaining, and trade unions.

The Association is grateful to the Denver committee—Thurman M. Sanders, chairman, Walter C. Brauer, John Barker, Thomas Buescher, Todd Calhoun, Allison E. Nutt, Edward Toliver, and Daniel Winograd—and members of the Denver chapter for their generous hospitality at this Annual Meeting, as well as to the National Office staff, headed by Elizabeth Gulesserian, who assisted in making the meeting a success.

Barbara D. Dennis
Editor

You are invited to become 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 5,000 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 Meeting*, *Proceedings of the Spring Meeting*, a special research volume (*Membership Directory* every six years), and quarterly issues of the *Newsletter*.

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Sincerely yours,

IRRA President 1981

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I. PRESIDENTIAL ADDRESS

Values in Industrial Relations: The Case of the Adversary Principle

JACK BARBASH
University of Wisconsin

The idea behind this talk is a reexamination of the adversary principle in American industrial relations. In the process I also want to say something about the importance of values in industrial relations.

Fred Harbison and John Coleman, I think, captured much of what I mean by the adversary principle in their notion of “armed truce.” I am not sure that armed truce is the label I would have chosen, but the content rings true for today, even thirty years after it was written. Armed truce, they said, is:

1. A feeling on the part of management that unions and collective bargaining are at best necessary evils in modern industrial society.
2. A conviction on the part of the labor leadership involved that the union’s main job is to challenge and protest managerial actions.
3. Basic disagreement between the parties over the appropriate scope of collective bargaining and the matters which should properly be subject to joint determination.¹

Because the parties have wanted a workable adversary relationship, they have normalized it. Grievance-arbitration is a case in point. Another example: The parties engage in common action to save the life of the enterprise, and from time to time they join in undertakings to ease the harshness of their confrontation. But the adversarial character of the relationship remains fundamentally undisturbed.

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¹ *Goals and Strategy in Collective Bargaining* (New York: Harper, 1951), p. 20.

Primarily, the adversary relationship is between employers and employees. This will be the major focus here. A secondary adversary relationship can exist between groups of employees.

The primary adversaries differ on substantive grounds, that is, the relative size of their shares. Equally important, they differ in the perspectives they bring to the *bargaining* of their shares. In general, employers are the initiators in the management process, and employees, union or not, are more typically reactive or defensive. In collective bargaining, the field is reversed. It is the union which initiates and management which reacts.

Employees are likely to take a shorter-run, more defensive, more pessimistic, and more circumscribed view of their interests than do their employers. This more restrictive perspective reflects differences in the facts of life—not, of course, differences inherent in character. There is also an underlying class difference reflecting the separate social universes in which employees and employers move.

A questioning mood is abroad in our land as we grope for explanations of our economic comedown in the world—if we have come down. In industrial relations we are questioning once again the adversary principle and its institutions. One of the questions is: Why can't the cooperative spirit prevailing between Japanese workers and employers be duplicated here?

There is nothing new in the criticism of the adversary principle. There has hardly been a time in the modern industrial era when the adversary principle has not been under fire—at first from the employer for whom unionism and collective bargaining disturbed the natural harmony which would otherwise prevail; later from idealists holding out a vision of more collaborative, cooperative, trusting, problem-solving, integrative, and mature relationship, or on the left from revolutionaries who have faulted the adversary principle for failing to pave the way to the ultimate class struggle.

In spite of the criticism, the adversary principle in its limited American form has endured. Why? First, because the parties seem to want it that way. I think, at bottom, most employees see their working lives as a game in which the object is, at some point, to avoid doing work which they would rather not do, and to get away with it; similarly, management up and down the line sees itself as playing in the same game but with the reverse object of checking the inherent tendency to goof off. I think McGregor's Theory X is closer to the truth of what most work relationships are like than is Theory Y.

The adversary principle endures because it reflects the objective re-

ality of modern industrial organization—its competitiveness, its pervasive command-and-obey organization, and its zero-sum efficiency ethic, all of which by their nature pit participants against one another. We must not exclude the final possibility that there is something in the human psyche that infuses every human situation with latent aggressiveness.

The adversary principle has persisted because we have found ways of taming it, even if we haven't altogether eliminated it. Indeed, the supreme achievement of western industrial relations has been its ability to come up with institutions that blunt the force of the adversary principle. These institutions include the trade union, professional management, arbitration, mediation, the welfare state, work-easing technologies, collective bargaining, and full employment.

At a "higher" stage of industrial relations have come landmark experiments in "creative" collective bargaining like the 1910 "protocol" in the women's garment industry, productivity bargaining, interest arbitration, human relations committees, union-management cooperation, progress-sharing, and precrisis bargaining.

In the *most* advanced sector of industrial relations, the adversary relationship is channeled through the "social contract." The social contract is "cooperative bargaining," but at the level of the macroeconomy. Sweden, for a generation before the crash of the "Swedish model" in 1980, was the prize exemplar of the social contract even though credit for innovating the term in this context belongs to the U.K. The social contract is the product of the era of full employment and inflation.

The essential principle underlying the social contract is an agreement between a labor movement which commits itself to wage moderation in bargaining in return for commitments from the government to refrain from (1) instituting mandatory wage controls, (2) using mass unemployment to curb inflation, and (3) impairing the benefits of the welfare state. The National Accord in the United States is a less developed species of the social contract.

The ability of a society to sustain the social contract or other forms of collaboration is not simply a function of the personal philosophies. It is a function of the general equilibrium prevailing in the society at large, specifically: (1) whether there exists a parity of power—otherwise the disadvantaged parties are reluctant to exercise self-restraint lest their positions be worsened; (2) whether the society is so vast and diverse, and so complex, that it is unable to support the spirit of solidarity demanded; (3) whether the principal interests have participated in the *making* of the social contract; and (4) finally, whether the national condition is deemed to be of sufficient urgency to warrant a social contract.

The point is that these more civilized expressions of the adversary principle have not succeeded in becoming the universal or permanent state. Eventually there is a reversion to a more combative adversary relationship.

I want to *raise* the question—this is all I undertake to do here—of why the adversary tide has not been permanently stemmed. To begin with, collective bargaining subsists on payouts and results. Bad times with their lower payouts have been less favorable to moderation of the adversary principle than have good times.

The social contract in western Europe lasted as long as it did because sustained economic growth made possible a long cycle of high payouts. Now that the rate of growth has slowed, the social contract is in trouble over how to distribute a smaller net product. The problem has also been worsened by disagreements *within* the working class over relative shares.

So long as the total product to be divided was growing, it didn't seem to matter too much who owned and controlled it. Now it does matter, as the pervasive European movement for codetermination, industrial democracy, wage-earner funds attests. The effect of the codetermination movement is to breach a consensus on who owns the means of production, which is what made the social contract feasible to begin with.

Efforts at ameliorating the adversary relationship are frequently undermined by insurgent movements appealing to the shop floor's inbred antimanagement feelings. Technological change or the attrition of real wages hits the rank and file directly. These disturbances generate insecurities that the professional union leadership cannot experience at first hand. It is not that the union leadership lacks dedication; it is that the view from the union office is, in the nature of the case, different from the view from the shop floor.

Collective bargaining, especially negotiations, is a game played by professionals for its own sake, according to well-understood rules and roles. The gamesmanship of bargaining makes it more exciting. The theatrics also exaggerate differences, polarize the parties, inject personal tensions, and force confrontations beyond what is necessary to make the best deal.

What makes much of the bargaining behavior seem dysfunctional is that it is aimed at constituencies who are not at the bargaining table. The union's brave words are mostly directed to its rank and file who have to be continually reassured of the virility with which their demands are being pressed.

The management side, not being the same kind of political organization as the union, being more of a hierarchy, is not under the same sort

of pressure. But neither can management show tendermindedness for fear of creating false expectations or creating the impression that it is "giving the company away."

There is, finally, the role of ideology in sharpening adversary attitudes. Trade unionism is historically a product of socialist movements which tend to equate strong adversary postures with revolutionary zeal. To be sure, the purpose of collective bargaining is agreement. Nevertheless, there is a whole vocabulary of putdowns of agreement, like business unionism, "more," "bread and butter," corporate unionism, reformism, sellout, porkchoppers, which deprecate conciliation and glamorize militancy. Collective bargaining's need for agreement to survive and grow collides with the need of radical creeds for militancy. The collision is the great historic contradiction between trade unionism and socialism.

The other sort of ideological influence which, in a perverse way, affects the adversary principle is exerted by what might be called the industrial relations "establishment." I do not use establishment in a pejorative sense; I freely acknowledge my own grade-B membership in it.

The establishment rationalizes the adversary principle in two senses: We justify it and, in the Weberian meaning, we have institutionalized it. But we do not really raise basic questions about it.

By way of justifying the adversary principle, we have been developing a *counter*-ideology to fend off the assaults of left and right. To the left we have been demonstrating that the adversary principle can stop short of revolution and yet serve the workers all the better. To the right, which includes mainline economics, we have been saying that tension among the participants, far from being pathological or aberrant, is normal—and if kept within bounds, even desirable.

I think the time has come for reevaluation of the adversarial principle in American industrial relations. Altered circumstances should alter principles.

The altered circumstances consist, first, of the fact that the parties are secure enough in their own identities that they need not fear, as much as in the past, of being coopted by the other side. This is especially true of the union which has resisted tampering with the adversary principle lest it be caught up into the management system.

For its part, management has demonstrated that it can hold its own in collective bargaining—so much so that it can risk more collaborative relationships. In short, the parity of power, which is a condition of constructive collaboration, is now present in many situations.

Second, the present state of the American economy cannot support the costs of out-and-out adversarialism. Admittedly, the presumption here

that moderation of the adversary relationship would lead to a more productive American economy is conjectural.

Third, there is a special problem with the way the adversary principle works out in the public sector. Let me lay it out this way: In the final analysis, the essential sanction that the adversaries rely on is withholding something of value to the other side, or the threat of it. In the private sector, the equity of the situation is that the immediate costs of withholding fall mostly on the adversaries themselves.

The adversary principle works less equitably in the public sector. The costs of the adversary system in police, fire, health, and sanitation are borne mostly by those who are deprived of these critical services, that is, by those who are not the active adversaries. Social disruption is, indeed, the major element which the parties count on to resolve the dispute.

Adversary collective bargaining lends itself most effectively to the negotiation of financial rewards and power relationships. Come new questions like inflation, quality of worklife, affirmative action, which involve problem-solving rather than distributive processes, and collective bargaining either rejects these sorts of issues or adapts only with great strain.

Adversity provides the "coercive evidence" which is forcing us to rethink ancient truths. Auto and steel, from their encounters with adversity, are providing the laboratory for such experiments in the art of collaboration and problem-solving as "codetermination," employee ownership, quality of worklife, and quality control. The results are not in. In fact, the experiments are just beginning.

Is all of this adversary collective bargaining by another name? Is it socialism through the back door? Or are we opening up a new frontier for affirmative collective bargaining? Qualitative changes toward a more collaborative commitment *are* practical even though, admittedly, transformations are few, temporary, and hard to come by. To the best of my knowledge we have not explored analytically who so few, why the low survival rate, and why some last longer than others.

Further, even if the evolution from a less adversarial to a more collaborative relationship *is* utopian—which it could very well be—why *not* utopian speculation? It's too bad that Marx and Engels gave utopianism a bad name. Why not utopian thinking, if the limiting terms are understood by everyone?

The adversary principle in industrial relations operates on the assumption that egoism and aggression are inherent in the human situation and that a system of checks and balances has to be maintained to protect the parties from themselves and from each other. The general interest has to

be protected from both of them. This is the Theory X of the situation.

Is a Theory Y type of collective bargaining possible? Are nonexchange values beyond the pale? Do words like social justice, social responsibility, altruism, love, sacrifice, trust, statesmanship, charity, idealism have any meaning in industrial relations, or are they only the rhetoric of ceremony?

Therefore my next point: Can scholars in industrial relations give *analytical* content to these terms in a context of industrial relations? Or do we deal only with the things that can be counted?

As a distinguished predecessor in this post, J. Douglas Brown, put it a generation ago, industrial relations "is the study of values arising in the minds, intuitions and emotions of individuals."² To follow through on this piece of insight: In a liberal society, the business of industrial relations is more than technique and know-how. It is also the values to which technique and know-how are directed. Equity, due process, fairness, rights, reasonableness, participation, incentive, alienation, privacy, democracy, self-determination, good faith, mutual survival, incrementalism, pragmatism, job satisfaction, order—these are some of the values that our field has embedded into the practice of collective bargaining.

These values are more important than any putative industrial relations "science," I have been saying. They are more important than capitalism and socialism. No industrial relations problem of any importance turns on capitalism vs. socialism, as we are learning at the moment from the drama which the Polish people are unfolding before our eyes. Motivation, alienation, low productivity, poor supervision, a deteriorating work ethic, absenteeism—all of what we think of as dysfunctions of industrial relations—and, indeed, the adversary principle as such are problems of *all* modern industrial societies. This must be because the dysfunctions are a consequence of the industrializing process as such and not alone of the juridical system under which it operates.

To finish up, this is what I think I have said: Industrial relations as a field of study, like most of the social sciences, needs to liberate itself from obsessive reliance on mechanistic counting and theorizing and return to the values of the founding fathers of industrial relations who, if I am not mistaken, tried to get at the *spirit* of industrial relations.

I close with a text in point from John R. Commons who must rank as *the* founding father: "There can be no question of reasonableness in maximum net income economics. It is only a question of economic power. But the institutional economics of willingness takes into account the ethical use of economic power. . . ."³

² "University Research in Industrial Relations," in *Proceedings* of the Industrial Relations Research Association (Madison, WI: IRRRA, 1952), p. 6.

³ *American Economic Review*, Supplement, 1936, p. 240.

II. PERSPECTIVES ON LABOR- MANAGEMENT RELATIONS RESEARCH IN THE 1980s

Labor-Management Relations Research: The Role of the Department of Labor*

THOMAS A. KOCHAN
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The purpose of this paper is to summarize the U.S. Department of Labor's current programs and future plans for supporting research on labor-management relations. The paper reviews the background to and results of a year-long joint study conducted by the Department in cooperation with industrial relations researchers. This joint appraisal sought both to revitalize labor-management relations research within academia and to strengthen the Department's policy analysis and research-support programs in this area.

The project was undertaken because of the widely shared view by labor experts within the Department and in academia that labor-management relations research was neither providing the ideas and analysis needed to deal with current problems nor keeping up with developments in other areas of the social sciences. Recent critiques, for example, have argued that: (1) the links between researchers, policy-makers, and practitioners that once existed have eroded, (2) a generation-gap had developed between the War Labor Board era scholars and younger quantitative researchers, (3) most new industrial relations researchers have been attracted to the growth areas of labor economics and/or behavioral sciences rather than to collective bargaining and labor-management rela-

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* This paper was prepared while the author was on leave to the U.S. Department of Labor. Opinions expressed in the paper are those of the author and do not represent the official position or views of the Labor Department.

tions, and (4) labor-management relations research has failed to incorporate the developments in theory and methodology that allowed the other areas of the social sciences to progress.¹ Thus, the dual purpose of the year-long study was to lay the foundation for revitalizing and redirecting academic research and Labor Department programs in the labor-management relations area.

Before describing the results of this effort, a brief review of the Department of Labor's mission and organizational structure will be provided in order to place its current program and future plans in perspective. The final section of the paper then will discuss some unfinished business and additional challenges the Department needs to address in order to make a meaningful contribution to research, policy analysis and development, and practice in labor-management relations in particular, and industrial relations in general.

Historical Perspective

The Department of Labor was created in 1913 to "foster, promote, and develop the welfare of wage earners of the United States, to improve their working conditions, and to advance their opportunities for profitable employment."² In 1963 the labor-management relations responsibilities of the Department were more specifically spelled out in the Secretary's Order establishing the position of the Assistant Secretary for the Labor Management Services Administration (LMSA). The Order stated that

among the most important duties and responsibilities of the Secretary of Labor are those that are related to serving as the primary advisor to the President and spokesman to the Congress on matters of labor-management relations. . . . As a consequence, the Department of Labor requires a comprehensive labor-management relations program which will better provide that assistance to the Secretary which will marshal and make available to labor and management research data and other resources needed to improve the climate of labor-management relations.³

¹ See, for example, John T. Dunlop, "Policy Decisions and Research in Economics and Industrial Relations," *Industrial and Labor Relations Review* 30 (April 1977), pp. 275-82 (see also the Comments and Reply to this paper in the October issue); Thomas A. Kochan, "Theory, Policy Evaluation and Methodology in Collective Bargaining Research," in 1976 *Proceedings* of the Industrial Research Association, pp. 236-48; Clark Kerr, "Industrial Relations Research: A Personal Retrospective," *Industrial Relations* 17 (May 1978), pp. 131-42; George Strauss and Peter Feuille, "IR Research: A Critical Analysis," *Industrial Relations* 17 (October 1978), pp. 258-77; and David Lewin, "Why Labor Policy Is Out of Date," *Business Week*, January 15, 1979, p. 18.

² Jonathan Grossman, *The Department of Labor* (New York: Praeger, 1973), p. 3.

³ Secretary of Labor Order No. 24-63, August 8, 1963.

Despite this clear statement of its objectives and purpose, LMSA was not able to establish a major research program in labor-management relations. Indeed, by 1979 LMSA had grown in a variety of directions, the least important of which was its labor-management relations programs. The overall budget for LMSA in fiscal 1980 was approximately \$53.9 million of which only 7 percent, or \$3.7 million, was allocated to the offices within LMSA responsible for improving labor-management relations. Ninety-three percent of LMSA's budget was allocated to enforcing the Employee Retirement and Income Security Act, the Labor Management Reporting and Disclosure Act, and various employee protection programs. The research program received only \$860,000 of this \$3.7 million.

The low level of funding currently given labor-management relations within the Department is a result of at least three factors: (1) the lack of a legislative base or authorization for its work; (2) the lack of a clearly formulated set of objectives, programs, and strategies for the federal government's role in labor-management relations; and (3) the shifting focus of departmental responsibilities and interests.

Although the Secretary of Labor is responsible for advising the President and the Congress on the performance of labor-management relations, the Department has no generalized responsibility for administering or enforcing the nation's basic labor laws. Nor does it have a specific legislative authorization for conducting research or evaluation on labor-management relations policies. Indeed, unlike most other major statutes, none of the major laws governing collective bargaining in the private sector contains a provision calling for basic research or evaluation and, therefore, no agency of the federal government is specifically authorized to perform these vital functions. Thus, the Department lacks the legislative base and regulatory responsibility for securing funding for its work in this area.

Perhaps an even more important impediment to the development of a labor-management relations research program has been the constraint imposed by adherence to the principle of "free collective bargaining," i.e., the view that the government should refrain from interfering in labor-management relations as much as possible. Belief in this principle as the cornerstone for national labor policy has kept the Department from setting long-term objectives for labor-management policy and from examining the relationship between collective bargaining and other labor policy objectives.

Events of the last two decades have overtaken this view of American labor policy. The incremental growth of direct government regulations

of terms and conditions of employment since 1960 has eroded the role and status of "free collective bargaining" in the economy and in the Department. Introduction and expansion of regulations in such areas as safety and health, pensions, equal employment opportunity, trade adjustment and employee protection, etc., have turned the Department into a major regulatory agency. These new regulatory functions, the expansion of the Department's training and employment responsibilities and programs, and its increasing interest in gaining a voice in the macroeconomic policy-making process have served as the major areas of departmental growth, activity, and interest in recent years. It is not surprising, therefore, that these newer and expanding activities have dominated the attention of the Office of the Assistant Secretary for Policy, Evaluation, and Research (ASPER), a division created in 1969 to provide the Secretary with direct Department-wide policy development and evaluation services. ASPER never has viewed the analysis of labor-management issues as an important priority.

The Labor Department Plan

The first step in the effort to reverse this state of affairs was to establish a research agenda attuned to the labor policy problems and issues that are expected to be important in the 1980s. A complete report presenting this research agenda is available from the Department.⁴ The research agenda is based on the following assumptions:

1. The most pressing labor policy issues of the 1980s will continue to involve the economic and noneconomic terms and conditions of employment rather than the procedural aspects of collective bargaining. Finding solutions to these problems, however, will require developing a better understanding of the relationships between collective bargaining policies, structures, and practices and these problems. (a) The economic pressures of inflation, unemployment, and lagging productivity will require the continued search for policies relating changes in wages, economic benefits, and labor costs to national economic policies. (b) Concern for improving the terms and conditions of employment for American workers in such areas as occupational safety and health, economic security and dislocation, equal employment opportunity, quality of work, etc., will continue to be at the center of attention in public policy debates and private practice. The 1980s will be a time of searching for a better fit between labor-management relations and government policies in these areas.

⁴ Thomas A. Kochan, *Labor-Management Research Priorities for the 1980s* (Washington: U.S. Department of Labor, 1980).

2. Efforts will be made to improve the climate for labor-management relations and to reverse the trend toward greater polarization that has emerged in recent years between top levels of the labor and management communities.

3. Efforts will be made to stimulate changes in labor-management relations in order to help the parties (a) adapt to changing expectations of the labor force and to changing economic conditions, and (b) improve the performance of labor-management relationships.

4. Increased efforts will be made systematically to involve labor and management in the formulation and implementation of labor and economic policies.

5. Concern for the adequacy of procedures for resolving national emergency disputes will surface once again as an important topic of debate. More generally, we will continue to see experimentation with a variety of strategies for handling labor-management conflicts and problems in the public and private sectors.

6. Debates will continue over the adequacy of existing laws, procedures, and enforcement strategies governing the major agencies that administer our labor policies (e.g., NLRB, NMB, OSHA, EEOC, etc.). Efforts will be made to improve the administration of these agencies and the procedures used to adjudicate disputes involving them.

7. Labor-management policies in the public sector will remain at the center of attention. The right to strike of public employees, the effectiveness of alternative forms of dispute resolution, the effects of collective bargaining on compensation and productivity, and the question of federal legislation governing labor-management relations in state and local governments will be among the many public-sector issues of central concern.

8. Concern for the effective management and utilization of human resources in society will increase as the service sector of the economy expands and as demographic shifts (a) increase the competition for scarce mid-career promotional opportunities among the postwar baby boom cohort, (b) create a shortage of young workers for entry-level, low-skilled jobs, and (c) increase the supply of older workers.

9. Interest in examining the relevance of West European approaches to and experiences with industrial relations problems will continue to grow.

The core of the Department's plan for addressing the issues noted in the assumptions is to strengthen the role and program of LMSA in supporting research, promoting experimentation and evaluation of alternative ways of dealing with labor-management relations problems,

and providing forums for ongoing discussion of research and policy needs.

The proposed research program in LMSA will have four components. First, a PhD dissertation grants program will be implemented in 1981. This program should encourage new researchers to enter the field. Introduction of new researchers should also speed the process of theoretical and methodological development in labor-management relations research. Second, LMSA will be seeking authorization to add an experimental and demonstration projects component to its research program. This will allow it to sponsor and evaluate action-oriented efforts for trying out new approaches to dealing with industrial relations problems. Third, the current LMSA practice of issuing requests for research proposals on *specific* topics of current interest to the Department will be continued. Fourth, in addition to issuing specific requests for proposals, LMSA plans to issue a *general* solicitation requesting proposals that address research needs outlined in the research agenda report. This will be a major improvement in its program since it will give researchers more flexibility in determining the type and specific content of research needed while still maintaining a focus on critical policy issues and problems. This part of the new program will be implemented in 1981. Finally, the Department plans to seek a major increase in LMSA's appropriation to implement this new program fully in fiscal 1982.

The Department is also creating a Labor Management Relations Research Advisory Committee to (1) assist in periodically updating the research agenda, (2) advise the Department on the information and services to parties that would help improve the performance of collective bargaining, and (3) provide a forum for discussing policy issues, research reports, and other labor-management developments and disseminating this information more widely to practitioners. Hopefully, this committee will provide continuity to the Department's research program and serve as a forum for rebuilding the links among researchers, policy-makers, and practitioners.

Unfinished Business

If a stronger link between labor-management relations and other labor policy objectives is to be achieved, closer integration across departmental divisions and a stronger appreciation and understanding of the role of industrial relations among the professionals in the Department will be needed. ASPER has an important role to play in this regard. Indeed, some of its priorities lend themselves to this objective quite well. For example, ASPER is currently seeking to strengthen research on the wage-determination process in union and nonunion set-

tings at the micro level as part of its interest in analyzing and evaluating incomes policy alternatives. ASPER is also coordinating planning of the fourth phase of the Quality of Employment Survey. This survey provides basic data for monitoring working conditions and assessing worker expectations, aspirations, and attitudes toward work and unions. ASPER must continue to take the lead in providing these and other basic data needed to evaluate the welfare of workers in American society. In addition, ASPER has been promoting the current Administration's efforts to develop an "industrial policy" and coordinating the Department's efforts to develop a strategy for dealing with plant closings and economic dislocations. These issues offer an ideal opportunity for integrating industrial relations policies and practices into our broader labor and economic policies. To do this effectively requires a Department-wide perspective that is capable of linking the discrete components of labor policy into a coherent whole. Developing this broad perspective and fitting industrial and labor relations policies and practices into it is a challenge ASPER needs to address more systematically in the years ahead than it has in the past.

Some progress is being made in linking the regulatory policies of specific operating divisions within Labor to labor-management relations practices at the workplace level. The Occupational Safety and Health Administration (OSHA), for example, plans to conduct a series of experimental and demonstration projects to test whether, if strengthened in a number of ways, labor-management safety and health committees can serve as effective self-enforcement and monitoring mechanisms at the workplace. In addition, a new Executive Order covering safety and health policies of federal agencies calls for an expanded role for labor-management safety and health committees in the federal sector. OSHA is also in the process of developing a research plan for evaluating this component of the Executive Order. This is an example of the type of research and experimentation that needs to be encouraged in order to develop a better understanding of how labor-management practices at the workplace can contribute to the welfare of workers, the goals of employers, *and* the objectives of public policies.

While a start on revitalizing the Department's labor-management research and policy analysis program has been made, much more needs to be done if these efforts are to have a visible effect on the field in the 1980s. The Department, for example, will have to obtain the budget funds needed to support this program at a meaningful level. The Department will also need to better define its role in our industrial relations system. Should it maintain the reactive and/or *laissez-faire*

role that is consistent with its view of the principle of "free collective bargaining" or establish a role as a catalyst for change and improved performance in industrial relations? This is a fundamental policy question that should be at the forefront of discussion in the Department in future years. To address this issue adequately, the Department will need to both strengthen its ties to its external labor and management constituencies and broaden its expertise on labor-management policy issues. One of the consequences of the diffusion of departmental responsibilities outside of the labor-management relations areas in recent years is that only a small proportion of the professional staff within the Department has training, background, or personal knowledge in the field of industrial relations.

Industrial relations researchers also share a responsibility for revitalizing work in this area and must look beyond any single public or private funding source for a sense of direction and purpose. The Labor Department should continue to play an active role in supporting policy-relevant research and professional development within the field; however, the basic responsibilities for defining the general direction and content of industrial relations research must remain within the academic community. While academics in an applied field such as industrial relations should be responsive to policy-makers' and practitioners' needs, care must be taken to insure that researchers do not become so dependent on any single funding source that they fail to perform their central long-run function. The Labor Department's role, therefore, should be seen as only one part of the solution to the larger task of strengthening the contribution of research toward meeting the industrial relations challenges of the 1980s.

Labor's Agenda for 1980s' Research

RUDY A. OSWALD

*American Federation of Labor and
Congress of Industrial Organizations*

Labor research traces its origins to the institutionalists, to people like John R. Commons. Their contribution was to analyze, describe, and evaluate economic conditions, with particular emphasis on how economic conditions affected working men and women. Today it is important to bring back an institutional analysis of conditions that affect men and women in the working environment.

Union research people are immersed most of the time in very specific "micro" worlds, in providing the background analysis for organizing and representing workers in specific communities and occupations, in specific corporations and industries, and in private and public settings. They are concerned with determining, analyzing, and evaluating their members' wages and working conditions, as well as the factors that influence them. The "micro" world that they observe is in a continual stage of flux, floating within the larger "macro" economic and social environment.

Union research people, therefore, are also deeply concerned about the general economic and social environment. The "micro" events of the workplace are affected by the overall environment and interact with that general environment. This appreciation of the "macro" environment has traditionally led union representatives and union members to look toward broad public economic policy approaches as crucial for creating the healthy economic climate in which to pursue effective "micro" approaches. Union involvement in political issues and political action is essentially an attempt to protect and improve the basic economic and social structure of the American society.

Macroeconomic and social problems of central concern to organized workers include:

- Full employment.
- Achieving "fair" income distribution.
- Relieving hardship and suffering.
- Assuring social justice.

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More economic research is necessary to provide effective answers for these "macro" problems. Although full employment is the public commitment of the Humphrey-Hawkins Full Employment and Balanced Growth Act of 1978, and was pledged in the "Employment Act of 1946," the priority research for effectuating this goal is sorely lacking.

Little research work has been done on income distribution, and there is practically no accurate up-to-date data on the income of the wealthy or the extent of wealth. Economic data measure poverty only through crude measures rapidly put in place in the early 1960s. The long historical series on the City Worker's Family Budgets and the Budgets for the Retired Workers should be updated.

A sense of justice and equity is essential to public development of the nation's economic policies. In the September 1979 National Accord between the AFL-CIO and the Administration, the AFL-CIO insisted on the principles of fairness and equity and equality of sacrifice in the nation's fight against recession and inflation. The AFL-CIO maintained that if there must be austerity in this fight, austerity and sacrifice must be fairly shared, and the burdens distributed equitably. And in the process, those least advantaged in our society be protected.

All economic policies have income distribution effects—effects on economic and social justice. In addition to private economic decision-making, income distribution is affected by political decisions on government taxing and spending policies, money supply, credit and interest rate policies, jobs and job training programs, social insurance and social welfare transfer programs, and, by public policies toward education, recreation, cultural opportunities, public safety, environmental protections, and occupational safety and health.

A free society must guarantee the rights of workers to form unions and to bargain collectively. Sad to say, these rights are ignored or dismissed by many in our society today, and these rights frequently are not high on research agendas. While many in our society applaud the actions of the Polish workers in their strikes and struggles to establish the free trade unions, they fail to support such actions by American workers. The rights of workers to organize and to bargain collectively with their employers through freely chosen unions continue to be invaded, delayed, and denied by some anti-union employers. No other free industrial democracy in the world has anything like the National Association of Manufacturers' "Council for a Union Free Environment" and management consultants specializing in union-busting. More research needs to be done on the roadblocks to union organization and to collective bargaining.

Basic human rights in the workplace too often are trampled underfoot by business management seeking to obstruct the workers' striving for dignity and humanity and by management invasion of the workers' right to privacy. The rights of workers to privacy, dignity, and basic civil liberties have been weakened by employers requiring "lie detector" tests and vague psychological tests.

Research—A Public-Private Affair

Research obligations in our society are shared between the public sector and the private sector. Clearly government has a lead role to play in conducting economic and industrial relations research, but the responsibility is also a private responsibility for universities, research organizations, and clearly also for business and labor as primary actors in the economic workplace scene.

But "macro" analysis is not enough. There is a need for the "micro" approach as well, and the inadequacy of research in the "micro" area is especially egregious. It is again time for thorough research on individual industries, as was done by the TNEC (Temporary National Economic Committee) more than a generation ago. Such analysis should set forth essential background for business-labor-government tripartite action on new national programs for "economic revitalization" and "re-industrialization." Industry and sector data need to be collected and analyzed, as well as area data including inner-city economic problems.

In approaching the economic problems of the 1980s and in its call for a reindustrialization policy, the AFL-CIO is emphasizing the need for selective, targeted action to aid American industry, rather than broad-based across-the-board benefits to all industry, regardless of specific need or specific national interest.

As part of the basic industry and sector analysis, more information is needed on the employment and inflation effects of U.S. trade, both imports and exports. This analysis should include a review of the loss of jobs resulting from the export of capital and production as well as the exporting of technology by U.S. corporations to their foreign subsidiaries.

The growing problem of plant closings needs more research work. Workers and communities suffer serious job losses and negative social effects from major plant closings. The reasons for such closings must be analyzed, including import penetration of U.S. markets, effects of tax subsidies on industrial migration, easy tax-loss write-offs, corporate mergers, shifts in consumer tastes, technological developments, corpo-

rate mismanagement and financial insolvency, etc. Barry Bluestone and Bennett Harrison have produced an impressive report¹ on causes and effects of plant closings, but legislation dealing with plant closings is before Congress and before many state legislatures and, therefore, much more "micro" level research is needed on this subject.

Information on safe and healthy working conditions needs to be enhanced. Governmental agencies such as the Occupational Safety and Health Administration and the National Institute for Occupational Safety and Health should increase their capability for research and standards development and private research in occupational safety and health should be expanded.

An example of decreased research in the "micro" field of industrial relations is the sudden discontinuation by the Bureau of Labor Statistics of four important wage and benefit programs.

These programs should be reestablished and they should be expanded to include public-sector data. The discontinued programs were: (1) "Digest of Selected Health and Insurance Plans" and "Digest of Selected Pension Plans"; (2) Wage chronologies; (3) Employer compensation expenditures; and (4) The collection of smaller collective bargaining agreements (covering less than 1,000 workers).

Little research today deals with the policies and programs that contribute to full-employment economy. Little work is done on income distribution, and there is practically no accurate data measures of the income of the wealthy, or the extent of wealth. Poverty data fail to measure poverty, and BLS shrinks from exercising its responsibilities to update the City Worker's Family Budget, and the Budgets for Retired Workers.

Let me turn now to a specific research agenda developed in March 1980, when more than 70 union and university researchers specializing in industrial and labor relations and representatives of public and private funding agencies attended a symposium in Boston, jointly sponsored by the AFL-CIO Research Department and the Extension-Public Service Division of the Cornell University School of Industrial and Labor Relations. A major objective of the meeting was to explore the possibility of developing a research agenda on topics of interest to union and university researchers in the field of industrial and labor relations. Following is a quick outline of just three of the many research topics that were discussed at the symposium:

¹ Barry Bluestone and Bennett Harrison, *Capital and Communities: The Causes and Consequences of Private Disinvestment* (Washington: The Progressive Alliance, 1980).

Corporate Structure, Corporate Concentration, and Bargaining

- Studies of union responses to corporate mergers and corporate concentration.
- Research on the factors associated with corporate concentration, including competition, the presence or absence of labor unions, and conglomerate interests.
- Research on the impact of corporate concentration on employment, wages, union structure, and union bargaining power.
- Examination of the impact of deregulation on employment and collective bargaining.

Labor Law

- Research on the impact of the increased legalization of labor relations, especially the professionalization of arbitrators, the increasing use of administrative law judges, and the resurgence of the labor injunction, on free collective bargaining.
- Studies concerning procedural delays and the effects of NLRB representation rules, particularly those concerning union determination, on union growth.
- Studies of the impact of court rulings related to the duty of fair representation.
- Examination of the role and impact of management consultants on the collective bargaining rights of workers.
- Research into the issue of impasse resolution in the public sector.
- Studies of the overall role of law in industrial relations, especially the commitment of labor and management to the basic principles underlying rational labor policies.

Job Security and Economic Dislocation

- Examination of the forces underlying economic dislocation, especially the impact of changing forms of corporate structure.
- Research into possible methods of preventing economic dislocation, including government subsidization of failing industries, employee ownership, and the role of collective bargaining.
- Studies of the impact of economic dislocation on workers and collective bargaining and methods of easing that impact.

These outlines are just a hint of the vast array of new "micro" research that should be undertaken in order to improve the industrial relations that now exists in the U.S. Such research would be a fitting

continuation of the institutional research that has been fostered through the years by this organization, the Industrial Relations Research Association.²

² For a quick review of the institutionalized memory and creativity, see (1) Milton Derber, *Research in Labor Problems in the United States* (New York: Random House, 1967); (2) *A Review of Industrial Relations Research, Vols. I and II*, (Madison, WI: Industrial Relations Research Association, 1970 and 1971); (3) Gerald C. Somers, ed., *The Next Twenty-Five Years of Industrial Relations* (Madison, WI: Industrial Relations Research Association, 1973); and (4) Joseph B. Shedd, "Patterns in Industrial Relations Research" (Background Paper for the Conference on Labor Research, March 13-14, 1980, Boston, MA, jointly sponsored by the Ford Foundation, the Research Department, AFL-CIO, and the Extension Division, New York State School of Industrial and Labor Relations, Cornell University), 1980, mimeo.

A User's Agenda for Labor Relations Research

AUDREY FREEDMAN
The Conference Board

For the sake of symmetry, perhaps, this section of the morning has been billed as "A Management Agenda for Labor Relations Research in the 1980s." The title suggests that the adversary aspects of the practice of labor relations somehow operate to produce two clashing agendas, or at least two different emphases. It also allows plenty of room—too much, I think—for advocacy to overwhelm inquiry.

I.

The more important party that needs representation is our own "silent majority": those who use, or might use, our research. The users of the first importance are managers at all levels of enterprises, union officers, members who control union positions and institutional actions, and individual workers who respond to individual incentives. Research priority, I am suggesting, should be concentrated on analyzing and revealing the systematic implications and consequences of the actions and policies of these economic and political actors.

Please notice the omission of "public policy." Our urge to do "policy relevant research," combined with the relative availability of large (industry-wide, nationally aggregated) data sets, has wafted us right out of the ballpark of real labor relations. Up there in the clouds of public policy, it is very hard to see the players, let alone to analyze the systematic effects of their moves.

Getting back down to the ground means, among other things, basing research on observations of actual events and processes. Collecting data means getting it raw, getting it cluttered with detail, and making an orderly place for as much detail as possible. Being assaulted with a mess of facts should not drive an academic researcher out of the real world and back to an elegant five-factor "model," tapes available from Census. The real world of industrial relations is his user; just so, it

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must be his source. In academic language, I am calling for micro-analysis and micro-observation.

This done, the body of labor relations research will pick up more:

- conflicting interests and action *inside* unions; also *inside* industries, companies, managements. Overtones and effects of *individual* acts and *individual* interests—economic and political—will become observable.
- observations that crack open the overly generalized category—like “seniority system,” “part-time,” “average pay rate,” “company-wide bargaining,” and, yes, “quality of worklife.”
- opportunities for making comparisons of process and outcome *within* industries, *among* plants, *within* unions, *between* companies, etc.

In an article in the June 1979 *Journal of Economic Literature*, Harvey Leibenstein points out “A Branch of Economics is Missing: Micro-Micro Theory.” He notes that economics has moved to the study of larger and larger aggregates; that it treats the firm (the subject of micro-economics) as a unitary black box; and that it ignores the intra-firm interactions of *individuals* and their influence on firm (or institutional) behavior.

But we in labor relations/labor economic research had a micro-micro interest—even fascination—during the “institutional” era, roughly the 1920s through the mid-1950s. While I am definitely not a good-old-days romantic, I do not like to see the awareness of micro-micro process shamed out of labor relations researchers as impure thought. Better to observe and incorporate, rejoicing that the idea of individual decisions and interactions has never been missing from labor relations. Best of all, this is where the real practitioners “are at.”

II.

If industrial relations research can benefit by preserving its observation base in the detailed phenomena of the real world, a critical movement toward better communication with that operating world needs to be initiated. In a letter to Tom Kochan a couple of years ago, I made this point in a very unacademic (and un-government-writing) way:

There is no real communication between labor relations researchers and operating managers. The loss is primarily to those who deal with difficult everyday labor relations pressures, finding their guidance in experience and instinct and (usually unfortunately) in the behavior recipes of legal counsel.

But there is also a loss to the academic researcher-teacher. He is not “teaching” nearly as many people as he should be. They’re out there, without contact with him, learning via anecdote. Moreover, since the teacher-researcher is not pushed into regular exchange with practitioners, he gets freer and freer in his retreat into an academic style of writing, of formulating questions, of narrowing down his project for the sake of research purity and research convenience. Finally, the worst happens: *no* one goes out into the operating world to collect a whole pile of information, naively, just to see if it can be fit together in some rough way to tell us how something broad and messy works at all. No sir: now that the researcher is a scientist he goes out to collect fragment *a*, *b*, and *c* to test theory *f*—all of it so narrow and unreal that no Vice President of Personnel would have patience to puzzle out the possible implications.

III.

A third research emphasis that is also quite practical is to strengthen firm-level analysis, particularly in studying the outcomes of governmental actions. One sees frequent references to the “unanticipated effects” of a particular tax shift, one subsidy element in some new social program, one component of a trade act, a small section of a new industry regulation. Why “unanticipated”? *Because no analysis directed toward firm-level response—micro-economics, if you prefer the term—was undertaken.*

In labor relations research, there is not enough emphasis on the “theory of the firm,” and a great gap in connecting this analytic framework with those observed political and economic realities that I earlier emphasized. For a very deep-seated reason, too. Labor relations researchers tend to have a social-policy outlook, a reforming, macro-economic bent. I think that most of us have a generalized feeling that government policy can be fashioned to improve social and economic conditions. Consequently, research questions are framed in macro-economic terms, for the most part.

That predilection has three effects. First, when analysis is directed toward the unemployment outcomes of minimum wages or of unemployment compensation, it is usually done by researchers over at “that other meeting, The American Economic Association.” We have limited ourselves without realizing it. Second (and this is evident even in the labor textbooks), there seems to be a Grand Canyon between micro-economic analysis and labor relations. Now we are even saying that the two have nothing to do with each other. This is akin to maintaining

that chemistry and cooking are entirely unrelated. Third, we grow very nearsighted in our research, focusing on just one effect. Labor relations technique *X*, for example, may accomplish social-policy outcome *Y*—*but if we look at firm-level response*, we could spot a few more outcomes and long-term effects that might be negative on, say, income distribution, competitive vitality, market responsiveness, etc.

So, I am urging a heavy application of micro-analysis, to stimulate our growth in usefulness. The real practitioners that we are observing are responding to incentives and disincentives in systematic ways—and all of us need some deeper understanding of the “systematic” in our everyday actions.

The National Science Foundation's Role In Labor-Management Research

L. VAUGHN BLANKENSHIP
National Science Foundation

Organizational traditions change slowly. The National Science Foundation has not had a “tradition” of supporting labor-management research, *per se*, though, over the years, a number of individual investigators, pursuing topics in economics, sociology, political science, psychology, and, more recently, productivity, public policy, innovation, R&D management, and public service delivery, have undoubtedly produced work which could be classified as lying somewhere in this domain. Many would hold that such work “should” be funded by the Department of Labor or the Department of Commerce—if it relates to the private sector—since it is clearly supportive of their mission. The appropriate location for labor-management research oriented toward the public sector, especially at the state and local level, is less clear since there is no Department of Local Government in the American federal system.¹ In either case, the Foundation’s traditional view would be that work of sufficiently high scientific merit is supported in one of the disciplinary areas, work of a more applied nature should “go to Labor.”

Since the early 1970s, however, there have been a number of efforts to modify this tradition, to identify and encourage applied research on labor-management-related issues. The results to date have been mixed, often frustrating, both to the involved staff and, undoubtedly, to members of the research community.

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¹ In recent years, both the Department of Housing and Urban Development and the Civil Service Commission (now split into a Commission and the Office of Personnel Management) have articulated a mission responsibility for “management capacity building” at the state and, especially, local level. The OPM has been particularly aggressive in supporting research on the federal civil service and in providing leadership for “public management research” in the federal government. It has proven more difficult to justify *research* under the “capacity building” responsibility.

Basic Organizational Orientations

Most people would generally accept the following assertions about "Labor-Management Research:" (1) it is nondisciplinary or multidisciplinary and would be classified as applied or problem-oriented rather than basic; (2) its practitioners are usually trained in one or more of the social or behavioral sciences, though some enter it through engineering or even applied mathematics, and most are located in professional schools rather than in traditional academic departments; and (3) it provides some of the intellectual underpinning for managerial and research careers in industry, government, and unions.

The National Science Foundation was established in 1950 as a continuation of the successful government-university partnership which had existed during World War II. Over the years, it has emerged as a primary federal source of support for basic research. Since, in the United States, most basic research is conducted in universities, academic scientists have become the Foundation's major constituency. Not surprisingly, the dominant "principle of organization" is "scientific discipline."

During the first 20 or so years of the Foundation's existence, it was unclear whether or not its charter to maintain the "health of science" included the social sciences—basic *or* applied. It was only after this uncertainty had been removed by the 1968 amendments to the NSF Organic Act that the social sciences were given divisional status, putting them on a par with physics, chemistry, engineering, and the other "hard" sciences. These same amendments, for the first time, also explicitly permitted the Foundation to support applied research—under certain conditions.

Until the 1968 amendments, then, the organizational "traditions" and perspectives of the NSF—disciplinary basic research, "hard" sciences, traditional academic departments—simply did not permit the emergence of support opportunities for labor-management research, except, perhaps occasionally, as an unintended consequence of some discipline-oriented research project. Had anyone inquired about support for such work, they would probably have been told that it was "supported by the Department of Labor" or "Commerce." These amendments, however, established a *permissive basis* for a change. They did not automatically lead to the development of significant new research directions and traditions.

Applied, Problem-Oriented Research

The initial response to these new opportunities was the establish-

ment, in 1970, of the Interdisciplinary Research Relevant to Problems of Our Society (IRRPOS) program. This activity was hardly off the ground, however, before it was absorbed by a much larger program, soon to become popularly known by the acronym of RANN—Research Applied to National Needs. With RANN came a top management group, a management style and philosophy, and a set of organizational principles which were generally foreign to the traditions of the NSF. The emphasis, which gradually emerged, had a heavy technological, “top-down management, quick fix, short-term pay off” flavor to it. The basic organizational units, however, did suggest a “problem” rather than a discipline focus: Social Systems and Human Resources, Environmental Systems and Resources, Intergovernmental Science and Research Utilization, and, later, Advanced Productivity Research and Technology, Advanced Environmental Research and Technology, and Advanced Energy Research and Technology. It was within this context that further opportunities for applied social and behavioral science research, including labor/management research, developed.

Once the *permissive basis* and general *organizational and budgetary framework*—in this case, RANN and the associated divisional structure and operating philosophy—had emerged, the key to the further development of any new research thrust at the NSF is a Program Officer who has professional ties with, and a scientific and *sociological* understanding of, the research communities involved. In addition, when potential applications are of concern, some minimal understanding of the “use environment” or “policy environment” toward which research is oriented seems crucial, although that remains an issue for internal debate as does the use of “users” as reviewers on research proposals.²

At the Foundation, Program Officers are professionally identified with specialized fields of science and provide the day-to-day management for processing proposals and making final funding decisions. On a longer term basis, they select and manage advisory committees, prepare long-range budgetary and scientific plans, and argue for support levels for the area they represent. Their presence at the Foundation; their interaction with other federal, and private, funding programs, scientific societies, and individual investigators; and their

²Traditionally, Program Officers come to the Foundation for two years as “Rotators” from a university science or engineering department. Similarly, peer reviewers are traditionally chosen for their recognized expertise in the *scientific* substance of proposals. “Users” or “Implementors” are chosen because they have a different expertise—knowledge of the environment in which research results must be translated into practical, operating technologies or policies and practices. Blending the two sets of judgments together without letting one dominate the other is one of the most challenging responsibilities for Program Officers in applied research.

personal persuasiveness in articulating scientific priorities and resource needs, provide a focal point of scientific, political, and administrative leadership, an understanding “window” for the scientific community(ies), and a knowledge base for program design and priority setting.

Social Systems and Human Resources

The most logical place for an applied labor-management research program to develop was in the newly created Division of Social Systems and Human Resources in RANN. The scientific and applications “meaning” of a division with such a title was, however, vague. It was not intuitively obvious how to operationalize such an organizational concept by selecting a specific set of either Program Officers or research projects. At the time of its creation, there was no *existing* demand, no stream of proposals contending for support, which could unambiguously be classified as “social systems” research—it was everything, and nothing! There was certainly no well-established “social systems” research community—academic or otherwise—to which to turn for program definitions or priorities or for stimulating demand for research support. Though “human resources” had an HEW ring to it, it was not otherwise clear what the particular application/policy environment of research supported under such a rubric was or ought to be. Again, it was everything and nothing!

Traditionally the Foundation’s programs have been differentiated from those in other agencies by virtue of their basic, disciplinary character and the fact that they rely on grants to undirected, academic performers. The RANN program introduced an applied element into this calculus including the support of nonacademic performers. With multi-million dollar applied research programs already existing in numerous agencies, “duplication and overlap” inevitably became a continuous administrative and political issue in the selection of individual projects and the identification of new program areas, and the defense of these selections to the OMB and the Congress.

Since the initial staff for the new Division of Social Systems and Human Resources did not contain a “specialist” in labor-management research there was no “focal point” for systematically identifying and exploring the possibilities in this area. There were three political scientists, one with background in organizational studies, one with a background in engineering; four economists, including the Division Director with a background in studies of economic regulation and policy research; two sociologists, one of whom was a demographer, the other a specialist in hazards research; a city planner and a lawyer.

Two Program Solicitations for the “evaluation of policy-related re-

search” represented the first systematic opportunity to explore sets of labor-management research issues which might serve as a basis for future program development and identification of a research clientele for SSHR funding. Since these solicitations were announced in the *Commerce Daily Bulletin* and sent virtually to the entire NSF university and departmental mailing list, they constituted a broad “test of the water” for a program of this type. They called for proposals from the applied research community on a variety of topics, topics chosen largely by the new staff and reflecting their own background experiences and sense of relevance:³

(1) the expanded role of health workers; (2) the effectiveness of alternative allocation of health care manpower; (3) the relations between industrial organization, job satisfaction, and productivity; (4) the impact of unionization on public institutions; and (5) public and private personnel systems.

Almost one-hundred proposals, a majority from private consulting firms and not-for-profit institutions, were received and reviewed. Three were awarded on the subject of industrial organization and job satisfaction and one was awarded in each of the other areas. Though a handful of additional unsolicited proposals on labor-management-related topics were received in the first two years of the program’s existence, the absence of a Program Officer who knew and professionally identified with such research made their reception problematical and their eventual funding unlikely. If they weren’t “turned off”⁴ because of lack of interest, they could die simply because no one had strong professional motivation to “push them through the adversarial management system” which characterized SSHR and the RANN Program. Those that survived did so in spite of these situations. By the time the research assessments initiated by these two Solicitations were received in 1974–1975, the focus of SSHR activities had shifted. Consequently they never provided the expected foundation for systematic priority setting and program development in the areas covered.

³ There were almost 20 topics in these two Solicitations. Only these five were roughly in the “labor-management research” domain.

⁴ Program Officers in SSHR received numerous telephone and written inquiries from investigators regarding the eligibility (“program fit”) of their ideas for potential funding under the vaguely defined “social systems and human resources” terminology. When the Program Officer judged that the “fit” was poor or non-existent, the submission of a proposal was strongly discouraged. This came to be referred to as “turning off” a researcher. Whether or not something “fit” could be quite idiosyncratic to the particular Program Officer. It also depended very much on his assessment of the chances of getting it through the higher level management system.

Productivity

By the mid-1970s a new “theme” was emerging which could, potentially, provide a more focused context for the development of a labor-management research agenda. In Spring 1974, an NSF-sponsored conference on the topic of “Productivity in Industry” brought together a group of executives from leading firms and academic researchers to discuss “barriers to productivity” in American industry.⁵ In September, the RANN Program was reorganized at the divisional level and a new Division of Advanced Productivity Research and Technology (APRT) was created, combining elements of the applied social sciences in SSHR with several pre-existing technology and applied engineering programs, including one which focused on batch process manufacturing and automation.

Between 1974 and 1976, a substantial effort was made to explore the possibilities for a more coherent, coordinated program of management, organizational and union (worker)-related research within the overall rubric of “productivity.” A new Program Officer, a “Rotator” with a strong background in management and decision-making research, largely initiated and carried out this effort. Close working relationships were established with relevant program staff in the Departments of Labor and Commerce and in the Commission on Productivity and Quality of Working Life, and an effort was made to develop the outline of a research program on “productivity, management, workers and the workplace” in which all of these agencies, including the NSF, could play their distinctive roles in keeping with their unique missions.

It was hoped that these efforts would result in several things: (1) a strengthened rationale for an explicit Foundation program in this area; (2) increased visibility for the Foundation’s interest and an increase in the flow of unsolicited research proposals on relevant topics;⁶ (3) a ‘budget increment’ to support the initiation of such a program; and (4) a coordinated, informed effort which could be more easily defended against the charge of “duplication and overlap.” These hopes were only partially realized.

The increased interaction with other agencies and with parts of the related research communities began to give the Foundation’s growing

⁵ Representatives of unions were explicitly excluded from this initial conference on the belief that the ideas would be more free flowing and less adversarial. A later conference was planned to explore the views of union leaders on this subject.

⁶ In the Foundation, “proposal pressure” is generally accepted as the single best indicator of the true significance of research area or program. Activities which fail to generate significant “proposal pressure” will have difficulty surviving for any length of time.

interest in applied labor-management research increased visibility. The volume of informal inquiries from both academic and nonacademic researchers increased and several materialized into full-blown research proposals. The planned conference with labor union leaders on "barriers to productivity" was held in the Spring of 1975 and a Solicitation for proposals for studying the organization and management of white-collar and administrative functions in public and private sector organizations was issued and, subsequently, funded. A planning contract produced a conceptual design for a systematic program. In the end, however, these efforts fell short of establishing a viable, budgeted, coherent program of management, organizational and union (worker)-related research in APRT.

The concept of "productivity," of research aimed at "removing barriers to productivity," had a somewhat artificial, if not alien, ring to it for much of the applied social and behavioral sciences community. At best, it sounded like engineering, efficiency, turn-of-the-century scientific management. At worst, it sounded technological, exploitative, inhuman. In either case, no significant part of this research community was naturally grouped around this subject area and thought of itself as doing such work. Under such circumstances, efforts to fit the language of labor-management research into the shoe of "productivity" were awkward, unpersuasive, and often uncommunicative.

Other difficulties were encountered if the "natural" language of labor-management research, e.g., attitudes, organization structure, job design, unions, leadership, management performance, planning and decision-making, etc., were used. The language was "political" in multiple senses of the word. It was certainly "hotter" than the more remote, abstract language of basic scientific disciplines or the neutral language of engineering and efficiency. It was eminently clear that "political realities" of unions, management, and workers would be central in any successful implementation of the results of such research. The experiences of the Commission on Productivity and on the Quality of Working Life were demonstrating how sensitive and difficult this could be.

Such language also brought the question of proper agency missions and roles into sharp focus. What was the NSF doing in an applied research program on workers and union-management relations? Wasn't that the clear province of Labor? And, if this was not enough, it even raised a question about the proper role of the federal government in funding research. Why should private funds be used to support work which would primarily benefit private management? If it was worth doing, the major beneficiaries—the companies—should support it!

These problems were mirrored in the uneasiness with which RANN management reacted to discussions, program plans, or unsolicited proposals on any of these topics.⁷ Sensing that there was probably a need for such work in a "productivity" program, yet also sensing the many pitfalls, they tended to respond to any plans or proposals with delay, indecision and requests for more reviews, more justification, more modifications, more coordination with mission agencies followed by still another round of indecision and delay. In the absence of any clear policy decision, any clear "yes" or "no," these efforts for a coherent program simply petered out in 1976, with the bureaucratic exhaustion of the Program Officer and his return to the university. It would be almost two years before another Program officer with a strong background and professional interest in labor-management research could join the staff and, by then, the organizational context for such applied research in the NSF had undergone still another significant change.

An 'Open Window'

The Foundation traditionally has viewed itself as *responding* to the best ideas emerging from the scientific community, as determined by the peer review process, rather than *directing* research towards selected topics or program area. The RANN Program, with its emphasis on selected "national needs" and its flavor of top-down planning and management, represented a substantial departure from this tradition.

A different picture of the appropriate genesis of applied research underlies the organization of the Directorate for Applied Sciences and Research Applications (ASRA) in January 1978. To begin with, scientists, rather than planners, managers, "users" or policy-makers were deemed to be the best judges of at least a portion of the applied research which the Foundation should be supporting. In the course of carrying out their "normal" research they frequently identified opportunities for pushing it in more applied directions. Because of its nature, however, it was unlikely to be supported by a basic research program. It was not contributing fundamental "new knowledge" to a particular field of science. At the same time, it was not applied enough to be eligible for support from a mission agency. Thus, "falling between the cracks," it went unsupported and undone. What was needed was a division which could respond to all such opportunities, without preconceived "national needs" or other program categories, funding the best research in the tradition of the Foundation. This picture of a

⁷ The final funding decision on the labor-oriented conference on productivity was held up for three weeks while the top management of RANN agonized over the proper title for the conference!

“window,” open to ideas for applied research merging from basic research and supporting work “falling between the cracks,” was embedded in the new Division of Applied Research (DAR).⁸

Key structural and procedural changes were introduced into this new Division to maximize the likelihood that the operational intent of an “open window” philosophy would be realized in practice. These changes were especially critical since a significant proportion of the staff had been RANN Program Officers. The Division was divided into two sections, Applied Social and Behavioral Sciences and Applied Physical, Mathematical and Biological Sciences Engineering. When new staff positions were created or turnover occurred, an explicit policy of appointing “Rotators” was adopted. In the long run, this would broaden considerably the scientific and experience base of the staff and expand links with new portions of the applied research community. It would also keep points of view on programmatic and scientific matters from becoming “locked in” as they sometimes did in the RANN program with its reliance on permanent staff.

Two division-level advisory panels were established. These panels, composed of individuals from the multiple disciplines covered by each of the Sections, met three times a year to review all proposals and recommend funding priorities. Individual Program Officers no longer had “their” budget.

Instead, there was a sectional budget and all proposals—and all Program Officers—competed equally for what was available at each panel meeting. The discussions and rankings of the advisory panel provided a useful common and *open* basis for choosing among projects and allocating resources. Most importantly, perhaps, the Division would accept, and review, *any* proposals which were not for clinical research,⁹ product development, or technical assistance or which did not directly duplicate research supported by another federal agency.¹⁰ The subjective judgments of program “fit,” with all of the idiosyncrasies which they potentially introduced, were no longer appropriate or necessary. Everything would compete equally, and openly, on the basis of scientific merit and potential utility.

⁸ This rather idealistic notion of the “origins of applied research ideas” is not at issue here.

⁹ Since 1950 the Foundation has explicitly excluded support of clinical research.

¹⁰ Because of the many difficulties in defining, and getting some consensus on, “duplication,” a very *narrow* definition was adopted: Duplication exists when two projects have virtually identical problems and approaches. A *Coordination Review Form* was developed and used to obtain this information from other applied programs in the federal government. Experience under RANN demonstrated the consequences which follow from an inadequate operationalization of the concept of “duplication.”

From the perspective of labor-management research, the establishment of an 'open window' Division could be viewed as a retreat to ground zero. All it did was to create a *permissive basis* within which to encourage such work. On the surface, this could be viewed as being little different from the situation that existed in 1971. There were three critical differences.

Instead of trying to generate a list of "national needs" under which to rationalize, guide, and direct research, the new Division, like the rest of the Foundation, would be driven by the ideas and interests of the research community. Second, decision-making and resource allocation were more open to *external* inputs and evaluation from that same research community. Finally, with the departure of the top RANN management, the NASA-style language, procedures, and outlook began to change and decision-making was decentralized to the divisional and Program Officer levels where it has traditionally existed in the rest of the NSF.

Expanding the Applied Research Agenda

From the perspective of "Labor-Management Research," several things had to occur if the concept of an 'open window' was to be more than an empty phrase. The Division had to establish links with the relevant research communities and the opportunity which was now open had to be made visible and known. There had to be proposals for research on labor-management issues since the Division could not respond to what it did not receive! These things had to be accomplished against the rather spotty history of dealings with some portions of this research community under RANN. They also had to be done without conveying the notion that there was a targeted budget for such work. There was only the *opportunity to compete*, to submit a proposal without prejudice as to "program fit," on any problem of the investigator's own choosing, a proposal which could compete against all others on its own merits.¹¹

¹¹ It was surprising how frequently individuals seemed to be uncomfortable with the notion that there was no definite sum "targeted" to a particular area or Program Officer. While the "open window" policy was intended to give maximum freedom to the investigator, it also made it difficult for him to assess his chances of winning because he couldn't gauge the competition or the size of his pot, except in very general terms. The multidisciplinary nature of the advisory panel introduced another large element of uncertainty. These factors probably inhibited some from investing the time required to prepare a proposal when they couldn't estimate the likelihood of payoff. It couldn't have been *too* constraining, however, since the number of unsolicited proposals received in the Division as a whole went from about 200 in the last year of RANN to over 1,000 in FY 1980—an increase of 500 percent!

Two "Rotators," with relevant professional backgrounds, were added to the Staff in 1978. One was a faculty member from a School of Management with training in operations research and decision-making and substantial work experience in corporate planning and city government. The second was an industrial psychologist with a strong interest in studies of work, worker attitudes, leadership, and organizational performance. In addition, one of the economists who had joined the staff a year earlier had a substantial expertise in operations research and labor economics. Given the total size of the staff in the applied social and behavioral sciences (9), and the range of areas they covered, this represented a sizable commitment of resources to one problem area.

There was also a substantial representation of individuals with interest and experience in various aspects of labor-management research on the advisory panel for the applied social and behavioral sciences: two Deans of Schools of Administration, one an organizational psychologist and the other a specialist in accounting and statistical decision theory; a Professor of Social Psychology and Editor of one of the leading scholarly journals in organization studies; a Professor of Public Management in still another School of Administration; and a sociologist who included some significant applied organizational studies in his list of publications.

At the end of two years, these efforts to expand the visibility of research opportunities for work on labor-management issues and to strengthen links with the relevant applied research communities, had produced disappointing results in terms of an increased flow of research proposals. During fiscal years 1979 and 1980, only about 30 out of over 500 unsolicited proposals submitted in the applied social and behavioral sciences dealt with issues on management, decision-making, unions, workers, work organization, or related concerns. About a dozen of these were ultimately supported.

Production, Automation, Manufacturing

Within the Division of Applied Research are several "coherent areas." One of the oldest and most successful is a program in production and batch-process manufacturing. Since 1971, it has supported work on such things as robotics, geometric modeling, automated assembly, machine tool wear, computer vision, and parts design at a level of about \$2.5 million per year. On several occasions, there have been discussions of the possibilities for a social and behavioral complement to this work.

A one-day workshop on "Management, Manufacturing Automation

and the Workplace" was held at the Foundation in the Spring of 1979. Participants were from industrial management or union backgrounds and the gamut of academic disciplines from the history of technology to labor economics, industrial sociology, industrial engineering, and operations research. Several months later, research issues and needs in automation and manufacturing were also the focus of a day-long discussion at the National Academy of Engineering. While engineering and computer applications were emphasized, some attention was given to management, union, and worker-related concerns. In the interim between these two meetings, the National Science Board also had an opportunity to discuss a modest budget "initiative" to encourage the development of a social and behavioral sciences complement to the production research program in DAR.

The tentative conclusions from all of these discussions were not particularly positive. There did not appear to be any significant portion of the applied social and behavioral sciences research community with an established interest in these topics. Similarly, there was little or no consensus on what such research might look like or, indeed, on the need or desirability of doing it. While admitting that automation might cause some problems for both management and workers, the engineers and economists in the discussions generally expressed the view that technological change was inevitable, the problems were temporary, and, in the long run, everyone would be better off. Under such circumstances, as one of them said, "it would be a waste of money" to support research on "the inevitable!" Those in other applied social science disciplines expressed some uneasiness about being seen as the "tools" of the engineers, while others doubted that the findings of social science would ever be used anyway. Spokesmen for both unions and management expressed genuine concern about the impact of technological change and its deleterious effects on managers and workers, but research was not given high marks for its utility in ameliorating these effects.

The culturally unique nature of these responses was suggested in the summer of 1979. At the *International Conference on Production Research* held in Amsterdam, almost one-fourth of the sessions dealt with managerial, organizational, or worker-related topics. Not a single paper was delivered by an American social scientist. Instead, the investigators were Japanese or European, drawing, frequently, on American sources for theoretical or methodological references, but describing work carried out in their respective countries. Subsequent visits with research groups in Oslo, Trondheim, Karlsruhe, Frankfurt, London, and Glasgow confirmed the existence of sizable research groups and re-

search traditions, frequently overlapping and intensely concerned about the role of management, unions, government, and workers in the workplace, and the impact of automation on these roles as well as on the organizations and meaning of work in general.¹²

Summary and Conclusions

The specific research traditions included in the domain of "Labor-Management Research" are quite broad and diverse and there appears to be minimal overlap among them. They range from operations research, applied mathematics, decision-theory and management science through industrial psychology, behavioral psychology, industrial sociology and organizational theory or behavior to labor economics and industrial relations. My sense is that there are reasonable numbers of individuals identified with each of these who are engaged in research which could be classified as relevant to labor-management issues. Yet, almost eight years after the establishment of the first applied social science research program at the National Science Foundation, we have received no more than a comparative handful of research proposals from representatives of all these groups.

In the early days of the RANN Program there were several factors which might partially account for these results—the management style of the programs and its engineering, "quick pay-off" orientation; the difficulty of sorting out proper agency roles in supporting labor-management research; the general absence of anyone on the professional staff with the appropriate scientific background; the negative experiences which some prominent investigators had with the program in its early days. These factors all point to internal difficulties which have inhibited the growth of closer links with these various research communities, factors exacerbated by the continual reorganization and renaming of applied social science research. The experiences of the last two and half years, however, begin to suggest that some of the explanation may also lie in the sociology of these research communities.

Parallel to these developments has been the post-WWII growth of the federal R&D supportive apparatus, complete with formal review processes, administrative and financial procedures, and a funding process which centers around "a research proposal" for a clearly defined goal and set of tasks. The key to this university-government relationship, in a federalist system where the central government has no consti-

¹² Further evidence of these points is provided by the work of the Committee on Social Effects of Automation of the International Federation of Automatic Control, and the Working Paper of January 1979, prepared for the Social Science Research Council of Great Britain, "Research Needs in Work Organizations."

tutional responsibility for education, is (1) that the government is "buying" research for legitimate federal objectives, and (2) that the university is undertaking work which it would *not otherwise pursue* when it accepts federal R&D funds. In the case of the National Science Foundation, the maintenance of the national science base is the federal end being served.

There are four sources of support for university-based research in addition to the NSF: (1) other mission-agencies; (2) private foundations; (3) state legislatures, endowments and student tuition; and (4) "consulting" arrangements.

The mode of support for most mission agencies is typically through contracts or RFP's (Requests for Proposals) rather than through unsolicited proposal style used by the Foundation. The exceptions, of course, are agencies like the NIH, the ONR, and parts of the NIE. Similarly, private foundations like Ford, Rockefeller, and Russell Sage have, during the last decade or so, underwritten institutes and programs, as well as individual projects, on labor-management issues. Finally, many faculty may "bootleg" their research under their regular faculty time or else build it into their "consulting arrangements" with companies, unions, or public organizations. The company gets advice on its management problems and the faculty member gets a "fee" and data for a publishable article.

Our experience during the last year or so strongly suggests that much of the labor-management related research is, indeed, supported through one or more of these alternative sources. In addition, in some disciplines, especially economics, the basic research programs in the Foundation may be sufficient to meet the needs. These factors may explain the apparently weak response of its applied research community to the "open window" opportunity at NSF. Since investigators don't require Foundation funding for the type of work they do, they feel no need to submit proposals for competitive evaluation in the uncertain "alien" environment of a predominantly disciplinary, basic research oriented organization. The absence of any "targeted" program may further inhibit their willingness to compete though such a program would resurrect the earlier problems of "duplication and overlap" with mission agencies.

Those of us at the NSF who were involved in assessing the scientific readiness and interest in research on the behavioral and managerial implications of automation have been genuinely puzzled by the results of our inquiries. Japan and the major Western European industrial nations all appear to have a number of established and active research

groups vitally interested in the managerial, workplace, worker, social, and economic issues associated with the move toward more and more automation in production and manufacturing. We have been unable to locate any significant comparable groups or traditions in the United States. If the interest is there, it is latent.

It is possible that larger cultural differences between the U.S. and these other countries account for these findings. These European efforts often appeared to be intellectual extensions of the significant economic and political roles which unions play in these countries. The work is also frequently cast in the language of socialism or social democracy, an ideological tradition which is quite different from the *laissez-faire* liberal capitalism of the United States.

While recognizing that technological change and the need for productivity in manufacturing is "inevitable," there is a genuine belief that these changes should be planned and managed, with "worker participation." Not only would this cut the short-term transition costs, but there is also a strong belief that workers *may actually have something significant to contribute to solving productivity problems*. In contrast, the American perspective is epitomized by the engineers and economists who seem to believe both the inevitability of technological change and the power of the "unseen hand" to make everyone better off in the "long run." Neither engineers nor economists seem to place much faith in the ability of workers to make significant contributions to productivity. Technology is the solution for engineers, capital investment for economists.

For the time-being, at least, the window for applied research on labor-management issues remains "open" at the NSF. Applied research will always be a bit precarious at the Foundation and consideration is currently being given to still another reorganization. It isn't clear that the "Labor-Management Research Community" needs such a program. It may well be adequately supported elsewhere.

III. CONTRIBUTED PAPERS: SPECIAL GROUPS IN THE LABOR MARKET

Occupational Mobility Among Recent Black Immigrants*

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More immigrants were legally admitted to the United States in the 1970s than in any previous decade of the last half-century. The increased volume of immigration has involved a striking shift in composition as well. Since the elimination of ethnocentric national-origins quotas in 1965, nonwhite aliens have become the fastest growing segment of the foreign-born population. The number of West Indians, other than Cubans, entering as permanent resident aliens leapt from 44,500 in the 1950s to 262,700 in the 1960s, then rose still faster between 1971 and 1977 as another 304,700 arrived.¹

Although considerable attention has recently been focused on the arrival of over 15,000 Haitian boat people in Miami, the black immigrant population is highly concentrated in the Northeast. One-tenth of all blacks in New York City counted in the 1970 Census were foreign born.² Their current share may be far larger, given the hundreds of thousands of legal entrants and an estimated one-half million or more illegal entrants from the Caribbean in the past decade.³ Yet little economic research exists on their employment in this country.

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¹ U.S. Department of Justice, Immigration and Naturalization Service, *Annual Report*, various years.

² U.S. Bureau of the Census, *1970 Census of Population: Vol. 1. Characteristics of the Population. New York*. Part 34, Sect. 2 (Washington: U.S. Government Printing Office, 1973), Table 142.

³ J. M. Scheuer, "Illegal Immigration—Problems and Prospects," *City Almanac* 12 (April 1978), pp. 1–15.

This paper examines the occupational mobility of black immigrants in the U.S. through comparisons with their premigration occupations and with the occupational mobility of native-born blacks. After briefly discussing relevant theoretical issues and formulating several hypotheses in the first section, I then exploit the 1970 Census of Population in the empirical analysis of Section II. The principal conclusions are in Section III.

I. Theoretical Questions and Hypotheses

Foreign-born workers are likely to experience problems of occupational adjustment during the first few years at destination, due primarily to the imperfect international mobility of skills and language, legal restrictions on employment of aliens, and personal difficulties in adapting to a new society and labor market. Studies of West Indian workers in Britain have found that many craftsmen are unable to transfer skills learned abroad to industrial jobs in a more advanced economy. Training acquired in the often less sophisticated techniques of the Caribbean is frequently judged inadequate by the standards of British employers and craft unions.⁴ Individuals with professional, technical, and managerial backgrounds also appear especially subject to adjustment difficulties. These may be even more severe in the U.S. where noncitizens are still ineligible for many government jobs and occupational licenses. It is thus to be expected that recent arrivals drawn from such fields will experience high rates of occupational mobility, much of it downwards, relative to the native born and to immigrants long resident here.

Despite the likelihood of a decline in occupational status from that at origin, black immigrants enjoy certain important advantages relative to native-born black workers which may be reflected in greater access to high level occupations. Surveys of U.S.-bound emigrants in the West Indies indicate a disproportionate number come from high socioeconomic, urban backgrounds.⁵ Their job search and resettlement costs after immigration are typically facilitated by supportive networks of relatives and friends already settled in New York City.⁶ And many studies suggest that the cultural and linguistic characteristics of West Indians often make them preferable to white employers over indigenous black workers.⁷

⁴ For a survey of the British research, see P. L. Wright, *The Coloured Worker in British Industry* (Oxford: Oxford University Press, 1968).

⁵ R. W. Palmer, "A Decade of West Indian Immigration to the United States, 1962-72: An Economic Analysis," *Social and Economic Studies* 23 (December 1974), pp. 571-87.

⁶ G. C. Hendricks, *The Dominican Diaspora: From the Dominican Republic to New York City* (New York: Columbia University Press, 1974).

⁷ V. Green. "Racial and Ethnic Factors in Afro-American and Afro-Caribbean

Recent research on white immigrant workers has identified a U-shaped pattern of occupational mobility, with the initial status decline followed after several years in the U.S. by upward mobility toward the occupational rank at origin.⁸ However, the recency of their arrival, coupled with more severe racial discrimination at higher occupational levels in this country, makes it unlikely that black immigrants will be as successful as whites in regaining their premigration occupations.

II. Data and Empirical Analysis

Data for this study were drawn from the 1970 Census of Population, 5-percent questionnaire. Respondents answered questions on country of birth, race, year of immigration, and occupation in 1965 and 1970. The study sample includes black native- and foreign-born men, ages 16 to 64, who were experienced members of the civilian noninstitutional labor force in 1970 and reported their occupation that year and in 1965. The sample was further limited to residents of New York and New Jersey SMSAs; two-thirds of all black immigrants are concentrated in this region, almost all in New York City. The 1/1000 Census sample was used for analysis of the native born while the 1/100 sample was employed for the foreign born to provide an adequate number of observations for statistical tests.

The empirical analysis begins with an examination of the frequency and direction of occupational mobility experienced by blacks who immigrated to the U.S. between 1965 and 1970. For these individuals, the occupation in 1965 was the last occupation in the country of origin. The premigration occupational distribution of these recent entrants reveals that a relatively large proportion had high-status occupations at origin (Table 1). Over 16 percent held jobs in professional, technical, and kindred fields and 24.7 percent were craftsmen. Barely one-third were in lower-level operative, service, farm, and laboring jobs.

Entry into the American labor force entails considerable movement between major occupational categories (*OCCMOBL*) for the foreign born, most of it downward. About 44 percent of black immigrants experienced occupational mobility between 1965 and 1970 compared with 20.6 percent of native-born blacks. But whereas the native born are almost twice as likely to be upwardly rather than downwardly mobile (*DOWNMOBL*), 27 percent of foreign-born men fell in status while 17.3 percent were upwardly mobile.⁹

Migrations," in *Migration and Development*, eds. H. Safa and B. DuToit (Paris: Mouton Publishers, 1975), pp. 83-96.

⁸ See, for example, Barry Chiswick, "A Longitudinal Analysis of the Occupational Mobility of Immigrants," in *Proceedings of the 30th Annual Meeting*, Industrial Relations Research Association, 1978.

⁹ Matrices cross-classifying occupation in 1970 with 1965 occupation, for both the native- and foreign-born subsamples, are available from the author upon request.

TABLE 1
Occupations and Occupational Mobility, Black Men in New York-New Jersey SMSAs

Major Occupation	Foreign Born in U.S. <5 Years			Foreign Born	Native Born
	Premigration Distribution	% <i>OCCMOBL</i> ^a	% <i>DOWNMOBL</i> ^b	1970	1970
Professional and technical	16.1	38.5	38.5	9.6	7.8
Managers and administrators	3.7	66.7	66.7	2.6	2.2
Sales workers	4.9	75.0	75.0	4.3	3.9
Clerical workers	17.3	28.6	21.3	17.3	13.1
Craftsmen	24.7	40.0	40.0	18.7	14.7
Operatives	17.3	71.4	21.4	23.7	33.1
Service workers	9.9	62.5	0.0	18.7	16.1
Farmers and farm laborers	3.7	66.7	0.0	0.5	0.0
Laborers, nonfarm	2.5	100.0	0.0	4.6	9.2

^a *OCCMOBL* is defined as movement to a different major occupational grouping in 1970 than in 1965.

^b *DOWNMOBL* is defined as movement to a lower major occupational grouping in 1970 than in 1965. Occupations are ranked according to the Duncan Index of Socioeconomic Status; see A.J. Reiss, et al., *Occupations and Social Status* (New York: The Free Press, 1961), table 7-4.

Source: 1970 Census of Population, 5 percent questionnaire.

Calculations of mobility rates by premigration occupation indicate that two-thirds of those in managerial and administrative positions in their homeland changed occupations once in the U.S. and all of them moved to lower ranking jobs (Table 1). Men formerly in professional and craft occupations were less likely to be mobile, but the roughly two out of five who were moved downward. The only other group suffering substantial downward mobility were sales workers. The depth of their descent was relatively modest, with most moving into clerical jobs.

Despite the prevalence of downward occupational mobility among the foreign born, their decline is not so steep and prolonged as to put them at an occupational disadvantage relative to native black workers in New York City. A comparison of 1970 occupations indicates that immigrants are far more likely to be in higher level jobs: 9.6 percent are professional and technical workers and 18.7 percent are craftsmen, compared with 7.8 percent and 14.7 percent, respectively, among indigenous blacks. Only one in three immigrants is employed in those occupations ranked below craftsmen in which over 58 percent of the native born are concentrated.¹⁰ Black immigrants and natives alike, however, are much less likely than white males to secure high-status jobs. Among native- and foreign-born whites in New York–New Jersey SMSAs, 19.1 percent were in professional occupations and 14.4 percent in managerial occupations in 1970.¹¹

These results are consistent with the hypothesis that adjustment difficulties tend to be especially important for high-level occupations. However, because recent immigrants are younger, on average, than native-born blacks, these mobility rates may also reflect the greater mobility common to the young age groups. To control for the effects of age, as well as to study the pattern of immigrant occupational change among those in the U.S. more than five years, regression equations were computed. Two dependent variables were used: *OCCMOBL*, a dichotomous variable equal to one for men who changed to a different major occupational grouping between 1965 and 1970, and zero for those keeping the same occupation; and *DOWNMOBL*, a dichotomous variable equal to one if downward occupational mobility was experienced in 1965–70, zero otherwise. Independent variables included schooling, years of work experience, marital status, occupational category in 1965, nationality and year of immigration.

For a pooled sample of all native- and foreign-born blacks (Table

¹⁰ These results are supported by my recent research comparing black earnings by nationality. See DeFreitas, "The Relative Earnings of Black Immigrants: The American Case," *Cambridge Economic Research Papers* 14, Cambridge University, 1980.

¹¹ Calculations from U.S. Bureau of the Census, Table 174.

2), additional schooling and work experience have statistically significant, negative effects on the probability of occupational change, but the coefficients are quite small ($-.015$ and $-.008$, respectively). No significant difference was found between the mobility of married and unmarried men. The foreign born have a higher probability of occupational change, but the foreign-birth variable is just significant at the 8 percent level.¹² When a different specification is used with dichotomous variables for six periods of immigration, men in the U.S. less than five years are found to be the sole cohort with a significantly higher probability of occupational change than otherwise similar natives (a coefficient of 20.4 percent and a t -value of 4.2). Those in the country over 10 years are somewhat less likely to change occupations than the indigenous population, but the difference is not statistically significant.

In a regression with a dichotomous dependent variable for downward mobility, the expectation of a higher probability of downward mobility among recent migrant cohorts is confirmed. Men arriving in the country between 1965 and 1970 have 18 percent more such mobility and those entering in 1960-64 have 9.8 percent more than do native blacks. The native born-foreign born differential is small and insignificant for earlier immigrant cohorts, with no evidence of a subsequent upturn in the occupational level of immigrants relative to native workers. Finally, in an analysis restricted to recently arrived foreign-born men, migrants with managerial backgrounds are found to have far greater rates of downward mobility (60.7 percentage points) than those in "blue-collar" jobs (the reference category). Smaller but also significant differentials exist for those in professional or clerical/sales positions in the country of origin.

III. Conclusions

The results in this paper suggest that black immigrants in New York City experience significant occupational mobility during their first few years after arrival. Downward mobility is especially severe among those with high level occupational backgrounds in the country of origin. These results are consistent with hypotheses derived from previous research on the adjustment difficulties experienced by white immigrants. However, unlike most white immigrants who are able to subsequently recover much of their lost occupational status through upward mobility, foreign-born black professionals, managers, and craftsmen appear less likely to regain their former occupational levels. Despite certain em-

¹²The coefficient of determination is low, a not uncommon result in regressions with binary dependent variables. Upper limits exist on the potential size of R^2 when such variables are employed. See D. G. Morrison, "Upper Bounds for Correlations between Binary Outcomes and Probabilistic Predictions," *Journal of the American Statistical Association* 67 (May 1972), pp. 68-70.

TABLE 2
Regression Results, Native- and Foreign-Born
Black Men in New York-New Jersey SMSAs

Dependent variable	Native and Foreign Born			Foreign Born, Migrated 1965-69
	<i>OCCMOBL</i>	<i>OCCMOBL</i>	<i>DOWNMOBL</i>	<i>DOWNMOBL</i>
Schooling	-.0147 (2.49)	-.0097 (1.62)	-.0034 (0.74)	-.0287 (1.88)
Experience	-.0078 (4.80)	-.0053 (4.67)	-.0025 (1.92)	.0061 (1.19)
Unmarried	-.0146 (0.33)	-.0241 (0.55)	.0301 (0.91)	.0357 (0.35)
Foreign born	.0649 (1.82)			
Migrated 1965-69		.2040 (4.16)	.1816 (4.88)	
Migrated 1960-64		.0533 (0.96)	.0978 (2.32)	
Migrated 1955-59		-.0701 (1.00)	.0347 (0.65)	
Migrated 1950-54		-.0294 (0.34)	.0243 (0.37)	
Migrated 1945-49		-.0715 (0.75)	-.0513 (0.71)	
Migrated pre-1945		-.0429 (0.52)	-.0031 (0.49)	
Professional, 1965				.3150 (2.34)
Manager, 1965				.6073 (3.08)
Sales/clerical, 1965				.2106 (1.94)
Constant	.5508 (6.08)	.4412 (4.67)	.1605 (2.24)	.3375 (1.52)
R^2	.0461	.0782	.0720	.1162
N	558	558	558	104

Note: *t*-value in parentheses.

Source: 1970 Census of Population, 5-percent questionnaire.

ployment advantages when compared with indigenous blacks, foreign-born blacks are substantially underrepresented in high-pay, high-status occupations relative to white males.

Whether this reflects primarily the fact that many arrived relatively recently or the pervasiveness of racial discrimination in employment deserves further research by economists and closer attention by policy-makers concerned with fully utilizing the imported skills of immigrant workers.

Barriers to Women Becoming Union Leaders*

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Traditionally, most union officers were men. Even though today women are a significant and increasing proportion of union members, men are much more likely to be union officers. There are some general explanations for this, but little research has been done on it.

In 1970, 23.9 percent of all union and employee association members were women. By 1978 this had increased to about 27.4 percent.¹ However, this increase is not reflected in the number of women who are national officers.² Women are more common in local than national office, but even in locals they are rarely other than shop stewards.³

This paper addresses the issue of why few women are union officers by integrating traditional industrial relations, or labor market, reasons for the dearth of women officers and other behavioral research on how our society views men and women.

Choosing Union Leaders

Many reasons may explain the underrepresentation of women in union office. Many women have two jobs, one paid and the other at home. Also, although the number of women with careers interrupted by childbearing is declining, women are more likely than men to have interrupted careers. The time when women leave the labor force is also the time when people interested in union office generally take their first positions. Women are also less likely than men to be in high-status and visible positions from which union officers generally come, and at

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* The contributions of Arthur Hochner and Stuart Schmidt are gratefully acknowledged.

¹ Bureau of Labor Statistics, *News*, September 3, 1979, 79-605.

² L. H. LeGrande, "Women in Labor Organizations: Their Ranks are Increasing," *Monthly Labor Review* 101 (August 1978), pp. 8-15.

³ Alice H. Cook, "Women and American Trade Unions," *Annals of the American Academy of Political and Social Science* 375 (January 1968), pp. 123-132; and Leonard R. Sayles and George Strauss, *The Local Unions*, rev. ed. (New York: Harcourt, Brace and World, 1967).

least some men and women see women as inappropriate for union office.⁴

Behavioral literature helps illuminate these reasons. Perceptions of both members and candidates help determine who runs for office. Both candidates and members, including officers, compare candidates' perceived qualifications to office requirements. Candidates use self-perceptions, attitudes, and past experiences to compare themselves to requirements. Members also use perceptions, attitudes, and past experiences to compare candidates to requirements.

If members, including incumbent officers, feel a candidate meets requirements for office, the candidate can become an officer. If members do not perceive a candidate as meeting qualifications, the candidate can not attain office. Similarly, individuals do not run for office unless they see themselves as qualified, the rewards of office as meeting their needs, and members as supporting them.

Both incumbent officers and members take part in choosing officers. Although incumbent officers do have considerable influence, candidates usually must be elected by the rank and file in order to become officers. This contrasts with hierarchical administrative organizations where leaders are appointed and constituent approval is unnecessary.

Member perceptions and individual self-perceptions influence officer selection because people act upon perceptions of reality rather than reality itself.⁵ Stereotypes influence perceptions. People often view individuals as having qualities which they believe characterize the group to which those individuals belong. These stereotypes may be correct or incorrect, but they rarely completely define the person. Nonetheless, stereotypes are extensively relied upon because they are a short cut in the perceptual process.

The stereotype literature shows that group, rather than individual, attributes affect selection most when qualifications for office are ambiguous and when candidates are not personally known to selectors. Both conditions can occur when union officers are chosen. Duties and qualifications of union officers are frequently ambiguous. Also, in many situations union members do not personally know candidates, particularly at the national level.

Finally, members and candidates use perceptions of necessary requirements for office in making decisions based on perceptions of the

⁴ See, for example, Fritz Heider, *The Psychology of Interpersonal Relations* (New York: John Wiley & Sons, 1958), pp. 20-78, for an excellent discussion of the importance of perceptions in explaining people's attitudes and behaviors.

⁵ B. Rosen and T. H. Jerdee, "Sex Stereotyping in the Executive Suite," *Harvard Business Review* 52 (1974), pp. 45-58.

union leadership role. The economic focus of unions in our society suggests that union leaders are expected to deliver economic and work-related benefits.

Three related requirements for union office are perceived negotiation and interpersonal skills, perceived knowledge of industrial relations, and access that members see themselves as having to officers once elected. This section describes how perceived qualifications of men and women compare to perceived requirements for office.

Skills

Perceived negotiation and interpersonal skills include dealing effectively with management and internal union groups. This involves effective power-tactics use and being an assertive, strong spokesperson. Interpersonal skills include being perceived as easily approachable and empathizing with and responding to members.

Stereotypes probably influence perceptions of men's and women's negotiation skills and power tactics. Stereotype research shows men characterized as aggressive, competitive, uncompromising, assertive, having better judgment, and more intelligent than women.⁶ These characteristics are commonly associated with negotiating skill and may lead members to favor men. Men also are perceived to use direct, concrete, and competent, or expertise tactics.⁷ Because industrial relations involves power tactics associated with men, members may favor men.

Another interpersonal skill is approachability. It is difficult from available research to determine whether a potential officer's sex influences member perceptions of approachability. There is, however, evidence that people perceive men as more emotionally stable than women.⁸ However, women are perceived as helpful and understanding. These qualities could enhance approachability if viewed appropriate for negotiators.

A subtle skills stereotype involves interaction with management. Management staffs are predominantly male. Members may feel women

⁶ E. M. Bennett and L. R. Cohen, "Men and Women: Personality Patterns and Contrasts," *Genetics Psychology Monographs* 50 (1950), pp. 101-155; R. L. Dipboye, "Women as Managers: Stereotypes and Realities," in *Women in Management*, ed. B. A. Stead (Englewood Cliffs, NJ: Prentice-Hall, 1978), pp. 2-10; Douglas Masengill and Nicholas DiMarco, "Sex-Role Stereotypes and Requisite Management Characteristics," *Sex Roles* 5 (October 1979), pp. 561-570; Rosen and Jerdee; and V. E. Schein, "The Relationship between Sex Role Stereotypes and Requisite Management Characteristics," *Journal of Applied Psychology* 13 (1975), pp. 352-376.

⁷ P. Johnson, "Women and Power: Toward a Theory of Effectiveness," *Journal of Social Issues* 32 (1976), pp. 99-110.

⁸ Schein; Dipboye.

will not be considered as equals by management. A study of local union officers showed it was initially hard for men to accept a woman as their spokesperson.⁹ Thus, members who do not themselves have traditional stereotypes of women may discriminate against women because they feel that others will.

Acceptance or rejection of traditional sex roles is probably also related to how women view their own skills. Women with traditional attitudes probably find being a tough negotiator as inconsistent with their view of the feminine role. These women would be uncomfortable using power tactics associated with union office.

An individual's self-perception of skills also influences self-confidence. Self-confidence is particularly important for women venturing into traditionally male roles, such as union office. Research concludes that people typically have less confidence performing tasks generally associated with the opposite sex.¹⁰ This suggests that women might have less self-confidence than men when evaluating their industrial relations skills because these tasks usually are performed by men.

Industrial Relations Knowledge

Perceived industrial relations knowledge includes understanding the negotiations process, the collective bargaining contract, the grievance procedure, internal union politics, and relationship of the union to its external environment. Industrial relations knowledge and political savvy often are assumed to result from job seniority and age.¹¹ Officers almost invariably come from the ranks of the workers they represent, suggesting that perceived knowledge depends not only on union experience, but on expertise with a specific union.¹²

If perceived industrial relations knowledge is a function of seniority and experience, women as a group are likely to be perceived as having insufficient knowledge to be officers because women are more likely to have interrupted careers. The resulting lack of experience can be a permanent handicap for some women.¹³

Self-perceptions of industrial relations knowledge also affect decisions to seek union office. The union leader role traditionally has had a masculine image. Thus, women who accept traditional sex role models

⁹ B. Wertheimer and A. H. Nelson, *Trade Union Women* (New York: Praeger, 1975).

¹⁰ E. Lenny, "Women's Self-Confidence in Achievement Setting," *Psychological Bulletin* (1977), pp. 1-13.

¹¹ Sayles and Strauss.

¹² M. Estey, *The Unions*, 2d ed. (New York: Harcourt Brace Jovanovich, 1976).

¹³ Cook.

are unlikely to be interested in union office and will not devote time to acquiring industrial relations knowledge. Thus, some women may believe they do not have enough knowledge to be officers. However, this belief results from their concept of appropriate behavior rather than lack of innate ability.

Traditional sex role stereotypes also affect how people are treated. Women seen as unacceptable for union office because of its masculine image had little opportunity to get industrial relations knowledge. These women may see themselves as too inexperienced to hold union office. Again, this self-perception may be accurate because of the impact of sex role stereotypes on women's treatment.

Access

Perceived access is members' perceived ability to interact with officers once elected. It has two components: time and physical accessibility. Both are important at the local level because members want officers available when problems arise. If fatherhood is perceived to place fewer time demands on men than motherhood places on women, union members concerned about the time leaders have for union duties may feel women will not have sufficient time to be officers. Sayles and Strauss's findings that union members generally feel women belong in the home is consistent with this.¹⁴

If women feel they have more time-consuming family responsibilities than men do, women will be less likely to seek union office. Existing empirical evidence supports this and shows that married women, unlike married men, are less likely than unmarried women to hold union office.¹⁵

Physical location is another component of access. People whose jobs allow them to circulate around the plant or office are easily accessible. Examples are people doing maintenance, machine set-up, and inspection work. These are generally high-status jobs often filled by seniority, and are more routinely held by men than women due to their continuous work histories.¹⁶

Rewards of Union Office

Another influence on decisions to seek union office are the associated rewards. Members decide to seek office partly because they feel they will get something from the experience. If men and women evaluate the

¹⁴ Sayles and Strauss.

¹⁵ Wertheimer and Nelson.

¹⁶ Sayles and Strauss.

rewards differently, this may help account for the relatively greater number of male union officers.

Rewards of office are more individually specific than are requirements for office, making rewards more difficult to specify. However, Sayles and Strauss identified six general rewards of union office: a sense of achievement or self-fulfillment, an outlet for aggression, an intellectual outlet, relief from monotonous jobs, opportunity to gain prestige or status, and a social outlet.¹⁷

Some empirical work on achievement indicates women have somewhat lower achievement needs than men.¹⁸ Other work suggests that men and women have the same level of achievement needs, but pursue them differently.¹⁹ Both approaches suggest differences between women and men in how union office might satisfy success needs. If men and women seek achievement to the same extent but in different ways, and holding union office is more appropriate for men, women would be less likely to see union office as relevant to achievement needs. Alternatively, if office represents an achievement, and if women have lower achievement needs than men, men will seek office more frequently.

If union office is an outlet for aggression, traditional concepts of appropriate male and female roles could influence the likelihood that women view holding union office as appropriate. Our society more readily condones aggression in men than in women, making this reward more attractive to men.

The social outlet rewards of union office may be less important for women than for men because most current officers are men. Job-linked social mixing between the sexes, in contrast to romantic mixing, is relatively new. It could be that men are more interested in going out for a "beer with the boys" than are some women. This dimension is difficult to measure and worthy of further study.

A reward encouraging women to run for office is relief from monotonous jobs. Because women are overrepresented in lower occupational levels, relief from monotony could be more enticing to women than to men. A somewhat different reward, super-seniority, often given to stewards, might also be an inducement for some women to seek office because of limited job tenure.

The final reward is an intellectual outlet. Neither available empirical

¹⁷ Sayles and Strauss.

¹⁸ G. S. Lesser, "Achievement Motivation in Women," and M. S. Horner, "A Psychological Barrier to Achievement in Women: The Motive to Avoid Success," both in *Human Motivation*, eds. D. C. McClelland and R. S. Steele (Morristown, NJ: General Learning Press, 1973).

¹⁹ S. A. Darley, "Big-Time Careers for the Little Woman: A Dual-Role Dilemma," *Journal of Social Issues* 32 (1976), pp. 85-98.

evidence nor a priori reasoning suggests that women and men differ in their desire for an intellectual outlet.

Conclusions

This paper proposes two reasons why few women are union officers. Either women are less likely to seek union office than are men, or incumbent officers and members are less likely to support women for office. The evidence reviewed supports both reasons. This analysis suggests women will have to put aside traditional sex-role stereotypes and seek office before members will see them as qualified.

A major contribution of this paper is an integration of existing explanations of why few women hold union office with the impact of perceptions and sex role stereotypes on leader choice. It also suggests important research questions. Do union members and incumbent officers perceive men and women differently as possible officers, and, if so, how? What differences exist between union members who hold office and those who do not? More specifically, do women who hold office differ, and, if so, in what ways from women who do not? Do women who hold office differ from their male counterparts, and, if so, how? And how do individual women union members perceive union office and its rewards?

Finally, it was assumed that the selection process is similar for men and women officers. This may not be valid. Because of how they are perceived, women may be expected to jump more hurdles than men to become officers. Studies of the officer-selection process, another previously neglected research area, would be of value both for a better understanding of the labor movement generally, and for more insight into the barriers facing women interested in union office.

The EEOC's Bold Foray into Sexual Harassment on the Job: New Implications for Employer Liability

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Effective March 11, 1980, the Equal Employment Opportunity Commission (EEOC) issued new sex-discrimination guidelines covering sexual harassment on the job.¹ The purpose of this paper is to review these guidelines, particularly in the context of the recent appellate decision in *Miller v. Bank of America*,² and to define possible affirmative measures which employers may take with respect to these guidelines. A model is also provided which traces possible employer liability for the sexual harassment activities of its employees under the guidelines.

The new EEOC guidelines clearly reiterate the recent case law holdings that sexual harassment is sex discrimination under Title VII of the Civil Rights Act of 1964.³ Section 1604.11(a) of the guidelines defines the term "sexual harassment" as being "unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature. . . ." The definition is broad and in fact may represent an expansion of existing case law interpretation of what constitutes an offending activity since the definition extends to environmental conditions of the workplace itself. Included in the EEOC's definition of "employer" are employment agencies, joint apprenticeship committees, and labor organizations, as well as other employers under Title VII. Use of the term "individual's" within the definition appears to make clear beyond any reasonable doubt that protection against sexual harassment extends to both male and female employees. Following is a section-by-section review of these guidelines.

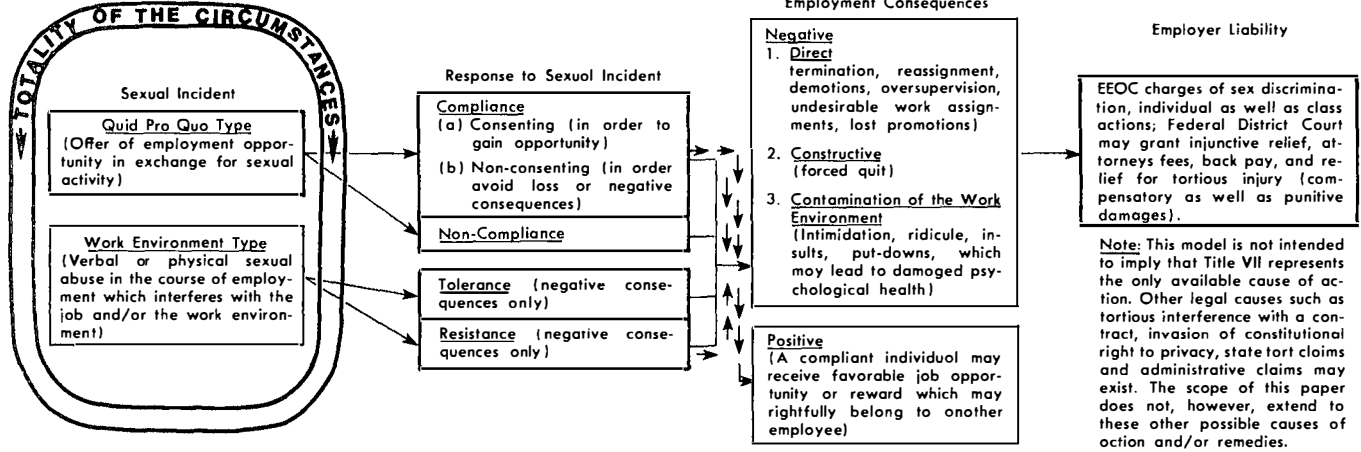
Author's address: Department of Management, College of Business Administration, North Texas State University, Denton, TX 76203.

¹ 45 FR 25024. All quoted material used in this paper which bears no immediate reference is taken from this source. The EEOC's final regulations on sexual harassment will be codified at Title 29 CFR, Ch. XIV, Part 1604, Sec. 1604.11.

² 600 F.2d 211, 20 FEP Cases 462, 20 EPD § 30086 (1979).

³ *Williams v. Saxbe*, 413 F.Supp. 654, 12 EPD § 11130 (1976); *Tompkins v. Public Service Electric & Gas Co.*, 568 F.2d 1044, 15 EPD § 7954 (3d Cir. 1977); *Miller v. Bank of America*, *supra* note 2; *Barnes v. Costle*, 561 F.2d 983 (D.C. Cir. 1977); *Heelan v. Johns-Manville Corp.*, 451 F.Supp. 1382, 16 EPD § 8330, 20 FEP Cases 251 (1978).

MODEL OF EMPLOYER LIABILITY



Analysis of the Guidelines Definition

The EEOC definition of sexual harassment stated above identifies two types of sexual incidents, described by the model as the Quid Pro Quo type and the Work Environment type. The guidelines also set out three circumstances under which the definition will be applied. These are: (1) where sexual conduct is made a condition of an individual's employment (Employment Condition); (2) where such conduct or condition creates an employment consequence (Employment Consequence); and (3) where such condition creates an offensive working environment or interferes with job performance (Offensive Job Interference).

The first circumstance (Employment Condition) describes sexual harassment as occurring when ". . . submission to such conduct is made either explicitly or implicitly a *term or condition* [emphasis added] of an individual's employment. . . ." This situation is described within the model as the Quid Pro Quo type of sexual incident and implies an offer to exchange employment opportunity for sexual activity. Such an offer is usually made by a supervisor, or a person in a superior position, to some subordinate employee.

Although the guidelines do not speak to possible responses which may be made by an individual confronted by a Quid Pro Quo incident, the model indicates two possible responses to such an incident: compliance or noncompliance. As the model also notes, a compliant response may be of either a consenting nature (a willing positive response in order to gain positive employment consequences) or a nonconsenting nature (an unwilling positive response in order to avoid loss or negative employment consequences). Potential employer liability may accrue under either a compliant or noncompliant response.

The second circumstance (Employment Consequence) describes harassment activity or behavior as occurring when ". . . submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual. . . ." The guidelines do not clearly state whether the first two circumstances must be read together. For example, is an individual in order to sustain a claim of harassment, required to endure unwanted sexual behavior unless/until an adverse employment decision has been made as a result of such conduct? As noted by Gene Renslow, Deputy District Director of the Dallas EEOC,⁴ the question is probably moot since it appears to be covered by the third circumstance.

⁴ Statement by Gene Renslow, Deputy District Director, Equal Employment Opportunity Commission, Dallas Area District Office, Dallas, TX, March 24, 1980.

Under the third circumstance (Offensive Job Interference), the sexual harassment definition is extended beyond the Quid Pro Quo type of sexual incident to include situations where “. . . such conduct has the purpose or effect of substantially interfering with an individual’s work performance or creating an intimidating, hostile, or offensive working environment.” The circumstance is described within the model as the Work Environment type of sexual incident. Since Work Environment harassments are probably a more pervasive form and are harder to identify positively,⁵ they have the potential for creating more problems and liability for employers than the Quid Pro Quo type. With respect to the Work Environment sexual incident, no offer of positive rewards is made; the individual is simply put in the position of either tolerating or resisting unwanted sexual activity (physical and/or verbal) during the course of employment. As shown by the model, regardless of whether a response to such an incident is tolerance or resistance, the harassed individual probably always suffers negative consequences.

Analysis of Employer Liability

Four subsections of Section 1604.11 of the EEOC guidelines make explicit reference to employer liability. Subsection (b) states that the totality of the circumstances, including the nature of the offense and the context in which an alleged offense occurs, will be considered in any determination that an activity or behavior constitutes sexual harassment. Each case will turn on its own facts (be determined situationally) in defining a harassment activity.

Applying the legal doctrine of respondeat superior (let the principal—here, the employer—be held responsible), Subsection (c) clearly states that the employer will be held responsible for the acts of its agents and supervisory employees. Further, this responsibility exists “. . . regardless of whether the specific acts complained of were authorized or even forbidden by the employer and regardless of whether the employer knew or should have known of their occurrence.”

With respect to nonsupervisory personnel and others outside the agency relationship (possibly co-workers, customers, clients, etc.), Subsection (d) invokes employer liability for harassment in the workplace except where the employer lacked knowledge and could not reasonably be expected to have known of a harassment incident. Further, the employer may rebut liability only where immediate and appropriate corrective action is taken upon discovery of such conduct. Although all

⁵ *Sexual Harassment in the Federal Government: Hearings Before the Subcommittee on Post Office and Civil Service, House of Representatives, 96th Cong., 1st Sess., Serial No. 96-57 (1980).*

the precedent-setting harassment cases have involved superior-subordinate types of employment situations, future litigation involving activities of nonsupervisory persons can probably be expected. In fact, the recently filed case of *Alus v. General Foods, Inc.*⁶ alleges harassment activities by plaintiff's co-workers. The plaintiff in *Alus* seeks, in addition to losses recoverable under Title VII, \$5 million in compensatory and punitive damages for tortious interference with a contract. The implications for liability under Subsection (d) may then merit a serious concern for employers.

And, finally, the guidelines at Subsection (d) define a program of prevention, stating that employers should take affirmative steps in dealing with the problem. Suggested approaches include “. . . affirmatively raising the subject, expressing strong disapproval, developing appropriate sanctions, informing employees of their right to raise and how to raise the issue of harassment under Title VII, and developing methods to sensitize all concerned.”

Validity of the Guidelines

The guidelines, at the date of this writing, have only “interim” approval; comments from interested parties will be received by the EEOC until June 10, 1980. However, the EEOC expects no significant changes in the finally approved guidelines.⁷ With respect to the judicially defined validity of the guidelines' principles, the Ninth Circuit's decision in *Miller* may have already established validity for at least some of the principles iterated by the guidelines.

In *Miller*, the Ninth Circuit ruled (1) that under the legal doctrine of respondeat superior, employers are responsible for the tortious acts (sexual harassment) of a supervisor even when such acts are forbidden by the employer's policy, and (2) that the mere existence of a harassment grievance procedure at the employer's establishment does not create a duty with the grievant to use the procedure, nor can failure to exhaust internal remedies foreclose an individual's rights under Title VII. *Miller* cites as authority *Alexander v. Gardner-Denver Co.*,⁸ a race discrimination case in which the Superior Court established that internal grievance procedures may not be used to deny access to Title VII remedies.

Under the language of the guidelines and the principles of *Miller*,

⁶ Civil Action No. G 79 699 CA 5, in the U.S. District Court for the Western District of Michigan.

⁷ Statement by Gene Renslow, Deputy District Director, Equal Employment Opportunity Commission, Dallas Area District Office, Dallas, TX., March 24, 1980.

⁸ 415 U.S. 36, 49-50, 94 S.Ct. 1011, 7 FEP Cases 81 (1974).

it appears that the employer is strictly liable for the acts of its supervisors and may not escape that liability. At the very most, liability may be rebutted under the guidelines (1) only upon a clear showing that immediate and appropriate corrective efforts were taken to halt activities which the employer knew of or should have known of, and (2) only with respect to nonsupervisory (rather than supervisory) persons within the workplace.

The guidelines specify, however, that the context in which an alleged offense occurs will be considered, not in order to determine employer liability, but rather to ascertain whether an activity actually constitutes illegal behavior. Harassment prevention and enforcement of appropriate workplace behaviors then appear to be the best, if not the only, "cures" for employer liability. Consideration, therefore, should be given to development of programs that meet affirmatively the preventive standards outlined by the guidelines. Specific areas for program consideration include policy statements, management and employee training, and communication of internal grievance procedures for harassment complaints. The following section offers a proposal for such an affirmative approach.

Proposal for an Affirmative Approach

A strongly worded corporate policy statement should be issued and disseminated to all employees within the organization. Such a statement should stress the unacceptability of all forms of sexual harassment, should define sexual harassment, and should provide written examples of what behaviors are incorporated by the term. A continuing review of fair employment practice case law relevant to sexual harassment should provide fact situations from which such examples may be extrapolated. The corporate policy statement should also emphasize that such unacceptable behavior will be punished. Penalties should be applied uniformly, but not necessarily according to a prejudged or absolute standard. Penalties, rather, should be related and equitable to particular facts and circumstances.

Training should be prescribed for both male and female employees. Training for female employees should be directed toward an awareness of what kinds of behaviors constitute sexual harassment, how to cope with it on an informal basis, and how to utilize formal complaint systems, internal as well as external. Training for male employees should emphasize awareness of the changing context of employment in terms of new and increasing female roles, what kinds of behaviors are offensive and therefore illegal, and that offensive behaviors will not be tolerated and, indeed, will be punished. In addition, it might be well to include information on the legal liability and cost consequences to

both the employer and a harassment offender. The ultimate purpose of training should be to change the organizational climate through heightened awareness of all employees.

A formal counseling-grievance procedure for handling harassment complaints should be designed, initiated, and publicized within the organization. Such procedure should afford maximum privacy for the complaining individual as well as the alleged offender, offer confidential counseling for both individuals, and provide a complete grievance procedure including arbitration at the option of the complaining individual. Full use of these procedures should be encouraged where there is any question of harassing behaviors. Employees should, however, be advised that use of or failure to use the internal mechanism does not foreclose any rights existing under Title VII.

Conclusion

Sexual harassment undermines the integrity of the workplace. The courts as well as the EEOC recognize this as a reality and appear determined to extirpate sexual harassment from the American workplace. Denials that harassment exists and/or negligent inattention to dealing with harassment problems may now be a costly mistake for the employer. Harassment prevention, on the other hand, may be the best alternative for avoiding this cost.

Measuring the Employment Status of Youth: A Comparison of the Current Population Survey and the National Longitudinal Survey*

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The Current Population Survey (CPS) has historically collected labor force data which have been used to ascertain youth employment status.¹ The existence of several national surveys now can be used to augment and check both labor force data of the CPS and the employment situation of youth.² In particular, the data from the 1979 National Longitudinal Survey of Youth Labor Market Experience (NLS) creates an opportunity to examine the youth employment estimates gathered by the CPS.³ The employment status of youth in the NLS is

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* This study was undertaken at the Center for Human Resource Research while the author was on leave from the University of Texas at Austin. Funding for the 1979 National Longitudinal Survey of Youth Labor Market Experience is provided by the U.S. Department of Labor. The study does not necessarily reflect the official viewpoint of the Department or of the Ohio State University. The author has benefited substantially from comments of research colleagues at the Center, especially Michael E. Borus, Frank L. Mott, Gilbert Nestel, and Kezia Sproat, and from the research assistance provided by Stephanie Campbell, Susan Carpenter, and Jeff Colon. Any errors, however, are the sole responsibility of the author.

¹ For an excellent overview of labor force data concepts, refer to National Commission on Employment and Unemployment Statistics, *Counting the Labor Force* (Washington: U.S. Government Printing Office, September 1979).

² A review of national surveys is noted in R. B. Freeman and J. D. Medoff, "Why does the Rate of Youth Labor Force Activity Differ Across Surveys?" National Bureau of Economic Research, May 1979.

³ The NLS is based on interviews in 1979 with 12,683 youth who were 14-21 years of age on January 1, 1979. A majority of these young people, 11,407, were selected from over 70,000 households which were screened for eligible youth. The respondents came from 160 different Standard Metropolitan Statistical Areas and counties and were selected to provide a nationally representative sample. In addition, the sample was stratified by sex in order to yield approximately equal numbers of men and women, and there was oversampling of Hispanics; non-Hispanic black; and non-Hispanic, nonblack, poor youth. An additional sample of 1,281 persons who were serving in the Armed Forces on September 30, 1978, were interviewed. Individual weights based on probability of being selected were assigned to each respondent.

estimated using the Current Population Survey questions, but they apply to the week preceding the interview week rather than to a specific week of the month.⁴

The NLS and CPS Employment Status Comparison: Youth Age 16–21

The 1979 NLS youth survey revealed extensive labor market activity among youth. A total of 17.4 million youth were in the civilian labor force: 14.1 million were employed and 3.3 million were unemployed. In March 1979, the CPS estimated a total of 14.7 million youth in the civilian labor force: 12.6 were employed and 2.1 were unemployed. Besides higher labor force participation, the NLS youth sample yielded higher employment/population ratios and unemployment rates than the CPS for civilian noninstitutional youth 16–21 years of age.⁵ Differences between the two surveys tended to be associated with race, sex, age, and major activity during the survey week.

Survey Differences by Race and Sex

The NLS survey showed an overall LFPR of 71 percent in comparison to 60 percent for the CPS survey, or one-sixth higher LFPR than the CPS survey. Table 1 compares the employment status of the NLS youth sample with March 1979 data from the CPS.⁶ LFPR differences between surveys were greater for blacks than for whites. Black males and females in the NLS survey had a LFPR 19 points and 20

⁴ Only youth between the ages of 16 to 21 years are included in this analysis: as in the CPS, younger youth are not considered. Youth interviewed after May 1979 are excluded to control for the large influx of students to the labor force during the summer. These youth are assumed to be distributed proportionately to those who were interviewed prior to the summer.

⁵ In order to compare youth in the NLS sample and the CPS survey, the white and other race cohort and the Hispanic cohort in the NLS sample are combined. Differences between the two "white" groups still exist, however, since about 4 percent of Hispanics in the CPS survey are classified as black but are considered white in the NLS grouping. On the other hand the NLS white group includes other races who in the CPS are combined with blacks. The other races category comprises only about 2 percent of the whites and 11 percent of the blacks. The NLS and CPS should be quite comparable but the results of the differences should be to understate slightly the LFPR and employment/population ratios for the NLS white group and to overstate its unemployment rate relative to the CPS. The opposite will occur for blacks where the only difference between the CPS and NLS group is that the NLS excludes other races and Hispanic blacks.

⁶ March was the model month for interviewing NLS youth; at this time approximately 44 percent of the sample was interviewed. The overall seasonally unadjusted CPS unemployment rate varied only slightly for civilians 16–21 years of age during January to May 1979; 15.0 percent for both January and February, 14.1 percent for March, and 13.0 percent for both April and May.

points higher than the CPS rate. By comparison, the differences among whites were 9 points for males and 10 points for females.

Overall, the NLS youth sample had an unemployment rate of 19 percent, compared to 14 percent for the CPS survey or a 35 percent difference. For males, the NLS survey was 15 percent higher than the CPS for whites and one-fourth higher for blacks. The NLS unemployment rate was about 50 percent higher than the CPS estimate for both black and white females.

Less variation was found between the surveys in the employment/population ratio, but the NLS rate was still 6 points or 11 percent higher. Both white males and females reflected this difference, but the differential increased for black males and females; the NLS employment/population ratio was about one-fifth higher than the CPS.

Survey Differences by Age

Differences in the employment status between the NLS and CPS surveys were greatest among the youngest age group and declined substantially for the older age groups. Table 1 shows that differences in the LFPR between surveys dropped for older youth. Differences in the unemployment rates between the two surveys were also more accentuated among the youngest age groups. For females, the NLS also had the highest difference in unemployment rate for the younger age groups but survey differences remained substantial for older youth. Differences in the employment/population ratios between surveys also narrowed among older youth.

Survey Differences by Major Activity

Employment status differences between the two surveys were greatest for youth whose major activity was school. Youth were divided into those who stated that their main activity during the survey week was going to school and all other individuals. Table 2 compares the employment status of youth in the NLS and CPS surveys, controlling for school activity, race, and sex. The NLS revealed for youth whose major activity was school a 16 point higher LFPR than the CPS. The difference was greater for blacks, 28 points as compared to 13 points for whites. For youth engaged in all other activities, the LFPR difference between the two surveys was substantially less, especially for the white group.

The NLS unemployment rates were also greater than the CPS among youth who were mainly engaged in school activities, 54 percent higher as opposed to 17 percent higher for those mainly engaged in other activities. For males engaged in all other activities, the unemployment rates were identical in the NLS and CPS surveys. The NLS

TABLE 1
Employment Status, by Sex, Race, and Age: Comparison of NLS and CPS^a

Sex	Labor Force Participation Rate			Percent Unemployed			Employment/Population Ratio		
	NLS	CPS	Difference	NLS	CPS	Difference	NLS	CPS	Difference
<i>Black^b</i>									
Females	60.2	40.4	19.8	41.2	27.3	13.9	35.4	29.4	6.0
16-17	48.2	23.0	25.2	34.6	37.1	17.5	21.9	14.5	7.4
18-19	64.0	41.8	22.2	40.6	26.0	14.6	38.0	30.9	7.1
20-21	68.0	56.8	11.2	32.6	24.2	8.4	45.8	43.1	2.7
Males	70.9	52.0	18.9	35.9	28.7	7.2	45.4	37.1	8.3
16-17	59.6	29.1	30.5	53.5	43.5	10.0	27.7	16.5	11.2
18-19	72.7	56.1	16.6	33.4	27.0	6.4	48.4	40.9	7.5
20-21	82.9	75.8	7.1	22.8	23.2	-0.4	64.0	58.2	5.8
<i>White^c</i>									
Females	68.8	59.0	9.8	17.9	11.5	6.4	56.5	52.2	4.3
16-17	61.0	45.9	15.1	25.6	16.2	9.4	45.4	38.4	7.0
18-19	72.8	62.6	10.2	17.7	11.4	6.3	59.9	55.5	4.4
20-21	72.6	68.0	4.6	11.7	8.5	3.2	64.1	62.3	1.8
Males	74.6	65.9	8.7	14.9	13.0	1.9	63.5	57.3	6.2
16-17	64.1	50.3	13.8	24.3	19.6	4.7	48.5	40.4	8.1
18-19	77.6	70.2	7.4	13.0	12.6	0.4	67.5	61.3	6.2
20-21	82.6	77.8	4.8	8.9	8.9	0.0	75.2	70.9	4.3
<i>Total</i>									
Both sexes	70.8	59.9	10.9	19.1	14.1	5.0	57.3	51.5	5.8
Female	67.6	56.1	11.5	20.7	13.3	7.4	53.6	48.6	5.0
Male	74.1	63.9	10.2	17.5	14.8	2.7	61.1	54.4	6.7

^a CPS figures are for March 1979.

^b NLS excludes other races in Black category. CPS includes other races in Black category.

^c NLS includes all Hispanics and other races in White category. CPS includes white Hispanics but not other races in White category.
UNIVERSE: Civilians age 16-21 on interview date. N = 24,571,000

TABLE 2
Employment Status, by Major Activity, Sex and Race: Comparison of NLS and CPS^a

Sex and Major Activity	Labor Force Participation Rate			Unemployment Rate			Employment/Population Ratio		
	NLS	CPS	Difference	NLS	CPS	Difference	NLS	CPS	Difference
<i>Black</i>									
Both Sexes									
School	50.0	22.1	27.9	55.3	36.9	18.4	22.4	13.9	8.5
All other	78.9	70.5	8.4	29.2	25.2	4.0	55.9	52.8	3.1
Male									
School	52.6	24.1	28.5	55.7	42.7	13.0	23.3	13.8	9.5
All other	87.5	83.6	3.9	25.2	24.1	1.1	65.4	63.4	2.0
Female									
School	47.4	20.0	27.4	54.7	30.0	24.7	21.5	14.0	7.5
All other	71.2	59.7	11.5	33.5	26.4	7.1	47.3	44.0	3.3
<i>White</i>									
Both Sexes									
School	53.5	40.1	13.4	25.3	17.2	8.1	40.0	33.2	6.8
All other	85.7	83.3	2.4	12.0	10.0	2.0	75.4	74.9	0.5
Male									
School	53.1	40.3	12.8	23.8	18.5	5.3	40.5	32.9	7.6
All other	92.7	91.3	1.4	10.5	10.6	-0.1	82.9	81.7	1.2
Female									
School	53.9	39.8	14.1	26.9	15.8	11.1	39.4	33.5	5.9
All other	79.4	75.8	3.6	13.5	9.5	4.0	68.7	68.7	0.0
<i>Total</i>									
Both Sexes									
School	53.1	37.2	15.9	29.3	19.0	10.3	37.5	30.2	7.3
All other	84.8	81.4	3.4	14.0	12.0	2.0	72.9	71.7	1.2
Male									
School	53.1	37.8	15.3	28.0	20.9	7.1	38.2	29.9	8.3
All other	92.0	90.3	1.7	12.3	12.3	0.0	80.7	79.2	1.5
Female									
School	52.9	36.6	16.3	30.7	17.0	13.7	36.7	30.4	6.3
All other	78.3	73.4	4.9	15.8	11.6	4.2	65.9	64.9	1.0

^a See notes for Table 1.

showed a 36 percent higher unemployment rate than the CPS for females whose major activity was not school.

For youth engaged in school activity the employment/population ratios were higher in the NLS than the CPS. The NLS and CPS employment/population ratios were quite similar for youth engaged in all other activities, with the exception of a three point difference among black females.

Reasons for CPS/NLS Differences

Variation in the employment status of youth between the NLS and CPS surveys may be accounted for by a variety of reasons.⁷ First, the labor force status of youth in the NLS sample is based on the response of the youth, whereas in the CPS, labor force status is usually based on the response of the parent. The labor market activities of youth and their willingness to accept a job may not be perceived identically by young people and their parents. Other possible reasons for the difference in the two surveys are the following:

Reference Period

The CPS data refer to the week which includes the 12th of the month. In contrast, the 1979 NLS youth data refer to the week prior to the one in which the interview was conducted. The employment status of NLS youth covers the period from January to May 1979.

Interviewer Bias

The CPS utilizes experienced Census interviewers and in previous surveys the NLS has also employed Census interviewers. However, the 1979 NLS survey relied on interviewers from the National Opinion Research Center (NORC). While it is unlikely that an interviewer bias or errors contributed to the variance in the survey, the effects of interviewer differences are not known.

Sponsor Differences

While the CPS and NLS used the same procedure to classify employment status, the design and purpose of the surveys vary. For example, interviewers in the NLS state the study is under the auspices of

⁷ Differences between the surveys are well noted in Michael E. Borus, Frank L. Mott, and Gilbert Nestel, "Counting Youth: Comparison of Labor Force Statistics in the CPS and NLS," *Report on Youth Unemployment: Its Measurement and Meaning*. U.S. Department of Labor (Washington: U.S. Government Printing Office, 1978), and Norman Bowers, "Youth Labor Force Activities: Evaluation of Difference Across Surveys," U.S. Department of Labor, Office of Current Employment Analysis, unpublished paper, October 5, 1979.

the U.S. Department of Labor and sponsored by the Comprehensive Employment and Training Act. In comparison, the CPS interviewers identify themselves only as Census personnel. Consequently, the stated objectives of the NLS may prime the respondent to elicit employment-related responses.

While these hypotheses may partially explain the variance between the two surveys, the most plausible differences appear to be that the NLS directly interviews the youth, while the CPS relies on the head of the household or some other responsible adult. This finding is underscored when one notes that the largest differentials occurred among the younger youths and those in school. It is this younger group whose parents may know the least about their job-search activities and their desire to participate in the labor force. For example, a youth may have sought baby-sitting jobs, lawn mowing, or part-time work at a fast food restaurant without the knowledge of the parent. It is this group which is least likely to report for themselves in the CPS and also most likely to be living in their parents' household.

Implications of the CPS/NLS Difference

Differences in the employment statistics obtained between the CPS and NLS are not a recent finding. Indeed other comparative studies have suggested that the Census Bureau test whether the answer provided by a youth respondent is different from that given by a head of household.⁸ This type of control comparison should be undertaken. Holding measurement consideration aside, the significance of the NLS estimates indicates that the youth employment problem is more severe than has normally been perceived. The NLS sample obtained higher LFPRs, employment/population ratios, and unemployment rates than the CPS estimates. If NLS estimates are valid, more effort should be made to improve employment opportunities for youth. As additional work on the NLS sample is completed and research on the survey differences on employment status continues, the data on youth employment will be enlarged and improved. It is hoped that these data will generate effective youth employment policies.

⁸ Borus et al.

DISCUSSION

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The Santos paper raises three interesting questions: (1) Why are there differences between the NLS and CPS? (2) What are the implications of these differences? And (3) what further work may be called for?

Santos has provided several explanations of the differences. I, like he, believe that nonself-response in the CPS leads to the differences found in the two surveys. Obviously, there is a definitional problem when two surveys asking the same questions arrive at so substantially different numbers of participants in the labor force. The concepts of employment and unemployment do not fit as well for young people as they do for those who are well entrenched in the work force. The official definitions themselves are clear cut; employment for pay of one hour or more is all that is needed to be counted as employed. Similarly, being out of work, having made an attempt to find work within the last four weeks, and being able to accept work if it is offered are all that is needed to be classified as unemployed. In the case of youth, however, it appears that certain types of jobs may not be considered as employment in the CPS and that some job-search activities may be ignored. It would seem highly profitable to compare the characteristics of the jobs held by youth in the CPS and NLS data to determine if there are certain types of employment, e.g., a few hours a week in such odd jobs as babysitting or lawn-mowing, which are more prevalent in the NLS than CPS. Similarly, the methods of job search used in the two surveys should be compared to see if the youth in the NLS are more prone to use a single informal method of job search while the CPS describes more formal and more repeated job-search activities. Finally, we look forward to seeing published the results of the Census Bureau's methods test, begun in 1978. This test was designed to compare the effects of self-response on reports of employment status. While the sample in this age group was small, the methods test should yield some evidence of value.

Another explanation for the differences between surveys, which was

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not included in the Santos paper, is the rotation group bias which appears in the CPS. The Census Bureau and Bureau of Labor Statistics have noted for a number of years that there are substantially different responses for the first and fifth rotation groups in the CPS as compared with the other six. In a forthcoming article, in the *Monthly Labor Review*, Norman Bowers finds (using annual averages for 1979), that the labor force participation rate, employment/population ratio, and unemployment rate are considerably higher in the first month than in succeeding months for 16-19 year olds. To the extent that the NLS data are comparable to the first rotation group of the CPS, then, the differences between the two surveys are not as large as those observed using the total CPS sample.

The problem, however, continues to exist in policy terms. There is no evidence that the first rotation group is biased upward. It may well be that there are problems in the administration of the later waves of the CPS or that there are differential attrition patterns over the course of the interviews. Thus, it may well be that the NLS estimates of employment, unemployment, and labor force participation rates are in fact correct. If this is the case, there were approximately 3,325,000 unemployed youth 16-21 in the Spring of 1979 instead of 2,075,000 estimated by the CPS—a difference of 1,250,000 (or 60 percent). It should also be noted that the NLS finds 1,425,000 more employed youth in this age group than does the CPS.

There are several implications of having so many more unemployed youth than had previously been estimated. First, as the number of jobs expands there will be negligible effects on measured unemployment since the jobs will go primarily to individuals whom the CPS had categorized as out of the labor force, but who in fact had been searching for jobs. Second, if we know who the additional young job seekers are, and what desires they have for work (from the Santos paper, we know that they are heavily black, predominantly female, and mostly in school), we can use this information to determine whether the youth unemployment problem is in fact more severe than we had previously thought and, if so, we can attempt to establish the necessary remedial programs.

There are several questions which can be raised about the DeFreitas paper. The first relates to the nature and causes of the initial decline in occupational status experienced by the new immigrants. Just how substantial is the downward mobility? Obviously, persons who own their businesses, be they ever so small, would classify themselves as managers. I have noticed cases of what might be called occupational in-

flation in groups of immigrants. For example, I remember a Russian immigrant telling me he was an economist, but when I asked about his duties I found they consisted of keeping the books in a factory. Thus, one point is how much of the downward mobility is due to aggrandizement of the former occupation. In addition, the use of a dichotomous variable to indicate downward mobility does not tell us whether a physician is now having to take on internship responsibilities while studying to pass U.S. examinations or whether he or she is sweeping floors.

The really important issue in the DeFreitas paper, however, is whether black immigrants become permanently trapped at the lower occupational levels. He finds downward mobility for the 1965-1970 period among immigrants from 1950 through 1969, although the coefficients of the 1950-1959 immigrants are not statistically significant. This would imply that the black immigrants in the New York-New Jersey SMSAs have suffered substantial downward mobility during the 1965-1970 period, regardless of their time in the country; that is, not only does there appear to be an initial decline in occupational status upon immigration, but further declines are experienced in subsequent years. Thus, DeFreitas seems to show that there is no adjustment to the U.S. institutions and possibly that discrimination erodes the benefits that the immigrants initially derive from having more education and experience (and West Indian accents and values) when compared with their native counterparts. DeFreitas contrasts this with the evidence presented by Chiswick at these meetings in 1977 which show net increases in occupational status among white immigrants arriving from 1950-1964.¹

One note of caution to use in examining these types of data is that the characteristics of immigrants may change over the years. Controlling for schooling and experience may not be sufficient to measure the differences between black immigrants to New York and New Jersey SMSAs in the 1950s and those coming in 1965-1969. For instance, a French-speaking Haitian may be expected to have considerably more difficulty adjusting to American life and finding employment than an English-speaking West Indian has, although both may be black and have a high school education.

While it is the role of the discussant to raise questions about the papers under review, I should close with the acknowledgement that both the Santos and DeFreitas papers are excellent presentations of the additional problems faced by special groups in the labor force.

¹ Barry R. Chiswick, "A Longitudinal Analysis of the Occupational Mobility of Immigrants," in *Proceedings of the Industrial Relations Association*, 1977, pp. 20-27.

DISCUSSION*

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Section 1604.11 was added to the EEOC Guidelines on Discrimination Because of Sex, effective March 11, 1980. Ledgerwood and Johnson-Dietz succinctly discuss the provisions of this newest guideline. They analyze the three circumstances under which the employer is liable and develop a conceptually useful typology: a "Quid Pro Quo" type of sexual harassment involves the exchange of sexual activity for employment opportunity, while a "Work Environment" type includes conduct which has the purpose or effect of creating an intimidating, hostile, or offensive work environment. They note differences in employer responsibility for supervisory and nonsupervisory employees, and they discuss compensatory and punitive awards as well as back pay and other losses recoverable under Title VII. Finally, they propose an "Affirmative Approach" employers could initiate to make a showing of harassment prevention and enforcement of appropriate workplace behaviors.

At one level, the authors may be criticized on the ground that their proposed affirmative approach is itself sexist. They suggest that females be trained in both formal and informal coping, but that males be made sensitive to the issue, be taught what constitutes offensive behavior, and be warned that such behaviors will be punished. The authors apparently assume that sexual harassment activities are directed only toward females. Whether this is a reasonable assumption is unclear. Surveys of working women have shown that at least 70 percent of them report having been sexually harassed on the job.¹ No such surveys are available on men. However, the absence of knowledge does not necessarily indicate the absence of a problem. Obviously, the potential exists for males, especially those entering a female-dominated work environment, to be the victims of sexual harassment. Since both genders are

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* The author is indebted to Gloria Busman and Geraldine Leshin of the Institute of Industrial Relations, UCLA, for their helpful suggestions.

¹ Working Women's Institute, "Project Statement: Sexual Harassment on the Job," undated, mimeo. Also Clair Safran, "What Men Do to Women on the Job: A Shocking Look at Sexual Harassment," *Redbook* (November 1976); and Karen Lindsey, "Sexual Harassment on the Job," *Ms.* (November 1977).

accorded protection under the guidelines, teaching men how to cope and making women aware of what might constitute unwelcome behavior seem equally advisable in all "Affirmative Approaches."

At a second, and more important, level, Ledgerwood and Johnson-Dietz may be criticized for being too succinct in their discussion of liability. Liability involves two distinct questions. The first is, "When is an employer legally responsible?" The second is, "What is the extent, in dollar terms, of this liability?" Neither question is fully discussed in this paper.

Subsections (c) and (d) of the Guidelines address when an employer is legally responsible. The authors do correctly point out that employers are fully responsible for all acts of their supervisors, but are responsible for the acts of nonsupervisory personnel only when they knew or should have known that such acts occurred. The authors fail to point out the clear implication of this legal responsibility: to limit liability, employers could limit the number of supervisors.

They also neglect the implication raised by the Commission's refusal to define "supervisor." Each case is to be examined for the circumstances of the particular employment relationship and the job functions performed by the individual to determine whether an individual acts in a supervisory or agent capacity. If the burden falls to the employer to show an individual was not acting as its agent, its liability might be minimized by developing well-written and strictly followed job restrictions. The paper does not point this out. Nor do the authors point out the subsidiary implications this lack of a definition for "supervisor" may have for collective bargaining and performance-appraisal systems.²

Liability also involves the extent, or pecuniary obligations, of employer responsibility. While the authors do discuss direct monetary liabilities, they entirely neglect the cost-inducing effects of the new guidelines. Instituting training programs obviously involves one such cost; redefining jobs and/or writing job descriptions, reorganizing bargaining units, and altering performance-appraisal systems are others. Additional cost-inducing effects may also be important. For example, if unemployment insurance claims staffs hold that quits resulting from an unwillingness to submit to unwanted behaviors are not voluntary quits, employers' experience ratings, and thus attendant costs, will rise. Or if workers' compensation boards allow claims for symptoms induced by a sexually harassing work environment, these premium costs will rise. The authors need to discuss fully these direct and indirect pe-

² Geraldine Leshin, *Update: Affirmative Action Manual for Labor-Management Relations* (Los Angeles: Institute of Industrial Relations, UCLA, 1980).

cuniary liabilities if their assessment of the guidelines' implications is to be complete.

The Koziara and Pierson paper offers a model of union leader choice and reviews the literature which led to the development of the model. The evidence cited, not surprisingly, supports the model's two explanations of why there are so few female union leaders—women are less likely than men to seek office, and women are less likely to be supported for office by either incumbent officers or members. The authors then make some very timely and important suggestions for future research.

The basic assumption underlying this paper is that since 30 percent of union members are female, 30 percent of union leaders would be women if no barriers existed. This assumption may even be correct. Another assumption which seems to be operating in this paper is that even if perceptions and attitudes change, the strategies and tactics of union-management interactions will stay the same. Again, the authors may be right, but this assumption conflicts with part of their own argument. They point out that negotiations between unions and managements have been male-dominated essentially because males are perceived to be more aggressive than females and thus, on the union side at least, men have been voted into offices carrying such responsibilities. However, on the management side, women are increasingly being promoted to positions that have negotiating responsibilities. One wonders what the interaction effects will be. Will the present methods of operating be maintained by females' adapting to the current system, or will the system itself change in response to the different methods employed by females? As important, will an increasing number of female managers influence union voters to empower union women?

Koziara and Pierson are to be commended for their research suggestions. Their recommendation that the officer-selection process be studied seems particularly relevant to the subject at hand. We know little of officer turnover, success rates of challengers to incumbents, extent of participation in union elections, or even attendance at union meetings. We do know that union politics generates considerable apathy.³ One very recent preliminary finding is that women in associations are far more likely to be members of the governing boards than are women in trade unions.⁴ This suggests that at least one union-specific variable

³ Barbara M. Wertheimer and Anne H. Nelson, *Trade Union Women: A Study of Their Participation in New York City Locals* (New York: Praeger, 1975); also Alan J. Geare, Joyce J. Herd, and John M. Howells, *Women in Trade Unions: A Case Study of Participation in New Zealand* (Wellington, New Zealand: Victoria University Industrial Relations Centre, 1979).

⁴ Elyse Glassberg, Coalition of Labor Union Women, Center for Education and Research, Inc., New York, letter dated August 11, 1980.

—type of organization—be added to the authors' list of explanatory variables (e.g., education, occupation, length of continuous labor force attachment, size of organization, and percent of female members).

Finally, and most surprisingly, age is not included anywhere in the authors' discussion. This may be because the research work cited did not control for age. It may also be because age is not really what needs to be examined. If one assumes that younger workers have different perceptions or attitudes than older workers, simply controlling for age might not be effective. In this case one must control for a cohort effect. Both age and cohorts seem worthy of inclusion as explanatory variables in future research. Of course, if a cohort effect is in operation, and if such an effect shows that younger workers are more supportive of females in leadership positions, the problems the authors present will solve themselves, given enough time.

IV. THE PREVAILING WAGE CONCEPT IN THE PUBLIC SECTOR

Experience Under the Federal Pay Comparability Act of 1970

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The Federal Pay Comparability Act of 1970 mandates that federal white-collar employees be paid rates that are comparable with those in private industry for the same work levels and that they receive equal pay for substantially equal work. Private-enterprise rates are to be determined by Bureau of Labor Statistics surveys—in effect, by annual surveys of private industry pay for selected jobs.

To maintain comparability, the law provides for annual pay increases, of amounts decided on by the President. Congressional approval is not required. The President determines the comparability increase after receiving a report from the Directors of the Office of Management and Budget and the Office of Personnel Management and the Secretary of Labor (collectively called his Pay Agent) and from the Advisory Committee on Federal Pay, which consists of three persons generally recognized for their “impartiality, knowledge, and experience in the field of labor relations and pay policy.”

Employee organizations have a consultative part in the pay-setting process. There is no provision for collective bargaining.

The mandate for comparability has an important loophole—in the event of a national emergency, the President can issue an alternative plan which can change the size or date of the annual increase or cancel it entirely. Alternative plans can be, and sometimes have been, overridden by a majority vote of either house of Congress.

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Each alternative plan provides for a departure from comparability only for a year. The first subsequent full increase restores comparability. A succession of alternative plans, however, can lead to a salary gap that is so great as to be politically difficult to correct.

It may be useful to summarize briefly what is and is not meant by comparability:

1. The principle applies to salary levels for white-collar employees. Annual changes are designed simply to bring salary levels to par with the private sector.¹

2. Comparability is to be for similar work. The legislation does not provide that an average federal employee should earn as much as the average private-sector employee, regardless of occupation.

3. By law, pay is to be equalized for broad groups of jobs considered to be of equal skill and difficulty. The process does not, however, necessarily equalize pay of individual jobs with the same job in private industry. Lawyers in Grade 11, for example, have the same pay scales as historians at that grade, although in the nonfederal world, market forces may raise pay of lawyers substantially above that of historians.

4. Comparability applies to pay scales, not to actual annual earnings.

5. Comparability does not extend to benefits.

For practical purposes, the comparability legislation has been in effect for nine years. This does not mean that we have had nine years of comparability. In all but four years, there have been departures from it: Either the average increase has been smaller or uniform percentage increases at all grades have been substituted for the varying increases called for by comparability. On top of these departures from comparability have come restrictions on pay in the upper grades.

Pay comparability's checkered history is described in "Eight Years of Federal White-Collar Pay Comparability," issued about a year ago by the Advisory Committee on Federal Pay. Its conclusions are still true.

Let me give a fairly brief review of experience under the legislation:

1. The legislation has essentially assured federal white-collar employees (and military personnel, whose pay changes have a tandem relationship) of an annual salary increase.

2. Annual pay adjustments, even if they fail to match comparability,

¹ For the military, tied to white-collar pay comparability by separate legislation, the emphasis is on pay increases since there is no recent survey designed to set military pay levels on the basis of comparability, which could then be maintained by annual increases.

are important. Pay of legislators, judges, and federal executives has lagged much further behind comparability than that of white-collar employees covered by the comparability process. This lag is primarily due to the public's opinion of the functions of congressmen, judges, and federal executives and its difficulty in understanding why anyone, with the possible exception of athletes, entertainers, and television commentators, is worth more than \$50,000. The present problem is compounded by the size of the gap behind comparability that builds up in between quadrennial reviews of executive, legislative, and judicial salaries. It becomes so great as to be politically almost impossible to eliminate.

3. In a majority of the nine years, the white-collar raise has not been a full comparability change. It has been curtailed by presidential alternative plans in four years and economic stabilization in one of the earlier years. In a number of years, including those of alternative plans, it has been a uniform percentage increase for all grades rather than varying according to changes in the private sector. The gaps behind private-sector pay that have resulted are, in my view, a clear violation of the comparability principle. As pointed out earlier, the principle involves equating salary levels and using pay increases only as a mechanism to attain comparability of levels.

4. The system as it has functioned has failed (a) to provide high enough pay to keep competent middle and upper level civilian managers and professional workers from retiring early, or (b) to keep the skilled enlisted jobs in the military filled with competent personnel. It is not clear to what extent the current pressure to raise military pay is due to the tie between military pay increases and the rise in federal white-collar pay, which has lagged substantially behind civilian blue-collar wages; many of the hard-to-fill military jobs are skilled blue-collar positions. The problem of military pay is a complex one, however, involving a system of allowances and benefits, especially retirement, that is not efficient in terms of recruitment and retention. So far as I know, there have been no recent analyses of how military pay levels, as contrasted with changes, compare with the private sector.

5. One of the principal problems with the federal white-collar system is the wide range of jobs within a single federal pay structure. One structure encompasses jobs ranging from messengers to managers. Moreover, a number of important grade levels encompass both professional and managerial occupations and clerical jobs. This is contrary to private-industry practice and essentially amounts to a loss of comparability at the outset. As a result, at some grade levels, clerical workers are likely to be overpaid and professional workers are either underpaid or pro-

moted faster than they would be with a divided pay structure. Unfortunately, splitting the General Schedule into two (which would require legislation) has been opposed as continuing patterns of discrimination against women and minorities.

6. The effectiveness of the pay system, of course, depends in part on accurate classification of federal employees by grade. Classification will never be completely accurate. According to available data, however, overgrading of positions has increased pay of federal white-collar employees by approximately 1 percent of payroll. Administrative efforts have been under way for a couple of years to try to correct this overgrading, although it is unrealistic to assume that it can ever be completely eliminated. The mere inclusion within a single grade of a wide range of jobs that the private sector market values at different levels is bound to result in some overgrading and some undergrading. In the 1950s and 1960s, before pay comparability was introduced, overgrading was widespread in an effort to correct for low pay scales.

7. The functioning of comparability legislation has probably done little to improve federal labor relations. Indeed, it seems likely to push federal white-collar unions into seeking a stronger role in the pay-setting process.

The agencies administering pay comparability have sometimes leaned over backwards to make temporary concessions to the unions. One major concession has been to give the lower paid employees, who are most heavily represented by unions, larger percentage increases in some years than strict comparability would call for.

Despite these concessions, the lag of federal pay increases behind what comparability would call for and the even greater lag behind pay increases for blue-collar and Postal employees seems bound to lead white-collar employees to conclude that lack of a greater union role in the pay-setting process has been costly. Since 1970, pay of federal blue-collar employees has gone up substantially faster than that of federal white-collar workers, while Postal pay has risen almost twice as fast. Unions play a substantially larger part in federal blue- than in white-collar pay determination, and Postal pay is set by collective bargaining. The union role in pay-setting is by no means the only difference between these groups. Public perception of the services and pay levels of Postal workers is different from that of white-collar employees. White-collar pay determination may be further weakened if military pay changes are separated from it.

Even the formal advisory role of representatives of federal white-collar employees in pay-setting has been in abeyance the past two years;

in protest of the alternative plan in 1978, unions have refused to participate.

8. Combined with efforts to revise pay legislation, the 1978 interruption of discussions with employee organizations may have delayed technical improvements in measurement of pay comparability. The fact that the comparability legislation has a built-in mechanism for such improvements is one of its strengths. Technical changes made prior to 1978 substantially tightened up this measurement and, consequently, reduced the size of the increases that have gone into effect during the past nine years. (The Advisory Committee estimates that these changes have kept the annual federal payroll at least \$4 billion below what it would have been without them.)

The net cost effect of changes still to be decided on and implemented is difficult to forecast. A reduction in the size of establishments included in the BLS survey will cut increases. A reduced time lag between the date of the BLS survey of private-sector pay and the effective date of the annual federal pay increase would raise federal pay levels. The effects of inclusion of state and local government pay in the BLS survey and expansion of the benchmark jobs surveyed are more difficult to predict. Determination of pay on a locality basis, proposed in pay-reform legislation, would presumably have little net long-term effect on average pay levels nationwide.

The major feature of pay reform—notably total compensation comparability—is projected by the Administration to reduce pay levels below what pay comparability alone would call for.²

9. The major benefit that appears to be out of line is retirement costs, and it is probable that the generous retirement pay provisions for federal employees have been a factor in resistance to letting the pay-comparability process function. Whether the Administration's proposal for total compensation comparability is the way to correct this instead of dealing head-on with benefit levels on their own is highly debatable. It would probably result in salary rates below private-industry levels to compensate for liberal retirement benefits. It would effectively continue to benefit retirees at the expense of those still on the payroll and encourage early retirement of managers and professional employees.

The Advisory Committee on Federal Pay included a number of recommendations in its history of pay comparability: (1) continuation and

² The Congressional Budget Office has pointed out that different economic assumptions could change this conclusion. This difference in forecasts points up the likelihood that disputes between federal employee and Administration representatives over economic and actuarial assumptions of total compensation comparability and the complexity of the proposed system for comparing federal and private-sector benefits could greatly erode employee confidence in the compensation-setting process.

strengthening of the comparability system; (2) speeding up technical improvements; (3) establishing a separate system for extending comparability to benefits; and (4) attacking directly problems of “overgrading, overmanning, inflexibility, low productivity, excessive benefit levels,” rather than continuing low pay and poor employee performance.

Retirement for Federal Civil Servants: Down from the Incomparable

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In 1979, President Carter introduced a proposal for reforming compensation for federal employees. The central feature of the plan for revising remuneration for the white-collar, general schedule workforce is to base it on "total compensation comparability." Currently, the laws guiding pay policy specify that federal *salaries* be made comparable to those in the private sector. The Administration's proposal would broaden the comparability principle to include nonsalary benefits and it would be implemented initially by adjusting *salary* (in 1980) rather than benefits.

The notion of adjusting one element of compensation for a substantial shortfall or excess in another element is suspect. An employer as large as the government has to take into account the effect on the private sector in adjusting any component of compensation. Moreover, there are certain standards that the government ought to set in each element of compensation. These considerations point to a careful examination of imbalances within *each* element of public and private sector compensation before trying to add them all up.

Lily Mary David's paper in this volume spells out some of the structural flaws in the practice of setting federal salaries. Those shortcomings deserve specific responses that are not addressed by an across-the-board reduction in pay increases as is suggested in the Total Compensation Comparability proposal. Similarly, nonsalary benefits have problems of their own that warrant attention.

Nonsalary Overview

The benefit provisions of retirement programs are far and away the most important component of nonsalary compensation for federal and private-sector workers. Other benefits are either small (life insurance), fairly large but very similar between sectors (sick leave), or unmeasurable (security of job, freedom to strike). Finally, there is a category that

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all wise investigators shy away from for fear of unleashing blind animal passions: I refer to subsidized parking.¹

The pertinent facts on retirement are as follows. Federal employees under the general schedule are excluded from Social Security; they participate in the Civil Service Retirement System. The program provides for annuities based on length of service and the average salary of the highest three consecutive years of service. Usually, eligibility for retirement begins at age 55 with 30 years of service or various other age and service combinations, all of which are more favorable to the employees than Social Security eligibility rules. Civil Service retirement benefits are fully indexed, and about 80 percent is taxable. According to the Office of Personnel Management (OPM), the normal cost of this benefit package is about 36 percent of payroll.²

In the private sector, virtually all workers are covered by Social Security. The retirement provisions of Social Security are structured so that retirees with low career-average earnings receive benefits that replace a larger fraction of their preretirement earnings than do workers with high career-average earnings. Social security benefits are fully indexed and nontaxable. Some private-sector employees—about half—are also covered by private pension plans. These plans vary enormously in benefit provisions, but none of them is fully indexed.

For the administration's proposed October 1980 salary increase, the OPM derived estimates of private pension benefits for major corporations (whose benefit programs are generally the highest in the private sector) and concluded that federal workers' nonsalary benefits are between 3 to 10 percent higher than the private-sector major corporation employees. Accordingly, the pay raise for October 1980 originally was held down by about 5 percentage points below salary comparability. The salary hold-down offsets the more generous retirement program, producing total compensation comparability. (The rationale seems to have been abandoned in the final determination of the 1980 increase.)

Comparison of the *average* value of retirement benefits for the entire workforce gives only a crude and misleading measure of the extent to which any particular federal employee may be over- or under-benefited. Since Social Security is "tilted" in favor of low-earning workers while Civil Service retirement replaces the same fraction of gross earnings at all levels (for a similar career pattern), the federal vs. private differential

¹ These nonsalary benefits are discussed in "Compensation Reform for Federal White-Collar Employees: The Administration's Proposal and Budgetary Options for 1981" (Washington: Congressional Budget Office, May 1980).

² See "Standardized Cost Estimates of 'Typical' Benefit Plans," Office of Personnel Management, June 19, 1979, p. 4.

in retirement benefits is greatest at the top of the payscale. (Private pensions are often integrated with Social Security but do not offset the tilt.) The fact that private pensions and Civil Service retirement are taxed while Social Security isn't narrows the advantage of the high-earning, federal employee somewhat, but it is impossible to generalize about this since federal employees' tax rates are based on adjusted family income, not earnings. A further ambiguity as to who benefits the most from the relatively high cost federal retirement arises from Social Security's treatment of dependent spouses. Since a spouse adds 50 percent to the Social Security benefit, comparison of the relative advantage of civil service retirement would shrink if the analysis were based on married couples, rather than singles. A final difficulty in assessing the differential advantage of Civil Service retirement to particular employees stems from the difference in indexation of retirement benefits in the two sectors. The full indexation of Civil Service benefits versus the partial indexation of a private-sector retiree's pension leads to a valuation problem. A key advantage of an indexed pension over a fixed (bond-funded) pension is that it provides the recipient with insurance against unanticipated inflation. Even though indexed pensions contain an implicit cost—namely, that inflation may be *lower* than anticipated—risk-averse people would be willing to pay something for the protection against unexpectedly high inflation. The problem is that there is no market in which to price such an insurance policy, and there is no usable information on the risk-aversion proclivities of different members of the labor force.

The upshot of these observations is that federal employees' retirement benefits are, on average, more generous than those in the private sector. The extent of the comparative generosity varies by income, marital status, and risk-aversion of the particular employee classes being compared and by which segment of the private sector is taken as the comparison group. Even if one believed that the average federal retirement advantage could be measured and that it was appropriate to adjust salaries for such an excess, it would be next to impossible to determine the equitable allocation among employees of the salary holddown.

Reforming Federal Retirement

Total Compensation Comparability turns the question of federal pay reform upside down. If federal nonsalary benefits are "too high," surely the direct policy response is to lower them, rather than to reduce salaries, making them "too low." Unfortunately, in deciding whether federal retirement is too high, one needs a standard of a desirable or optimum retirement program, and this opens up a can of worms.

The first issue that has to be faced in rethinking a retirement plan for federal employees is whether the federal workforce should participate in Social Security. I think almost everyone—except present and former federal employees—would turn the question around and ask “why not?”

A recent report³ provides many reasons why federal employees should be covered. Among these are to avert windfall gains to federal employees who also become eligible for Social Security after a short period in a covered job and to provide better disability and survivor coverage for federal workers. Most important is to eliminate the current practice of allowing high-income federal workers to avoid taxes that support the redistributive elements of Social Security. In short, participation of federal workers in Social Security is long overdue.

This raises the second issue—how should Social Security be supplemented for federal workers?³ One approach to this question would be to look to private-sector practice for a clue to optimum pension-plan structure. But private-sector plans are highly varied; they are in flux; and they are subject to the market imperfection that fails to provide insurance against unanticipated inflation. Alternatively, one could take the current benefits of the Civil Service retirement system and design a combination of Social Security and supplement to come close to them (see the Report of the Universal Social Security Coverage Study Group). This begs all the pertinent questions (why early retirement, why base pensions on final pay, why index, etc.) and it ensures a continued costly program.

A more satisfactory way to design a supplementary program is to ask what criteria ought to be met and to fashion a program to meet the criteria.

Vesting and Portability

Federal policy has been pushing private-sector plans toward earlier vesting of pension rights so as to prevent pension rules from acting as an obstacle to mobility. Similarly, if a worker can carry his accumulated pension rights from job to job, mobility would be fostered. In general, for pensions to vest quickly and for portability to be meaningful, a defined *contribution* pension plan is best suited. This is the opposite of the current Civil Service retirement system which bases pensions on final salary, making it disadvantageous to quit federal employment in mid-career.

The tilt toward encouragement of mobility is particularly important for the federal government which will probably continue to have very

³ Report of the Universal Social Security Coverage Study Group, Department of Health, Education, and Welfare, March 1980.

little net employment growth. In an environment where the labor force is stagnant, higher turnover rates are the only way to bring in new blood and to meet changing skill-mix requirements. At a minimum, the federal retirement system ought to offer no impediment to employees' moving in and out of federal service, as the present system does.

Age of Retirement

Once federal employees are covered by Social Security, the major question is whether provision should be made for full pensions, without actuarial reduction, before age 65. There is a compelling national interest in encouraging *later* retirement to ease the burden of providing for the baby boom cohort when it retires. I am unaware of special reasons for the bulk of federal white-collar employees to enjoy comparatively long retirements as they now can. Since some industries (and some state-local government retirement plans) do permit retirement before age 65, however, there is a case to be made for some flexibility in retirement age for federal workers. To the extent that the federal plan is taken as a model, the sensible posture for the government is (a) *not* to encourage retirement at ages younger than Social Security eligibility, but (b) to permit it at the employee's option and cost.

Indexing

The federal government's position toward the indexation of benefits during retirement is ambiguous, inconsistent, and unstable. On the one hand, the government has made a commitment to index the largest portion of the average retiree's income—Social Security. On the other, it has made no attempt to enable private pension and insurance companies to purchase index bonds which would allow the private portion of retirement income to be indexed. On the third hand!, it has taken the position that its own employees should receive retirement benefits that are fully indexed (and twice a year to boot).

My own view is that retirement benefits in both sectors—federal and nonfederal—*should* be indexed. I believe that this is the only way that people can plan rationally for retirement (and this consideration obviously applies to both sectors) and that the logic of a social insurance scheme that provides only part of retirement needs (especially at high incomes) cannot be sustained unless supplementary benefits are indexed.

Adequacy

Social Security replaces about 41 percent of the single worker's final wage if he earns the median wage throughout his career. For the average

single federal worker, now earning about \$20,000, it would replace about 32 percent of final salary. For a married worker these ratios would increase by 50 percent. At higher salaries, the ratios decrease.

According to the President's Commission on Pension Policy, the replacement rate required to maintain the standard of consumption just prior to retirement would be on the order of 70 percent for the median salaried worker and about 60 percent for the average federal worker.⁴ If maintenance of the preretirement standard of living should be the goal of a total retirement program—and this is the goal endorsed by the President's Commission—then a single worker in the salary range of \$15–20,000 needs to supplement Social Security with about 30 percent of final salary in each year of retirement. For married couples in this wage bracket the needed add-on to Social Security is on the order of 15–20 percent. High-wage workers need more supplementation (about 40 percent at \$50,000 final salary); low-wage workers need less. Two broad conclusions emerge. First, there is no single replacement rate target that is applicable to all workers regardless of marital status and wage. Second, while it is possible to estimate a maintenance level replacement rate to supplement Social Security, that calculation does not tell you how much should be mandated by the employer nor how the employer and employee should share the cost.

Cost

The retirement income “gaps” could be filled entirely by discretionary individual savings over a working career or by an employer-funded supplementary program or by anything in between. If the federal government moves toward establishing a retirement program to supplement Social Security for its employees that is to stand as a model for the private sector, it must not impose any more cost on its payroll than it is willing to impose on private-sector payrolls. The present Civil Service retirement program with its employer cost of 29 percent of payroll (36 percent normal cost minus employee contribution of 7 percent) is way out of line with this standard. Social Security (net of Medicare), if calculated on a normal cost basis using the same Office of Personnel Management assumptions as were used to estimate the present Civil Service retirement system, costs the employer about 8 percent of payroll. Although no one knows exactly what fraction of payroll represents the normal cost of private pensions, estimates range from 5 to 9 percent of payroll.

⁴ See “Retirement Income Goals,” Working Paper Prepared by President's Commission on Pension Policy, March 1980.

Unless the federal government is willing to impose a substantial increase in payroll costs on the private sector, a reformed retirement scheme must be designed to cost much less (in combination with Social Security) than the present retirement program.

A Plan for Federal Retirement

A particularly simple plan that meets the criteria would allow federal employees to have set aside up to 18 percent of their annual earnings in a special retirement account. The government would match employee contributions heavily for the first 7 percent of salary saved, less for the next 7 percent, and not at all for the last 4 percent. Employee contributions and all earnings on them would be free of tax. For example:

Total Fraction of Salary Contributed	Employee Contribution	Employer Contribution
up to 7 %	up to 2 %	up to 5 %
next 7 %	5 %	2 %
next 4 %	4 %	0
<hr/> Total (18 %)	<hr/> 11 %	<hr/> 7 %

These break points approximate the savings needed to replace 15 percent, 30 percent, and 40 percent of final salary, the amounts needed to maintain consumption standards for a married couple with average earnings, a single worker with average earnings, and a single worker with \$50,000 salary, respectively, under plausible assumptions for a full-career worker.⁵

The sums in the accumulation account would belong to the employee and could be withdrawn only with penalty (as in Individual Retirement Accounts—IRAs) before a stipulated age. Accumulation accounts could be managed by existing private-sector pension, insurance, or mutual funds firms. At retirement, the federal government would issue to the pension carrier an index-bond in exchange for the individual's accumulation. With a portfolio of index bonds having a maturity equal to the expected life of the retirees, it would be possible for private insurers to issue indexed annuities.

This retirement plan would ordinarily (that is, unless the employees' choice of investment did poorly—they take the risk) provide retirement income adequate to maintain consumption for federal employees, with different marital status and wage history types selecting how large a replacement they need. People who want to retire early can save more. The direct cost of the supplementary program could not exceed 7 percent of payroll. The index-bonds issued by the government in lieu of ordinary

⁵ A longer version of this paper, available from the author, derives these ratios.

federal bonds impose no new burden on federal taxpayers. (This risk is already fully borne by taxpayers under the present program.)

Some readers will notice that I have reinvented the TIAA-CREF plan for college and university professors or the IRA plan for those ineligible for private pensions with three amendments: (1) the employer provides part of the contribution; (2) the accumulations may purchase an indexed annuity; (3) the percent of salary and the total that may be saved is greater than in IRA. Indeed, a sensible policy would be to amend the laws governing IRAs so that larger accumulations were possible and so that limited issuance of index bonds were linked to maturing IRA accounts. Then federal or private-sector workers would simply be eligible for the same plan. Comparable, at last.

Efficiency and Equity Considerations in State and Local Government Wage Determination*

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I. Introduction

Discussions of public-sector wage determination typically draw sharp distinctions between pay procedures associated with a civil service system and those associated with collective bargaining. Often, recommendations are made to reform public-sector pay determination by replacing a civil-service-type pay procedure with collective bargaining, or vice versa. The (generally unstated) rationale for such recommendations is that modification of the form of the pay procedure will lead to significantly different compensation outcomes. This paper challenges that assumption. Both theoretical reasoning and empirical evidence support the conclusion that the outcomes of public-sector wage-setting processes are largely unaffected by the particular form of the procedure used to set compensation. Further, any independent influences on pay outcomes that are exerted by the form of the pay procedure are more varied and subtle than is conventionally recognized. Evidence to support these claims is drawn from the experiences of American state and local governments.

II. Civil Service vs. Collective Bargaining—Idealized Types

Public-sector pay-setting procedures fall within a spectrum bounded by two idealized types: at the one end a civil service model, at the other end a collective bargaining model. The essence of the civil service model is that management maintains unilateral authority to set compensation.

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Toward this end and also to avoid politicization, the civil service model typically involves the delegation of pay-setting authority to an administrative agency, such as a civil service commission. Compensation is then determined with reference to pay offered for "comparable" jobs in either or both the private and public sectors. Pay comparability may be operationalized with a wage and salary survey which elicits data on prevailing rates. In addition to pay comparability, the civil service model is founded on the merit principle whereby employee hiring and promotion decisions are made contingent on performance (i.e., merit). In practice, efforts to maintain the merit principle include the use of selection tests and step increases between pay grades. In sum, this pay-setting procedure is endorsed primarily on efficiency grounds, though certain equity underpinnings may also be claimed for it.

At the other end of the spectrum of public-sector pay-setting procedures is collective bargaining whereby compensation is determined through negotiations between public officials and duly elected employee representatives. The essence of collective bargaining is the joint determination of pay. In idealized terms, it is relative bargaining power rather than unilateral managerial authority which determines compensation under the collective bargaining model. Relative bargaining power also determines the kinds of pay comparisons that are made and the uses to which comparability rates are put in the pay-setting process. Further, in the idealized sense, the collective bargaining model emphasizes joint determination of employee hiring and promotion and excludes step increases between pay grades. Seniority rather than performance is the preferred criterion for promotion and other employment decisions under the idealized collective bargaining model. Clearly, this pay-setting procedure is rooted in equity considerations, though it is not without efficiency implications.

How widespread is the use of these pay procedures? Unfortunately, the evidence in this regard is meager. It is known that the use of collective bargaining to set compensation in state and local government increased markedly during the 1960s and 1970s. By 1976, according to the Bureau of the Census, about 17 percent of all state and local governments engaged in collective bargaining or meet-and-confer sessions with their employees.¹ Of the 3.5 million state government workers in that year, about 16 percent were actually covered by contractual agreements, while for the 9.2 million employees of local governments, a considerably

¹ U.S. Bureau of the Census, *Labor-Management Relations in State and Local Governments: 1978*, Series GSS (Washington: U.S. Government Printing Office, July 1980), Table E, p. 2.

larger proportion, 35 percent, were so covered.² Thus, it is apparent that public-sector pay-setting procedures have been moving away from the civil service model toward the collective bargaining type. But exactly what the mix of public-sector pay-setting procedures may be at a particular point in time is unknown because detailed reports of such procedures are not available.

III. Public-Sector Pay Outcomes: Theoretical Perspectives

Does the form of the pay procedure influence public-sector pay outcomes? One might expect the answer to this question to be “yes.” After all, a procedure which maintains managerial authority and primarily seeks efficiency in pay determination could be expected to produce lower (or certainly different) pay outcomes than collective bargaining.

Yet, it can be argued theoretically that the form of the pay procedure will not significantly affect the ability of public-sector management—or labor—to influence the pay-setting process. Fundamentally, the variables that determine the power of public-sector management and labor, and thus pay outcomes, include the ability and willingness to pay of the relevant tax-paying community, wage rates in the local community, the cohesiveness and perception of group interests among employees, the cohesiveness of management, and the leverage that employees may possess through the threat of a strike. These determinants may, in turn, be influenced by various economic, political, and behavioral factors, but it is most unlikely that they will be significantly affected by the form of the pay-setting procedure.

For example, a strong and cohesive employee organization can (and often does) exist whether or not pay is set through collective bargaining. Historically, police and firefighters maintained such organizations long before they were granted collective bargaining rights. Additionally, there are numerous examples of public employees using the strike weapon to influence pay determination (and outcomes), even in the presence of a civil-service-type pay procedure. In some governments, moreover, collective bargaining co-exists with civil-service-type pay procedures.

When the *actual* operation of various public-sector pay procedures is examined, the idealized pay procedures seem to disappear and a common form emerges. Most basically, the issue of comparability arises

² *Ibid.*, Table 1, p. 7. Also see John F. Burton, Jr., “The Extent of Collective Bargaining in the Public Sector,” in *Public-Sector Bargaining*, eds. Benjamin Aaron, Joseph R. Grodin, and James L. Stern (Washington: Bureau of National Affairs, 1979), pp. 1-43.

whatever the form of the pay procedure. For a variety of reasons, public officials strive to maintain pay comparability between their employees and some other designated employee group or groups.³ On efficiency grounds, pay comparability, i.e., the payment of prevailing wages, is advocated as a mechanism to insure adequate labor supplies and avoid recruitment or turnover problems. When the pay comparisons are with the private sector, public officials are indicating, in effect, that they wish to obtain workers of comparable productivity (quality) to those of private industry. But equity considerations also argue in favor of comparability. Whether their input is through formal channels such as collective bargaining or more informal political lobbying, public employees base their pay demands/requests/expectations heavily on what other employees earn. Thus, where managers retain authority over pay decisions *and* where such authority is shared between managers and workers, comparability is the dominant criterion of public-sector wage determination.

Further, in one form or another, negotiation enters into all types of pay-determination procedures. In large part this is a consequence of the political nature of decision-making in the public sector, where a host of interest groups and rival officials compete for influence. But, in addition, negotiation enters the process because of the indeterminacy inherent in any pay procedure. Consider, for example, a procedure of the civil service variety. The civil service commission faces a judgment as to the sampling of private market and other public-sector pay rates. Should unionized firms be included in the sample? What about small firms or firms in highly concentrated industries? Questions such as these abound in undertaking any set of pay comparisons. Further, evidence from the authors' studies of local government pay-setting in San Francisco and Los Angeles indicate that various political pressures, including that generated by employees, influence the design and implementation of comparability surveys.⁴

³ The most extreme form of comparability in this respect is a formal parity relationship between two or more groups of employees. See, for example, David Lewin, "Wage Parity and the Supply of Police and Firemen," *Industrial Relations* 12 (February 1973), pp. 77-85.

⁴ Harry C. Katz, *The Impact of Public Employee Unions on City Budgeting and Employee Remuneration—A Case Study of San Francisco* (New York: Garland Publishing, Inc., 1980); David Lewin, "Wage Determination in Local Government Employment," Doctoral Dissertation, University of California, Los Angeles, 1971; Walter Fogel and David Lewin, "Wage Determination in the Public Sector," *Industrial and Labor Relations Review* 27 (April 1974), pp. 410-431; David Lewin, "Aspects of Wage Determination in Local Government Employment," *Public Administration Review* 34 (March-April 1974), pp. 149-155; and Sharon P. Smith, *Equal Pay in the Public Sector: Fact or Fantasy?* (Princeton, N.J.: Princeton University Press, 1977).

IV. Public-Sector Pay Outcomes: Empirical Evidence

To repeat the question raised earlier, does the type of pay procedure affect the outcomes of the public-sector pay-setting process? The evidence necessary to resolve this question is not available. In particular, two pieces of evidence are missing. First, there is inadequate information about the pay procedures presently (or previously) used by state and local governments throughout the country. Second, there is no data set that provides comprehensive comparisons of compensation for a large sample of state and local governments.

However, some light is shed on this question by the available evidence, fragmentary as it is. For example, a recent Urban Institute study provides a detailed picture of municipal compensation in 1979 for seven jobs in twelve major cities.⁵ The rankings of the cities suggests that there is no simple or direct correlation between the type of pay procedure and the level of compensation. As cases in point, San Francisco and Los Angeles were the second and third highest paying cities for the seven jobs combined, and were the two highest paying cities for the positions of police officer and firefighter. The structure of government in both of these cities is of the "reform" variety, and as part of that reform tradition these cities historically have not relied on collective bargaining to set compensation for their workforces. This was true even in the late 1960s, by which time most central cities in the nation had shifted to collective bargaining to set municipal employees' pay, particular in the public safety forces. Yet, in the same study, Dallas and San Diego were among the lowest paying cities. Like San Francisco and Los Angeles, both of these cities were also rather late in adopting collective bargaining to set municipal employee compensation.

Additional evidence in support of this conclusion comes from studies of the effects of unions on public-sector wages. These studies report rather limited union relative wage effects in the public sector, perhaps between 5 and 10 percent, on average.⁶ True, some larger wage impacts have been found, typically in the cases of police and firefighters or where cross-sections of individuals (instead of governments or occupations) are used. Further, initial estimates of public-sector union wage effects tend to be adjusted upward when wage spillovers, wage changes (as opposed to wage levels), fringe benefits, and the simultaneous de-

⁵ Elizabeth Dickson, Harold Hovey, and George Peterson, *Public Employee Compensation: A Twelve-City Comparison* (Washington: Urban Institute, 1980), pp. 31-50.

⁶ These studies are summarized in David Lewin, Raymond D. Horton, and James W. Kuhn, *Collective Bargaining and Manpower Utilization in Big City Governments* (Montclair, N.J.: Allanheld Osmun, 1979), pp. 54 and 84-86.

termination of pay and unionism are taken into account. But, on balance, the evidence continues to suggest rather modest union relative wage effects in the public sector, especially in those services such as education and health care where the bulk of public employees are found.

This conclusion is perhaps most strongly supported by the few studies that directly compare public- and private-sector union wage impacts. In this connection, Fottler, who found higher pay levels in public than in private hospitals, observes that "unionization does not appear to be the major explanation. . . . [Rather it is] the growing politicization of the public wage-setting process."⁷ Such politicization seems to raise pay beyond prevailing market rates, particularly for low-skilled, non-professional public workers, thereby leaving little additional pay elevation to result from unionism and collective bargaining. Methodologically, this suggests that when they compare the wages of unionized and nonunion employees in a specific public service or occupation and attempt to hold other variables constant, researchers nevertheless may be overlooking the impact of employees on pay via their participation in the more informal, political process through which public-sector pay is determined.

Note that this conclusion receives yet additional, if indirect, support from the few studies that have examined the effects of government structure on public employee pay. For example, Ehrenberg reports that, contrary to expectations, municipalities with a city-manager form of government did not pay firefighters significantly lower annual rates of compensation than mayor-council type municipalities; Ehrenberg and Goldstein found that city-manager type governments offered significantly higher monthly pay than mayor-council cities to administrative, protective service, health care, and parks and recreation employees; and Bartel and Lewin discovered that city-manager operated governments paid significantly higher annual police salaries than both mayor-council and commission type municipalities.⁸ Just as one would not expect reform-type municipalities to be among the highest paying local gov-

⁷ Myron D. Fottler, "The Union Impact on Hospital Wages," *Industrial and Labor Relations Review* 30 (April 1977), p. 354.

⁸ Ronald G. Ehrenberg, "Municipal Government Structure, Unionization and the Wages of Firefighters," *Industrial and Labor Relations Review* 27 (October 1973), pp. 36-48; Ronald G. Ehrenberg and Gerald S. Goldstein, "A Model of Public Sector Wage Determination," *Journal of Urban Economics* 2 (July 1975), pp. 223-245; and Ann Bartel and David Lewin, "Wages and Unionism in the Public Sector: The Case of Police," *Review of Economics and Statistics* 63 (February 1981). Bartel and Lewin also found that city-manager type governments had a significantly higher probability of having police unionism and collective bargaining than mayor-council or commission-operated municipalities.

ernments, one would not expect city-manager type governments to share that characteristic.

V. Some Potential Impacts

We have suggested that the outcomes of public-sector wage determination are not substantially or directly affected by the form of the pay procedure. We have also seen, however, that the evidence necessary to test the independent influence of particular forms of pay procedures is, variously, weak, indirect and inconclusive. Consequently, it may be useful to consider briefly some of the indirect impacts that types of pay procedures may, in fact, exert.

For instance, although the type of pay procedure may not have a strong bearing on public-employee compensation, it may affect the sensitivity of that compensation to changes in public attitudes, particularly in periods when these attitudes undergo substantial shifts. One such period was the mid-1970s, when fiscal crises in New York City and other local and state governments stirred taxpayer revolts. In some of these governments, the revolts brought about greater citizen involvement in public-sector pay decisions which, in turn, resulted in a reversal of the fortunes of public employees. For example, in San Francisco and a number of other California cities where public-sector wages were not formally bargained, the public's new found fiscal conservatism expressed itself in attacks on civil-service-type prevailing wage formulas which, when subsequently revised, resulted in sharp cutbacks in municipal employee wages and pensions.⁹ Yet, in New York City, which has a strong tradition of setting municipal compensation through collective bargaining, public employees did experience substantial layoffs and real wage cuts in the aftermath of the fiscal crisis. In that case, citizen opposition to conventional bargaining was an important factor in the adoption of broad-scale coalition bargaining through which the vast bulk of the layoffs and wage reductions were achieved.¹⁰ The point is that the direct public access provided in civil-service-type procedures may permit the relatively swift responsiveness of pay outcomes to changing public attitudes. Where collective bargaining is used to set public-employee compensation, as in New York City, significant shifts in public attitudes may also affect public-sector pay outcomes—though more slowly than where civil-service-type pay procedures exist.

⁹ See Harry C. Katz, "Municipal Pay Determination: The Case of San Francisco," *Industrial Relations* 18 (Winter 1979), pp. 44–58.

¹⁰ David Lewin and Mary McCormick, "Coalition Bargaining in Municipal Government: The New York City Experience," *Industrial and Labor Relations Review* (January 1981).

The form of the pay procedure may also exert impacts on employee organization and employee compensation objectives. Where formal collective bargaining rights are absent but civil-service-type pay procedures exist, for example, the unionization of traditionally difficult-to-organize public employees—e.g., white-collar and general service personnel—may be forestalled or made more difficult. In such settings, unionists who wish to organize public workers are caught in a dilemma. The nascent unions need something to sell to prospective members if they are to rally employee support. Yet, the bargaining recognition which might help to gain such support is lacking, and government officials can claim that the existing pay procedure ensures that employees will receive the equivalent of prevailing market rates. In this way, the form of the pay procedure can affect employee organization and, concomitantly, mitigate any impact on pay outcomes which such organization might bring about.¹¹

Concerning employee compensation objectives, efforts to reduce employee influence on public wage determination through the use or reform of civil-service-type pay procedures may, instead, lead employees to shift their concern from direct pay to pensions or even work rules. The aforementioned Urban Institute study reports that the largest source of variation across cities is in nonwage aspects of compensation.¹² Consequently, the power that public employees are able to exert (whether through formal bargaining or informal political channels) may only be deflected rather than defused by the form (and reform) of pay procedures.

Finally, whereas some have proposed reforming the public-sector pay-setting process by supplementing or supplanting collective bargaining with civil-service-type pay procedures, the experience of some governments is that a civil service procedure cannot—and perhaps should not—long be maintained in the face of advancing collective bargaining. For example, in 1978, voters in Los Angeles County, which operates the largest county government in the nation, approved a referendum rescinding that jurisdiction's prevailing-wage provision which had guided pay-setting for about four decades.¹³ In light of the spread of unionism among that county's employees and the negotiation of new labor agree-

¹¹ Note that this indirect effect of the pay procedure is likely to be less important for the unionization activities of police, firefighters, and teachers—who seem to organize readily and exert influence whether or not collective bargaining is present—and also for general service and white-collar personnel in large urban governments to whom unionism spreads rapidly from other organized public workers.

¹² Dickson, Hovey, and Peterson, pp. 53–76.

¹³ See "Prevailing Rate Provision Repealed in Los Angeles County," *California Public Employee Relations* 38 (September 1978), pp. 16–17.

ments over several bargaining rounds during the 1970s, county officials and the citizenry reached a judgment that the prevailing-wage rule, as implemented, set a prebargaining pay floor which was repeatedly ratched upward as negotiations proceeded to conclusion, thereby contributing to high labor costs. Similar efforts to reform public-sector pay practices have occurred in other jurisdictions. And, while these reforms may succeed in dampening the pay elevation that can result when collective bargaining co-exists with a prevailing wage rule, they raise other questions, such as "How is the pay of public professional, supervisory, and managerial personnel to be determined in the absence of a civil service provision?" and "Will the elimination of a prevailing-wage provision further encourage unionism among the employees of a particular government?" These are but a few of the many questions about public-sector compensation to which informed responses await the collection of additional, systematic data on pay practices and structures in American state and local governments.

DISCUSSION*

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The papers by Lily Mary David and by Robert Hartman are very interesting and valuable companion pieces in an examination of the prevailing wage concept in the federal sector. In essence, David's paper reviews where we have been with respect to the comparability policy while Hartman's analyzes where we might be going. Because the David paper is largely a recollection of our experience under this policy, it is, perhaps, not as open to criticism as the Hartman paper which is more exploratory and suggestive. Nevertheless, I find I must take issue with certain of the interpretation of the federal government's experimentation with comparability. In keeping with the time perspective implied by these two papers, I shall comment first on the David paper and then on the Hartman.

It is true that as David notes, under law, federal white-collar workers are supposed to be paid wages comparable to those in the private sector for the same level of work and that federal workers should receive equal pay for substantially equal work. Yet, she does not consider that there are conceptual difficulties that may make these two goals of comparability contradictory. Because private-sector wages reflect the interaction of many different forces (and these often result in another wage than that which would prevail under purely competitive conditions), private wages may often differ for substantially equal work. A greater difficulty arises if any job (whether nurse, accountant, or economist) actually differs between the federal and private sectors—for example, there may be differences in working conditions, job security, social status, etc. If nonpecuniary returns vary between sectors and tastes are the same across individuals, then wages should not be the same. Instead, there should be compensating wage differentials between sectors.

In reviewing the experience under the legislation, David noted that unions have been an important factor in explaining the fact that federal

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* Neither the Federal Reserve Bank of New York nor the Federal Reserve necessarily concurs with the opinions expressed in this paper.

blue-collar pay and postal pay have risen much more rapidly than federal white-collar pay. I would suggest that the mechanics of setting "comparable" pay rates for blue-collar workers are probably far more important in explaining the rapid rise than is the action of unions.

The David paper also considers briefly the possible effect of probable changes in the comparability process. I have little quarrel with most of these. However, I believe that Ms. David's suggestion that "determination of pay on a locality rather than a national basis . . . would presumably have little net effect on average pay levels nationwide" is too optimistic. Instead, I would argue that this change would initially raise average pay levels rather substantially, as it is unlikely that pay levels in low-cost areas would be lowered. Instead, pay levels in high-cost areas would be raised. Finally, in briefly noting the implications of a switchover to a full compensation comparability system, especially with reference to the liberal federal retirement benefits, Ms. David sets the stage for the Hartman paper which both questions the concept of full compensation comparability and explores the possibilities for correcting the imbalance in retirement benefits between the federal and private sectors.

It is clear, as both David and Hartman have noted, that the enormous differential in retirement benefits between federal and private sectors is a major sticking point for the implementation of a full compensation comparability system. Although Ms. David's paper does not examine the pros and cons of such system, Hartman's does argue that such a system for determining compensation "strains credulity." Instead, Hartman argues that careful consideration should be given to differences in each element of compensation between federal and private sectors before making full compensation comparisons. While I agree that large imbalances between the sectors in individual components of compensation should be avoided, Hartman's discussion seems to ignore the opportunities offered by a full compensation comparability system to design a compensation package that takes into consideration nonpecuniary aspects of jobs in the federal sector in order to attract individuals of a particular type. Thus, a compensation package which incorporates *small*, offsetting imbalances in its different components may be the most efficient one for the federal employer. (Such a system would be efficient in the sense that it would enable resources to be allocated to their highest valued use at minimum cost to the government.)

Hartman's suggested plan for federal retirement offers a very interesting proposition for correcting the federal retirement system by providing adequate benefits to workers without imposing excessive costs

on private employers and at the same time offering some much needed support to Social Security. Although Hartman's suggested retirement plan clearly is not a complete blueprint for reform, it is deficient because it completely ignores the serious problem of how to handle the transition from the present federal retirement system to his proposed "TIAA-CREF plan."

I find the Hartman plan particularly appealing since it allows the individual some control over his or her future retirement benefits through deciding the amount voluntarily saved. Moreover, the plan would facilitate employee mobility between the federal and private sectors and at the same time eliminate possibilities for double-dipping. While we might wish that we could wave a magic wand and transform the present system into the one Hartman proposes, clearly this is not a possibility. Consequently, we need to give some consideration to the transition between retirement plans. What will happen to the employees who are caught in the middle, too young to retire but too old to save enough to assure adequate retirement benefits? Will some lump-sum transfer be made to assure levels in the employee's accumulation accounts "as if" they had been saving the appropriate levels all along?

Finally, it is interesting to observe that while Hartman balks at the "notion of adjusting one element of compensation for a shortfall or excess in another element," his proposed retirement plan effectively does this from the employee's perspective. If salary levels remain the same under this retirement reform, then the net earnings the employee takes home are reduced by the amount of savings placed in the special retirement account, which will, of course, eventually produce retirement benefits. Nevertheless, because the employee pays partially for future retirement benefits out of present salary one element of federal compensation has in effect been adjusted for an excess in another.

DISCUSSION

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Professors Lewin and Katz have posed a scientific question: Is there a demonstrable relationship between the type of pay procedure adopted by a state or local government and the resultant level of wages or salaries? In short, does the procedure have a determinate weight as a variable, such that it would enable us to predict pay outcomes? Initially their answer is negative. What really matters for pay and pay changes, they say, is the power each side is able to bring to bear, not the procedural format in which pay-setting takes place. Later they argue that the evidence is too scanty to provide an unequivocal answer to the question. I agree with them that the suspected relationship has not been demonstrated so far.

Lewin and Katz contend that pay-setting procedures can be viewed as a spectrum, with one extreme standing for civil service systems that are unilateral in nature and that rest upon the principle of comparability. At the other extreme is collective bargaining, based upon bilateral negotiations. Civil service systems represent "efficiency" to the authors, while collective bargaining stands for equity. In between stands a variety of arrangements viewed as a continuous evolutionary scale moving toward equity and away from efficiency.

This view of the matter makes differences among actual pay-setting systems a question of degree rather than of kind. I think it preferable to classify systems in discrete categories. To illustrate, where does one place on this spectrum the former San Francisco system that rested upon a charter amendment, and provided for a highly inflationary automatic wage-setting formula that called for averaging the wages of bus and tram operators on the two or three highest paying properties alone, to obtain the comparability base for achieving "equity"? For another case, consider Davis-Bacon wage-setting in construction. Here the U.S. Department of Labor determines the scope of the geographic labor market area, defines the occupations that are to be included, and establishes the rules for admissibility of evidence for determining the comparability of wages.

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Where should we place these two systems along the Lewin-Katz spectrum? The use of comparability and the prevailing wage, rather than collective bargaining, would suggest placement at the "efficiency" or civil service end. But the active presence of unions whose political strength has afforded them strong discretionary influence indicates that placement should be made at the "equity" extreme along the scale, although there is no collective bargaining to go along with unionism. To me, these strange cases call for a category, not for placement along a scale. They are different in kind, and they have been typically permanent rather than transitory.

I am also troubled by the authors' dichotomy between "efficiency" and "equity." There are civil service systems that have little or nothing to do with economic or even technical efficiency. As for equity, the first question is: Whose equity? The employees', or the taxpayers', or that of the consumers of the service?

I am entirely in agreement with Lewin and Katz that what really matters for pay-setting in the public sector is the relative power of labor and management. As Chamberlain suggested some years ago, each side must balance for itself the costs of resistance relative to the costs of concession, while each side seeks to influence this ratio for its opposite. For the authors, what counts are the ability and willingness of the taxpayers to pay; the levels of comparable local wage rates; the cohesiveness of the employee group, and the ability of the employees to strike.

There is more to the matter than this. I would add to the list the cohesiveness of public management, for one thing. Is there a jurisdictional separation between the lawmakers and the administrators, such that political rewards or penalties can be exploited to split the two, to the employees' advantage? The nature of the bargaining unit is also important. Alfred Marshall's old principle of "the importance of being unimportant" as regards share of total labor costs still is relevant. If I were a negotiator, I would rather represent a single occupation, such as the police, than bargain for a huge residual or catch-all unit. Another factor in the power equation is the availability and scale of subsidies—direct or in revenue-sharing form. Cost-shifting that holds taxpayers harmless can be of enormous significance for public managements. And finally, there is the factor of substitutability, either for the public service provided or for the labor inputs by which it is presently provided. Both affect the demand elasticity for a group of public workers, and through this their bargaining power.

Regarding the authors' central thesis—that what is involved in all of these procedures is some version of pay comparability—I agree. How-

ever, there are some exceptions or qualifications worth noting. One is that there are a few special jobs in local government that may have no counterpart to provide for use of the survey and comparison technique. Another is that this technique, as we all know, is flexible and selective, hence arbitrary. Thus political power can be introduced for manipulative purposes. Then there is also the old question of the internal labor market. Government employment units have job ladders that often make vertical mobility the central factor, and the external market largely irrelevant. As my former colleague, Robert L. Raimon, noted many years ago, there often exists an indeterminacy of wages along the middle rungs of these ladders, in that external comparisons really play no role. In a sense, for such jobs the supply schedule is zero-elastic.

Next, I want to point toward a peculiar case in the private sector in which the pay-setting arrangement clearly has affected pay outcomes. I am referring to coalition bargaining in the nonferrous metals industry, in which 26 national unions have combined to fix pay and other objectives, and to ratify proposed settlements. The essence of the matter is that *formally* the bargaining units are separated according to company, particular property, and (for the most part) particular national union. However, the *results* of bargaining are virtually industrywide as regards all money questions. They are achieved through the centralizing power provided by the coalition and the standardization of settlements that pattern-following imposed by the coalition has made possible. Here, then, is a major exception to the argument of the paper. If it has a public-sector counterpart, probably it is New York City.

It seems to me that the authors have set out a potentially very important area for research, one that would enable our profession to escape from sterile disputes over methodology by asking questions that can best be formulated by institutionalists in some instances, and by statisticians and econometricians in others. Starting from the ruling question—what factors significantly influence pay in the public sector?—the task is to identify and then refine the suspected variables, then to build up an adequate data base, and then to examine results. The whole enterprise will be a very difficult undertaking. And, as Lewin and Katz recognize, the “politics” of the matter are central, but extremely difficult to specify. The market factor also poses some hard questions. But the ultimate outcome could well be a better understanding of a pay-setting process that now is quite obscure.

V. CONTRIBUTED PAPERS: COLLECTIVE BARGAINING AND TRADE UNIONISM

Arbitration and Salary Determination in Baseball

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Introduction

The recent conflict between players and owners in professional baseball raises several interesting questions about their relationship. Two of the key bargaining issues are free agency and salary arbitration. This paper examines the existing arbitration procedure and evaluates its impact on the process and outcomes of bargaining. This will provide insight into the impact of any new arbitration procedure which may evolve within baseball. Hopefully, it will also provide understanding as to the possible usefulness of the final-offer technique in other bargaining relationships.

In this paper we will (1) review the usage of the final-offer salary procedure since its inception and discuss recent bargaining developments; (2) develop a theory of the expected impact of the availability of final-offer arbitration on the pay/performance relationship in baseball; (3) subject this theory to an empirical test employing several models of the baseball players' labor market; and (4) state our conclusions and discuss the implications of the results.

The Salary Arbitration Procedure and Recent Bargaining Developments

Prior to the 1974 season, baseball players had a limited set of options available to them during their salary negotiations. These options included accepting the owner's best offer, retirement from baseball,

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playing in another country, or playing for their club under the regulations specified in the reserve clause in their standard player contract. In this latter case, the club retained the right to the player's services and could impose a 20 percent salary penalty on the player for his refusal to sign a standard contract.¹ Under this salary-determination system, the player had very little bargaining power.

Well aware of the problems inherent in the existing process, the Major League Baseball Players Association entered the 1973 collective bargaining negotiations intent on changing the system. The result of their efforts was the adoption of final-offer salary arbitration as an additional option for players and clubs who could not resolve their salary disputes bilaterally. The procedure became effective with the 1974 season. While this system has undergone some changes, two crucial elements remain intact. First, a single arbitrator is required to choose *one of two* final positions submitted to him as the salary to be paid for the upcoming season: either the player's final demand or the club's final offer. Second, the contract explicitly states the criteria which the arbitrator is to employ in making his decision. These factors include career and past performance characteristics of the player, comparative baseball salaries, and recent performance of the club.

Table 1 summarizes the usage of final-offer salary arbitration in baseball since 1974. As is indicated in the table, there have been a total of 92 salary arbitration cases to date. The owners currently hold a slight edge in the number of cases won by a margin of 48 to 44. One theory of final-offer arbitration implies that an unequal number of decisions favoring one side can be explained by differences in taste for risk.²

During the recent negotiations, the owners proposed restructuring the *Basic Agreement* in the areas of salary arbitration and free agency. Their salary-arbitration proposal would have restricted arbitrators to consider only the criteria of *seniority* and the *pay of players with similar seniority levels* in rendering their decisions. This can be viewed as a direct attempt on the part of the owners to regain some of their former monopsony powers. Instead of tending to pay all players of equal performance the same wage as would occur in a competitive market, this

¹ This reserve system and the owners' claim to the services of ballplayers into perpetuity was effectively challenged by players Andy Messersmith and Dave McNally following the 1975 season. In a now famous arbitration decision, Peter Seitz ruled that the reserve clause enabled clubs to retain players services for *only* one additional season, and not into perpetuity as the owners had argued (see 66 LA 101-118). The players and owners later agreed to a six-year reserve system, after which time *free agency* could occur.

² Henry S. Farber, "An Analysis and Evaluation of Final-Offer Arbitration," Working Paper, Department of Economics, Massachusetts Institute of Technology, May 1979.

TABLE 1
Final-Offer Salary Arbitration In Baseball^a

Year	Cases	Player Wins	Clubs Wins
1974	29	13	16
1975	16	6	10
1976	0	0	0
1977	0	0	0
1978	9	2	7
1979	12	8	4
1980	26	15	11
Totals	92	44 (48%)	48 (52%)

^a *Data Sources:* 1974, 1975, *New York Times*, March 3, 1974; *Business Week*, March 23, 1974; *U.S. News and World Report*, March 24, 1975; *Sports Illustrated*, April 7, 1975; there were no arbitration cases in either 1976 or 1977 as the players were working without a signed collective bargaining contract. 1978, personal correspondence from Peter Rose, Legal and Administrative Assistant, MLBPA, dated April 19, 1978; 1979, *The Sporting News*, March 31, 1979; 1980, *The Sporting News*, March 15, 1980.

new proposal would tend to impose a salary schedule for all players with five or less years of experience. Such artificial equality implies discrimination against the better players.

In a similar fashion, the owners' proposal to limit the free agency system can be viewed as an attempt to keep salaries from reflecting the value of the marginal product for each player. In essence, the owners' proposal dealt with *compensation* for teams losing free agents. Under the previous contract, teams losing free agents were compensated with a rather insignificant assignment of a draft choice in the regular phase of the Amateur Player Draft. The new proposal would invoke increased compensation for "premier" free agents, where "premier" status is defined by the number of teams choosing a player in the re-entry draft and by a player having attained certain quantity statistics such as games started or times at bat. A generally accepted estimate is that 50 percent of all major league players would fall into this category. A club signing such a free agent could then protect 15 to 18 players on its 40-player roster, while the club losing the free agent would then be allowed to choose one of the unprotected players as compensation.

The heated bargaining over these and other issues provoked a player strike during the final week of the 1980 exhibition season and the threat of a regular season strike on May 22, 1980. The owners dropped their proposal for revamping the salary arbitration system but refused to change their position regarding free agency. A regular season strike was avoided at the last minute by the establishment of a joint player-management study committee on the free-agent compensation issue. The committee is to file a report on the compensation issue by the end of

1980, with these findings to serve as the basis for further negotiations. A failure to agree on some system by February 19, 1981, leaves the clubs in the position of being able to implement their proposed compensation plan. In the event that this occurs, the players can demand to reopen negotiations on the compensation issue and have the right to give notice of their intent to strike on or before the first of June. While some progress toward agreement has been made, it is clear that compensation for free agents is the single most volatile issue in the sphere of labor-management relations in baseball at the present time.

The Theory

Two effects of final-offer arbitration are interesting—its impact on the bargaining *process* and on bargaining *outcomes*. As to its impact on the bargaining process, the data in Table 1 and evidence from other studies are consistent with the hypothesis that final-offer arbitration promotes bilateral agreements.³ Other researchers have concentrated on the impacts of the availability of final-offer arbitration on the *outcomes* of collective bargaining.⁴ It is to one aspect of this impact on bargained outcomes in professional baseball that we now turn our attention.

The baseball players' labor market is especially useful for evaluating the impact of final-offer arbitration. First, during the period of our analysis (1968–1975), baseball owners had a cartel enforced by limitations on entry into the baseball industry.⁵ These monopoly powers enabled owners to generate economic rents from the product market by having higher prices than would have been obtained under competition. The constraint on the number of teams also limited employment alternatives to the players and allowed the owners to act collectively as a monopsonist. Second, the player draft and the reserve system limited competition for player services within the cartel, thus enabling owners

³ Those unfamiliar with the theory of final-offer arbitration should see Carl Stevens, "Is Compulsory Arbitration Compatible with Bargaining?" *Industrial Relations* 5 (February 1966), pp. 38–52. For an application and test of this theory in the setting of professional baseball, see James Dworkin, "The Impact of Final-Offer Interest Arbitration on Bargaining: The Case of Major League Baseball," *Proceedings*, Industrial Relations Research Association Twenty-Ninth Annual Meeting, 1976, pp. 161–169.

⁴ For an example of this type of research see James L. Stern, et al., *Final-Offer Arbitration* (Lexington, Mass.: Lexington Books, 1975), pp. 143–171. For a specific application to baseball, see the Chelius and Dworkin paper cited in footnote 8.

⁵ It should be noted that we are looking at the impact of the availability of salary arbitration *alone* on the pay/performance relationship, independent of any impact(s) that might have occurred due to the free agency system inaugurated in 1976. Note that our pay/performance data cover only through the 1975 season, the year prior to the beginning of the free agency system.

to discriminate among players. The economic rents of these limitations on competition provided a pool of resources over which the parties could bargain. The distribution of the rents, therefore, provides a means of evaluating the distribution of incomes brought about by the availability of final-offer arbitration.

If players are restricted to a single team, owners can discriminate among players on the basis of their opportunity wages outside of baseball. A set of players, equally productive in baseball but with varying nonbaseball alternatives, generates an upward sloping supply curve to the team. An owner who could perfectly discern opportunity wages would pay each player his opportunity wage as represented by the supply curve. With the limitations on player alternatives that existed in baseball, the ability to differentiate among players was limited only by the difficulty of determining opportunity wages and by the negative impact on morale of not paying players on the basis of their performance. Such limitations would imply that the schedule of wages paid was less steeply sloped than the schedule based solely on opportunity wages.

With the advent of final-offer arbitration, a player dissatisfied with his salary could invoke the procedure and present evidence on his productivity and on the wages paid to other players. Owners realize that the player's final demand might be accepted by the arbitrator and, thus, there is an incentive to reach agreement without using arbitration. The owner will offer a wage greater than the unconstrained supply schedule up to a limit of the marginal value of a player to the team.⁶

The above analysis implies a specific hypothesis about the impact of the availability of final-offer arbitration on the pay/performance relationship in baseball. Prior to arbitration, equally productive players were paid wages which depended on their reservation wage. After arbitration, equally productive players should all receive the same wage. *Therefore, after correcting for differences in performance, the range of wages paid should decline with the availability of arbitration.* That is, we should observe a tighter fit between pay and performance after the availability of final-offer arbitration.

While the above theory and associated hypothesis flow from the discipline of economics, it is interesting to note that much the same prediction can be arrived at using the psychological concept of expectancy theory.⁷ According to this theory, a person's motivation to

⁶One might argue that players could extract the total area under the demand curve. However, this implies differing wages to players with equal performance (a condition inconsistent with owners having a choice among players) or some method of obtaining a lump sum payment from the owners to the players as a group.

⁷V. Vroom, *Work and Motivation* (New York: John Wiley and Sons, 1964).

perform will depend on (1) the person's beliefs about the relationship between effort and performance (expectancy); (2) the person's beliefs about the connection between performance levels and rewards such as pay (instrumentality); and, (3) the value to the employee of the particular reward, such as pay (valence). Assuming that valences and expectancies remain constant, for baseball the critical issue is that after final-offer arbitration became available, players' instrumentalities would increase as they perceived a closer relationship between performance and pay. Note the similarity between this prediction and that of the economic model above. The psychological model would also predict that performance would increase after the availability of arbitration due to these higher instrumentalities.

The Empirical Results

The hypothesis about the impact of the availability of final-offer arbitration on the pay/performance relationship is that with performance constant, the range of player salaries will decline after the arbitration procedure becomes available. That is, economic discrimination will be reduced. This implication can be tested by the use of a regression equation relating performance to salary. A reduction in unexplained variance after arbitration becomes available would be consistent with the above hypothesis.

In recent years, there have been several published studies which have modeled the relationship between pay and performance in baseball.⁸ A significant problem with these studies is the specification of which performance measures should be used in the empirical analyses. For example, Pascal and Rapping used measures of lifetime batting average, home runs, times at bat in the previous season, the difference between last year's and lifetime batting average, and age to explain the salaries of nonpitching players. Scully chose to employ years in the majors, lifetime slugging average, a fan interest variable, and a variable denoting population of the city in which the team is located in his explanatory model for players. Chelius and Dworkin sidestep the inadequate theory problem by creating indices of performance through prin-

⁸ J. Scoville, "Labor Relations in Sports," in *Government and the Sports Business*, ed. R. Noll (Washington: The Brookings Institution, 1974), pp. 185-219; A. Pascal and L. Rapping, "The Economics of Racial Discrimination in Organized Baseball," in *Racial Discrimination in Economic Life*, ed. A. Pascal (Lexington, Mass.: Lexington Books, 1972), pp. 119-156; G. Scully, "Pay and Performance in Major League Baseball," *American Economic Review* 64 (December 1974), pp. 915-930; and J. Chelius and J. Dworkin, "An Economic Analysis of Final-Offer Arbitration as a Conflict Resolution Device," *The Journal of Conflict Resolution* 24 (June 1980), pp. 293-310.

principal components analysis and using these "factors" as the independent variables in their pay/performance regressions.⁹ They derive three factors for hitters (Production, Power, and Seniority) and three factors for pitchers (Workload, Inefficiency, and Seniority) which are then employed in their empirical analyses relating pay to performance.

Table 2 reports \bar{R}^2 statistics for the models of Scully, Pascal and Rapping, and Chelius and Dworkin for pitchers and players, prior to and after the inception of salary arbitration. In each case we examined the real salaries of all players in one of the Major Leagues for the years 1968, 1969, 1974, and 1975, the only years for which individual salary data were available. The first two years were prior to the institution of final-offer arbitration while during the latter two years final-offer arbitration was available. During these years, there were no other major changes in the player draft, reserve system, or union representation which might contaminate the results. Rookies were excluded from the analyses because their salaries were often influenced by changes in the contractual minimum salary negotiated by the Players Association and because of the lack of comparable performance data on them for the previous season. Since our purpose was to examine the influence of the availability of final-offer arbitration rather than its actual use, arbitrated salaries were also excluded. The sample sizes in the analyses were 420 for 1968-1969 (256 hitters and 164 pitchers) and 490 for 1974-1975 (307 hitters and 183 pitchers).

TABLE 2
 \bar{R}^2 Resulting from the Three Pay/Performance Models^a

	Scully		Pascal and Rapping		Chelius and Dworkin	
	1968/69	1974/75	1968/69	1974/75	1968/69	1974/75
Pitchers	.53	.51	.64	.69*	.56	.65*
Hitters	.69	.76*	.57	.61	.65	.69*

^a The complete regression results are not reported here due to space limitations. However, these results are available from the authors upon request.

* The difference is statistically significant at the .05 level.

As can be seen from an examination of the results presented in Table 2, the hypothesis of a tighter fit between pay and performance after the availability of final-offer salary arbitration receives support. Although the differences in some cases are small (and in two cases

⁹ See the Chelius and Dworkin paper cited in footnote 8 for a thorough explanation of the procedures employed.

insignificant), the \bar{R}^2 for both hitters and pitchers was generally greater in 1974–1975 than in 1968–1969, as the theory would suggest.¹⁰

Conclusion

The major conclusion of this study is that the *availability* of final-offer salary arbitration in professional baseball has led to a decline in the range of wages paid to equally productive players, as was predicted by our theory. Prior to arbitration, club owners were able to discriminate among equally productive players. After arbitration became available, the owners' ability to discriminate among players of equal skills was diminished.

Final-offer arbitration thus can be thought of as having altered the owners' monopsony position by redistributing bargaining power to the weaker party in the relationship, the players. While this finding is specific to the baseball industry and care should be exercised not to over-generalize, it does seem that the technique of final-offer arbitration merits further experimentation, particularly in situations where the right to strike is not considered to be a viable option.

¹⁰ The multiple correlation coefficients (R_s) were transformed to Fisher's Z_s . The difference in Z_s has a t distribution and in four of the six cases the t -value of the differences was statistically significant at the .05 level.

DISCUSSION

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The four papers presented here cover diverse topics but there is a common theme. Together they are representative of a change which has characterized much of industrial relations research since the late 1960s. This change is reflected in both the nature of the research and the orientation of the researchers. The research more and more has come to emphasize data collection, measurement, quantification, and theory testing. The scholars who carry out this research are either empiricists trained in traditional industrial relations centers or persons trained in the empirical traditions of organization behavior or economics. In these four papers we have a good cross section of technique and orientation: two papers by behavioral scientists working with industrial relations trained persons report the creation of data bases; two papers by industrial relations scholars with training in economics and the behavioral sciences empirically test theoretically derived hypotheses. Emphasizing empiricism as a common theme allows me to express some thoughts on the emerging tradition as well as on the papers themselves.

The process of building and testing a body of industrial relations theory is a slow one. Each piece of empirical research potentially represents a step forward either as a data base, a test of an old proposition, or a new inference to be tested. No one piece, however, is likely to represent a conclusive piece of evidence. And yet there is a tendency among some empiricists to try to get too much from a particular piece of work: to place too broad an interpretation on results, to draw inferences unsupported by theory, or to make policy recommendations which go beyond the ability of their findings to support the recommendation. Obviously, my orientation favors a conservative interpreta-

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Editor's note: The Sandver and Heneman paper, "Union Growth Through the Election Process, Recent Data and a Simulation of Future Membership Implications," the Kleiner and Klammer paper, "Good Faith Bargaining Orders: An Empirical Evaluation," and the Harris and Ryan paper, "Adjudication of Discrimination Grievances Through Arbitration: Evolving Empirical Patterns—1963–1978," will be published elsewhere.

tion of data. In reviewing each of the papers in this session that was the criterion applied.

Sandver and Heneman create a data set which gives us interesting insight into the range of several variables over the period 1973 to 1978 (it would have been very nice to see a frequency distribution by size of unit as well). Their paper had a modest goal—to assess the implications for future growth of the labor movement through National Labor Relations Board (NLRB) conducted single unit certifications. A strength of the paper is that their “simulation” is based on ranges from actual data in the previous time period—it gives us concrete parameters within which to work. However this is also a weakness of the paper. The authors assume a linear relationship to the past which opens up to a range of alternatives in the present. This approach does not acknowledge the possibility of strong discontinuities such as war, inflation, depression, or new industries, each of which through received theory can be linked to future discontinuities in union growth. Moreover, there are some of us who believe that the late 1980s could be an explosive period for white-collar unionization because of the shifting age and education composition of the labor force.

Their linear assumption notwithstanding, the authors draw some useful insights from the data such as the importance of “big wins” and “big losses” for resource allocation and their focus on penetration, the enormous effort required just to stand still. I do have some problems with some of their inferences, however. For example, they state that to show substantial gains and increase the union penetration level will require greater efforts and resources for organizing than have recently been expended, a recommendation which begs the question of the nature of the production function. They go on to speculate that current resources might be reallocated. However there is no discussion of the value of a marginal dollar spent on an organizer, an advertisement, organizing a big plant in town versus organizing several small ones (which might have signed on if the large one were organized), etc. Similarly they indicate that the strategy to increase the number of elections is obviously constrained by the ability of the NLRB to handle the additional administrative burden that would be placed on it. Given that the Board was able to handle 12,902 requests for election in 1978, what constitutes an undue burden? Nor do they discuss the role of the strategies of the parties as an element independent of the number of elections in determining burden.

Their conclusion is correct: evidence in this paper suggests that a rational empirical map of alternatives can be calculated; costs and pro-

spective benefits to this range of outcomes through some kind of utility analysis would be useful. However, in their words, "it must be emphasized that the projections made here are tentative and only as valid as the assumptions underlying them."

Like Sandver and Heneman, Harris and Ryan have created an interesting data set. Their study addresses the question of whether systematic patterns exist in arbitration cases involving discrimination. A wide range of useful categories were established, frequency tables presented, and chi-square computed on contingency tables. The authors acknowledge problems inherent in the data set (only published cases are used so there is selection bias) and in the use of chi-square statistics (large contingency tables tend to be significant irrespective of the process generating the underlying numbers). Some very interesting patterns emerge and constraints on rigorous research in arbitration were noted.

The authors distinguish their paper from others by emphasizing a longitudinal analysis that splits the sample into pre- and post-*Gardner-Denver* periods. *Gardner-Denver* gave grievants the right to counsel if they were dissatisfied with an arbitration award in a discrimination case. This seems like a logical criterion for splitting the sample, but as one reads the paper there is no interpretation of the longitudinal data that rests on the substance of the case. Finally in the last paragraph the authors say, "It is of course not possible to ascribe the differences seen here to the effect of the 1974 *Gardner-Denver* case." Why then these time periods? Why not three equal segments over the period? What does this say about the effect of artificial time dimensions on their results? Would another random cut have produced similar results?

In addition, here—as in the first paper—the rigor that went into the presentation of the data doesn't always get carried over to the analysis of the data. For example, at one point, citing data that show an overall reduction in the number of cases which led to findings of discrimination they infer, "there seems therefore to be a trend toward stringency in arbitrators' rulings concerning discrimination." Why not an alternative hypothesis that worse cases are coming through as unions and management settle the cases in which there is discrimination before they get to arbitration? Or why not the alternative of a managerial learning curve in which there are fewer real cases of discrimination and more perceived cases of discrimination? Similarly citing data on a low percentage of cases involving arbitrability, they infer that the parties themselves accept arbitration as a viable tool of adjudication. This however

ignores the alternative that nonarbitrability may be an issue that BNA and CCH find no value in publishing.

I applaud the authors for constructing the data set. I think the frequencies were quite useful; I did not personally find the contingency table chi-square reports valuable; I wish they had presented raw data in the cells so that persons could draw their own conclusions and run their own tests. The authors' suggestion for getting access to submitted but nonpublished cases as a control in empirical arbitration research is an excellent idea.

Kleiner and Klammer start with a theoretical discussion, develop a data set, test some hypotheses, and draw some conclusions. Their theory seems plausible. As a free marketer, I would expect the outcome they predict. A nice piece of work, carefully conceived and thoughtfully executed.

I did have some problems with the data set, perhaps because of the paucity of data presented. For example, contracts were selected from the 1965–77 time period, but we don't know the range of years represented by the contracts actually used. I would also like to have had more data on the indices to form an opinion of the dependent variable. However, my greatest problem lies in the fact that we don't know if these were first contracts (to me, at least, the theory discussion implies this) or whether they were of varying maturities, a factor which could have an effect on penetration. Finally, I would like to see a breakdown by SIC, union, and geography—again to help form an opinion of the data set.

My only other reservation deals with their conclusion. The authors claim to have shown empirically that “within the context of the theory that we have developed firms would gain economic rents by not complying with Section 8(a)(5) of the NLRA.” I'm not sure that this is a proper conclusion. What they show (subject to limitations discussed above) is that “firms are able to reduce union penetration by almost 7 percent by refusing to bargain in good faith until ordered to do so,” i.e., that “benefits” can result. They ignore the cost side. It seems to me that rent is a “net” concept. If the costs of generating savings were significantly less than the value of the savings from reduced penetration, as a free marketer I would have to believe that large numbers of firms would be violating 8(a)(5). In subsequent research I hope they will address this question.

The paper by Chelius and Dworkin is relatively modest in its goals and innovative in its approach. It stakes out a small claim (another piece of evidence in an ongoing discussion) and executes very carefully.

The authors claim to look at the impact of final-offer arbitration on process and outcomes of salary determination in baseball. I don't believe that they really deal with the process issue. Their Table 1 shows a parabolic curve, but there is no explanation in the paper nor is there any support for the assertion that these data are consistent with the hypothesis that final-offer promotes bilateral agreements. Once we get to impact on outcomes the paper becomes quite conservative. The authors state both economic theory and behavioral (expectancy) theory to show that there should be a tighter fit between salaries and effort after the availability of final-offer arbitration. Three different data sets show consistent results. The conclusion they draw is totally within the power of the theory and the tests presented.

In summary, all of the authors are to be congratulated for their contributions to the empirical literature on collective bargaining. In my opinion, some of the authors attempted to overstate the contribution, thus detracting from what, if handled conservatively, would have stood strongly on its own. I would hope that, as we mature as a field, we will feel sufficiently secure as scholars to allow each piece to speak for itself as a small part of the larger whole and, if we wish to increase our individual contributions to the body of knowledge, to do so through undertaking more research rather than asking the research we do to do too much.

VI. COLLECTIVE BARGAINING UNDER ADVERSE CONDITIONS, OR HARD TIMES IN THE MILL

Collective Bargaining: In the Grip of Structural Change*

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We know that way down the road we may be a union of much smaller membership than we now have. But I think if we make a contribution to the social good and economic health and welfare of this country, we would make that sacrifice. . . . Now, they [the Japanese] use more [robots]. . . . The president of Nissan [Datsun automobiles and trucks] told me . . . he was in our Oklahoma City plant, a new GM plant, the newest assembly plant [opened in 1979] in the United States, and they build X cars there. And he said he was surprised about the lack of technology. This is not because we don't know how to do it . . . when they [GM] built the plant for X cars, they thought to themselves, "Look, we might be converting this plant from small cars to big cars" and you are not going to invest in fixtures and jigs and technology that you can't easily convert when you go from a small car to a large car. . . .

Douglas Fraser, President, UAW, before
the Joint Economic Committee Hearing
on Auto Imports, March 19, 1980

It is my intent to indicate a few of those deeper and enduring forces that are significantly altering our industrial relations system. There is

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* This paper represents my personal views and opinions and not necessarily those of the Library of Congress where I am presently employed. Bruce Millen and Richard Prosten made helpful comments on an earlier draft.

almost always the temptation to highlight the changes and understate the powerful elements of continuity in any system. Those few analysts who have stressed continuity rather than change have generally had a better track record in forecasting industrial relations futures.¹

The tendency to overstate the possibility of change in IR systems springs from an underestimation of the inertial elements in such systems. For example, in the last decades of the twentieth century it is impossible to understand the differences between the U.S. IR system and those of Western Europe without reference to developments of one hundred years ago, and in several respects a century or two before then! Institutional forms and forces, once well rooted, can be even more powerful than economic and political factors when it comes to shaping IR systems.² Indeed, one of the strengths of IR systems in advanced, industrialized societies is often this very conservatism in resisting or adapting only slowly to changes in other institutions.

In the long run, however, IR institutions do tend to adapt to major economic and social forces. I am reminded of the fact that in 1960, several analysts called attention to the great growth in service employment and the decline of the blue-collar workforce when compared to total employment. Their analysis also indicated this trend was already reducing union membership (then largely concentrated among blue-collar workers) as a percentage of the labor force, but not much attention was addressed to what seemed to be a slow moving change. Twenty years later, articles on the shrinkage of the unions (as a percentage of the labor force) have become commonplace, and the union movement itself has become much more sensitive to this trend.³

I now turn to three sets of change already occurring, and likely to persist in the decade ahead, and the impact of these changes on collective bargaining. These are: (1) stagflation and incomes policies; (2) the restructuring of American manufacturing, and particularly the steel

¹ See, for an example of cautious, successful extrapolation from the recent past, John T. Dunlop, "The American Industrial Relations System in 1975," in *U.S. Industrial Relations: The Next Twenty Years*, ed. Jack Stieber (East Lansing: Michigan State University Press, 1958); and Dunlop, "Past and Future Tendencies in American Labor Organizations," *Daedalus* (Winter 1978).

² By institutional forces and forms I mean here primarily the structures and basic outlook of unions and employers in IR systems as well as the nature and character of the collective bargaining system they share. (That system, of course, has been shaped by government as well, but once in place it is not easily modified by government in an advanced democratic society.)

³ See Lane Kirkland, "Labor's Outlook—Building on Strength," *The AFL-CIO American Federationist* 87 (March 1980). Downward changes in the relative position of the union movement have too often been equated with their strength in the economy and the society. Unions' economic strength has varied less than the relative decline in numbers might suggest.

and auto industries, and (3) the rise of articulate, "outside" groups and government agencies representing their interests. I shall place major stress on the impact of changes in industrial structure, since this has been a less explored area.

Stagflation and Its Impact on Industrial Relations

The persistent stagflation of recent years, including rising prices and high unemployment, has intensified government's efforts to do "something" about wages and prices, to try to fashion some sort of an incomes policy. At the heart of any IR system in a modern, democratic, industrialized society are union-management negotiations over wages and related matters. Any incomes policy vitally affects this central union function.

Efforts to operate an incomes policy, of course, did not begin with the Carter Administration. Such a policy is no longer an aberration, an exception in U.S. economic life. Every administration in the postwar era save for that of President Eisenhower tried its hand at an incomes policy or something approaching it. These income control efforts have, of course, become more intense during the past decade.

Curiously, one reason why these efforts persist is that key union leaders have been accepting of incomes policies, in one form or another. Why this situation wherein at least important parts of the top union leadership accept incomes policies, even though the unions are often the first to feel the restrictions of such policies? I suspect it is because union leaders are really much less ideological than economists in judging the way in which wages and prices are set in the U.S. economy. A union leader could hardly share typical economics textbook assumptions that price-setting, either by individual corporations or by unions, has little real effect on the economy, that they are fundamentally transcended by anonymous market forces, or that "money" alone matters.

Under these circumstances it is not all that hard to persuade top union leaders that when inflation persists, some forms of government control—or coordination in the wage- and price-making process—are in order if inflation is to be checked. It is particularly those union leaders who operate at the national level, those who bargain with large oligopolistic corporations (whose price-making power looks especially "real"), and through them for virtually an entire industry, who tend to this more macro policy view.⁴ Lower level union leaders are less likely to share or accept this view.

⁴ Personal experiences of these leaders may also enter into the influences acting upon them. To speak of only two distinguished, departed labor leaders: George

Management executives by the nature of their single-company settings are less likely to have this macro view than is the case of many national union leaders. Company leaders may, therefore, be less accepting of incomes policies. The way in which a number of top corporate leaders, in the past, have seemed almost eager to accept devices like the Dunlop labor-management committee (I am not referring to the present government-supported body) suggests that they, too, are aware of the impact of large corporations and key unions on the path of the economy.

Looking to the decade of the 1980s, or at least the first half of it, the likely persistence of high inflation suggests that we shall have further efforts at incomes policies—programs to influence systematically wage and price movements, and with them profits and other incomes. The experience of the Nixon Administration which began in dead opposition to wage and price control looks illustrative. One should also not overlook the symbolic, political-gesture value to any government of some formal policies aimed at influencing wages and prices, even if the results are not impressive. Seeming to do something about inflation, in the short run at least, can be almost as important politically as actually doing something.

Whether we shall move on to a more formal social contract remains to be seen. This would entail, among other things, extensive reorganization and strengthening of American employer organizations at the expense of individual companies, the spread of tripartite bodies, and some further centralization of unionism, especially at the federation level. In the long run, an effective social-contract arrangement would also seem to require a wider acceptance of unionism by American employers. Without such an acceptance, a durable and equitable incomes policy is probably an impossibility.

Meany gained his first, prominent national experience as an AFL member on the World War II National War Labor Board which, all things considered, helped the union movement to make many advances, despite labor's no-strike pledge. A less happy experience might have left Meany with a less favorable view of incomes policies, policies which he was to accept without great demur several times in succeeding decades. Walter P. Reuther, the other major postwar union leader, rose to the presidency of the United Automobile Workers on the heels (the wings?) of a major strike conducted against the General Motors Corporation in 1945–1946. At the heart of Reuther's appeal in that strike was a call for a look at the company's books—with the assumption then, and in some later wage movements in the automobile industry, that company prices and profits were artificially high, set by excessive market power. Reuther's response to such power was his consistent support, in succeeding decades, for the establishment of some sort of public review board to have surveillance over, and to help monitor, major companies' prices and related wages.

Restructuring American Industry: The Impact on Collective Bargaining

Related to the stagnation of recent years are the tremendous structural adjustments barely under way in a number of American industries: These adjustments are likely to have a major impact on collective bargaining in the United States. This is particularly true of developments in the steel and auto industries.

Many major innovations in bargaining in the postwar era often had their origin in the steel and auto industries. Complementary company pensions, early retirement, supplementary unemployment benefits, the persistent use of escalator clauses—these practices, as well as wage leadership in manufacturing, were largely pioneered by the auto and steel unions and companies in these industries.⁵

It would not seem that a steel industry that has become increasingly dependent on government support, with trigger point and tariff-related devices, can continue to be a wage and fringe benefit leader. Indeed, before the steel industry can be reconstructed and made truly competitive, there will have to be large infusions of government aid in the forms of either special investment tax credits and/or depreciation allowances, and lines of federal credit that could make the Chrysler case seem almost modest. Of the 17 leading deepwater world-scale steel complexes (excluding the USSR) at the beginning of 1980, the first eight, with projected capacities ranging from 10 to 16 million metric tons were Japanese, and the 11th and 13th were also in that country. The only U.S. plant on the list—Burns Harbor—was tied for 14–17th place (6 million metric tons). This is an industry where (in basic steel-making) unit cost “declines systematically with increasing volume. . . . In 1977, Japan had twenty-five blast furnaces capable of producing over two million annual tons in volume; the U.S. had none. . . .”⁶

It seems unlikely that as large-scale aid is forthcoming in the 1980s, the government will let the steel union and industry continue to be the leader in innovating significant new benefit and wage advances. The Chrysler roll-back looks like a more plausible precedent for what may

⁵ I am aware that the United Mine Workers and the garment unions, among others, had made some steps in pensions and supplementary insurance benefits before these occurred in auto and steel. But it was only after the powerful and highly publicized successful efforts undertaken by the auto and steel unions in the late 1940s and in the 1950s that programs like these became more generalized in rubber, glass, and elsewhere.

⁶ See Ira C. Magaziner and Thomas M. Hout, *Japanese Industrial Policy* (London: Policy Studies Institute, 1980), pp. 13–16. The United States, with large regional markets and internal raw material sources and transport, need not duplicate the scale of Japanese deep-water steel operations, but there is general acknowledgment that our industry is lagging in comparison to Japan.

come in the form of government pressure. (The continuing pressure on New York City and its unions, tacit or overt, by the federal government has certainly been a spectre at their bargaining table ever since Congress granted the city financial aid.)

It's difficult to see even as far as the next negotiation in automobiles, but surely the government will again exercise considerable pressure against any lead or bellwether auto settlement which might encompass Chrysler—only this time it may be done in advance of negotiations.

The industrial situation in autos is less clear than in steel; the latter has fallen drastically behind Japanese competitors in technology and will need more time to catch up. In autos there appear to be no great technological lags, but rather retarded market responses on the part of the leading companies; but even if most of the auto companies make the transition by the mid-eighties, the UAW may not be the innovative force for new economic benefits that it was in past decades. A union which is leading the call for relief from imports, an industry which requires special depreciation regulations, and one of whose major producers has had to resort to the government for immense financial assistance—these don't look like prime candidates for great new bargaining advances.

Both auto and steel workers should continue to hold fairly high positions in the total wage and compensation league. This, after all, was the case with both railroad workers and coal miners even when their industries were in a kind of doldrum through the sixties. The variety of government assistance programs which looks to be forthcoming should help insulate auto and steel workers from serious downward pressures on their real compensation standards in the eighties. Moreover, the principle of industrial relations system inertia I earlier alluded to could be working to the advantage of the auto and steel unions. Indeed, the same caveat on industrial relations inertia might even produce leading settlements in auto or steel in one more negotiation. But, to repeat, by and large major bargaining innovation on wages and fringe benefits would seem to be beyond these unions in the decade ahead.

However, the national task of restructuring these industries may draw the steel and auto unions into new decision-making areas on plant location, technology choice, and the like. There already are indications how large the role of union leadership may be in these areas—if the unions can position themselves to face these difficult industrial decisions more directly. An example is provided by the important role of the steel workers' union in the national steel industry tripartite committee which negotiated the recent aid package for the steel industry with the Carter Ad-

ministration. Union ingenuity will also be taxed in more conventional areas, as plants are shut down and there is need to improve plans for transferring some employees, for extending early retirement for others, and for reinforcing supplementary unemployment benefits funds.

Generally speaking, the gravity and complexity of the structural problems in these two industries may tend to lock top union and management leaders into a more cooperative relationship than has been true in the past. It may be somewhat more difficult for top union leaders to work up to a national strike movement against companies with whom they have been cooperating extensively on legislation and related matters. Correspondingly, company managers are likely to be more flexible in dealing with these same unions.

The steel unions and the major steel companies will have gone at least nine years under the ENA before there is even the possibility of a national strike in the industry. With the first renewal of the 1974 ENA, in 1977, the parties agreed to continue the binding arbitration clause that then, in effect, ran until 1983. This April, while the rest of the contract was renegotiated, action on the ENA part, which would have extended the no-national-strike clause to 1986, was deferred and the issue has not yet been resolved.⁷ (Under the ENA, local unions at individual plants are free to strike under certain circumstances.)

In the case of autos, no such long formal period without the possibility of a major strike lies behind or ahead of them, but close cooperation on trade and industrial matters could also modify the quality of relationships. The negotiation of the accretion clause (which would extend UAW jurisdiction to some newly opened auto plants, by joint agreement) in the collective agreements late in 1979 and the extension of quality-of-work circles with the cooperation of management and the UAW in many auto plants seem to suggest greater cooperation and a reduced level of conflict.⁸

Equally difficult structural transitions are under way in some other important sectors. The rubber industry has, for some years, been faced with a breakdown in its national bargaining patterns, as settlements in tire plants diverge more and more from those in so-called nontire estab-

⁷ *Daily Labor Report* (Bureau of National Affairs), April 16, 1980, p. A-11. The ENA originally reflected a growing joint concern about the precarious economic state of the steel industry, but management has been increasingly worried about the high level of settlements under this agreement.

⁸ Common concern about trade and related matters does not *necessarily* enhance union-management mutual acceptance and their relations. The decline of unionism in the textile and electrical-electronics manufacturing industries, and the resistance to unionism of employers in those industries, even in the face of their common concerns about imports, is a case in point.

ishments. The rise of nonunionized tire plants is also a serious threat to the structure of collective bargaining in that industry. One could cite other cases, but none of these seems to be as important for national patterns as what occurs in steel and auto.⁹

Decline of Metal Bargaining Not Confined to the U.S.

For several decades metal unionism, usually in the basic steel and auto industries, has been the labor standards pattern-setter in advanced democratic industrial societies. The decline of this role in the U.S. also has its counterpart in most other advanced societies.

The steel industries of Germany, France, and England are all in the throes of a great employment shakedown. The German steel union had a less-than-successful strike almost two years ago, and the British steel union has lagged behind some other settlements. Japanese steel increases no longer are at the top of the wage parade in that country's annual Spring wage drives (Shuntō), as they often were in the past. In almost all countries special programs to ease layoffs have come to the fore in the steel industry. What we are witnessing is the development of excess capacity and with it some reduction of the all-central role of steel manufacturing in the economic lives of advanced industrial societies. A somewhat similar fate also seems to be overtaking sections of the European auto industry.¹⁰

In Search of Replacements for Steel and Auto Unionism

Are there likely candidates to replace these two unions (and industries) as change agents in the IR system? Most industry specialists look to the electronics sector to lead the way in industrial innovation and sales growth in the coming decade. If this is borne out, economically this industry's labor sector begins with a very fragmented union base and what appears to be a growing nonunion area. Moreover, it has never been an industrial wage leader. To the extent that nonunion com-

⁹ See the articles by Arnold R. Weber in the *New York Times*, April 19 and 21, 1979, which deal with some examples of strain in "old labor ties," especially in rubber manufacturing, as a result of economic-structural change. The steel union has also been beset by demands from major steel companies for special treatment for nonbasic steel plants—treatment which would diverge from the wage and benefit pattern of the basic industry. See *Wall Street Journal*, April 9, 1980. An analysis of bargaining structure change in construction, especially in response to the threat of nonunion construction, is to be found in Paul T. Hartman and Walter H. Franke, "The Changing Structure of Bargaining in Construction: Wide-Area and Multicraft Bargaining," *Industrial and Labor Relations Review* 33 (January 1980).

¹⁰ The chronic IR difficulties in Britain for nearly two decades have stemmed, in considerable part, from the stagnant state of its engineering (metal fabricating) industry.

panies like IBM have pioneered some innovative personnel practices, this has been of interest, but these have not spilled over very much to the newer, smaller electronics areas. Whether they will remains to be seen. Perhaps the communications industry may prove to be one of the new sources for labor innovation.

The great growth sector of unionism in the past decade has, of course, been in the public area. The catch-up nature of bargaining there to date and increasing public resistance to higher wages and benefits for public employees make the emergence of innovative collective bargaining leadership unlikely in this area.

Let me not seem to be too bleak in outlook, I hasten to add. There is always a tendency to be overwhelmed by an era of stagnation (shades of Alvin Hansen and Kondratieff in the thirties). It doesn't always pay to extrapolate the recent past! The real game for IR forecasters may be picking out the sharply advancing sectors of the modernized, more planned capitalism of the future. Moreover, it is possible that social advances in that new economy might come in a more generalized pattern, in the form of social *legislation* as distinguished from bargaining gains.

Emerging Interest Groups Expand Government Role in Collective Bargaining

Let me, finally, mention one other area or set of forces which is sharply altering the nature of labor-management relations. I refer to the rise of powerful interest groups whose efforts to realize their fuller potential in economic life is impinging sharply on bargaining structures and reducing its "private" character.

As Jack Barbash has suggested, the Civil Rights Act of 1964 set into motion the development of a new body of law attacking discrimination and calling for "affirmative action" against employers and unions.¹¹ Bilateral bargaining on hiring procedures, promotions, and retentions has had to yield significant ground to this new trend. The result has been to bring government into the process as an important participant. As the civil rights struggle has increasingly caught up women, this process has been deepened. It would be going too far to say the bargaining process, even in large companies, has become tripartite, but government's influence and role have grown significantly as a result of its intervention on behalf of minority and women's rights.

Some basic demographic trends are likely to make even more difficult

¹¹ Jack Barbash, "The Changing Structure of Collective Bargaining," *Challenge Magazine* (September-October 1973).

the satisfaction of minorities' and women's job claims in the coming decade. The great teenage cohort is now passing into the middle years of the labor force. Ordinarily it is in those middle years, 25-44, that most workers make their greatest wage and promotion gains. The extraordinary size of that age cohort will intensify competition within it and make promotions relatively hard to come by. (It is well to remember, too, that the entering labor force cohort, the teenagers, will be fewer to supervise, and this too will limit supervisory promotion opportunities.) This could lead to greater feelings of discrimination on the part of women and minorities. Having called upon the Equal Employment Opportunity Commission to help break open jobs in the 1970s, they may increasingly turn to it to help with upgrading and promotions in the 1980s.

It has not only been in the area of discrimination that government has been drawn into the labor system. Its role has also dramatically expanded in the area of safety regulation (OSHA). In the administration of private company pension plans, the government has also been called upon as a major regulator (ERISA).

In this latter field at least, the prospect seems to be for a widening of this role as many small company pension plans fall into difficulty. The great financial difficulties of a number of steel and auto companies may also lead to calls for assistance from the federal Pension Benefit Guarantee Corporation (set up under Title IV of ERISA) to prop up their pension plans. Government assistance is likely to be accompanied by more control. At some point, too, government assistance to private pension funds may seem increasingly inequitable to those employees (and taxpayers) who do not "share" in any private pension plan benefits. In turn, this could lead to pressure for mandated private pensions for all workers (not uncommon in Europe).

Taken together, EEOC, OSHA, and ERISA are having a wide and lasting effect on the bargaining system. The latter is less and less a private process.

Such then are some of the deeper social and economic structural changes that will continue to alter the structure of bargaining in the years ahead. It would be nice to end with a tidy integration of these forces, but although they all mirror profound economic and social change, I find no clear, integrating force among them, although all seem to bespeak a passage to a new, more state-interventionist form of capitalism.

Wage Determination During Periods of High Inflation*

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The fact is that we know precious little about the subject of this paper even though it is at the core of numerous macroeconomic policy debates of the past few years. The theory of macro wage determination is not well developed and the paucity of data has hampered empirical efforts to refine such theory as there is. I would like to discuss three issues of macro wage determination: (1) the role of rigid expectations; (2) the questions of energy-price pass-through; (3) the union/nonunion earnings differential and the role of incomes policies. These are important issues for policy-makers. Alas, I expect to raise more questions than I answer.

I. Rigid Expectations

A popular macro story in Washington is about the ratchet. It is not about a Medieval torture device, though many policy-makers find it painful. The story goes something like this. Every time there is a large increase in the relative price of some commodity (no matter what the cause), overall prices rise because so few prices fall (indeed we do a lot to prevent price declines) and the commodity suffering excess demand goes up in price. These *rates* of price increase then get built into expectations which cause long-term contracts (explicit or implicit) to reflect a higher inflation rate. Thus each round of price increases causes the inflation rate to “ratchet” upwards. I prefer to call this the theory of disembodied expectations because it implies expectations have lives of their own. To reverse the ratchet and to wring inflation out of people’s expectations, loose labor and product markets are needed. To prevent further ratcheting up, potential supply shortfalls must be reduced and the economy must become more flexible through greater competition and

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* I wish to thank Moraith A. Grace for help with the computations, Doug Leroy for help in obtaining some of the data, and Ralph Smith for advice and comments.

less regulation. Since economic policy-makers rarely like to take the blame for unemployment, they often look for devices other than loose markets to smash inflationary expectations more rapidly—hence the increasing attempts at incomes policies over the past decade.

Two types of evidence are germane to the question of the existence of an inflationary ratchet. The first deals with general wage-setting behavior and the second deals with the highly unionized sector which may establish wage patterns in the economy. The fact that past aggregate price changes are completely passed through to aggregate wage changes in estimates of Phillips curves for the recent period of great variation in inflation rates would indicate to me that expectations are highly flexible, not the reverse.¹ There is, however, a lag. In work that I have recently done with Steve Cecchetti, Mike McKee, and Dave McClain,² we found from simulations of our estimated aggregate wage and price equations that the world of inflationary shocks is best described as a dampened wage-price spiral. It takes some four years for wage and price inflation rates to settle back to some base rate after a rapid and concentrated price rise in some sector of the economy. (See Chart 1). Those estimates might imply that inflationary expectations wring *themselves* out of the economy once relative prices have become established at some new aggregate price level. The ratchet may be an artifact of the frequency of the shocks our economy has received over the past decade. We do not seem to finish one episode before the next occurs.

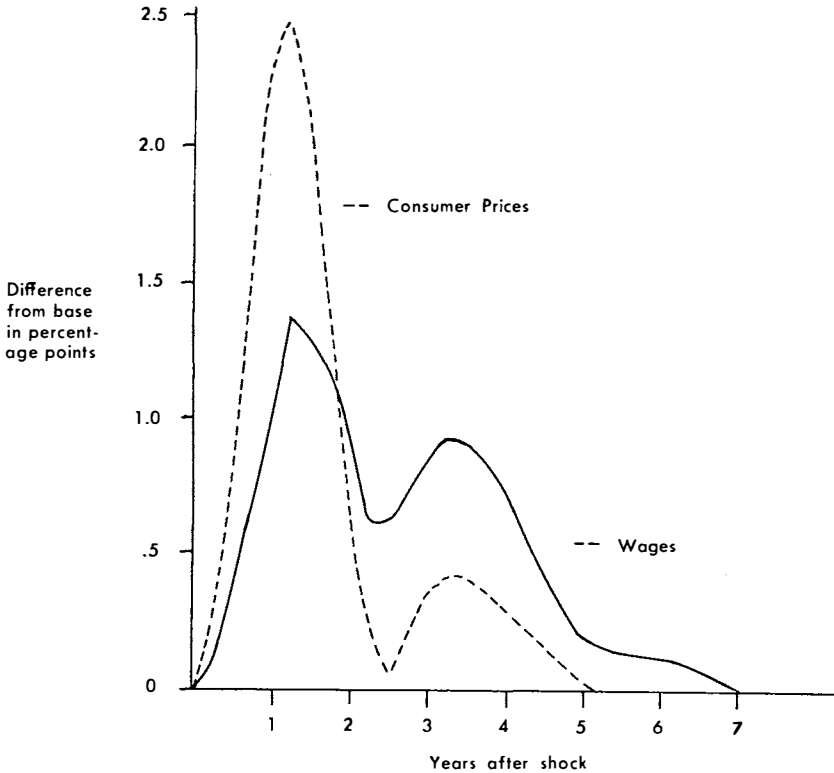
The other piece of evidence is from the data on contract lengths and cost-of-living adjustments (COLAs) in collective bargaining agreements. I have done some preliminary calculations based on some special tabulations of these data from the Bureau of Labor Statistics (Table 1). I had expected to observe from these data an unambiguous increase over the seventies in indexation of wages through shorter contracts on the one hand and through more contracts with COLA clauses on the other. This seemed a reasonable response to rising and variable inflation and would have been consistent with the Phillips curve results and counter to the ratchet. I now realize I had totally oversimplified the problem. In fact, the proportion of workers signing shorter contracts declined markedly and the proportion of workers signing long-term contracts with COLAs peaked after the first round of OPEC oil price increases and went up again after the second round and was generally high throughout the period. Workers with COLA clauses did substan-

¹ The sum of estimated coefficients on lagged price terms in augmented Phillips curves approach 1.0 from below as more recent data are added.

² Steven Cecchetti, Michael McKee, David McClain, and Daniel H. Saks, "O.P.E.C. II and the Wage-Price Spiral," 1980, mimeo.

Chart 1

Simulation of added wage and price inflation due to a 100 percent rise in oil prices over the course of 1 year*



* Source: Cecchetti, McLain, McKee, and Saks (1980).

tially better than workers signing contracts without them, but this is more an index of union strength and relative labor demand in certain industries. COLAs help workers and employers maintain relative wages and they seem likely to exist where unions are stronger. As the table shows, the negotiated part of wage increases for COLA workers was not that much smaller than the negotiated raises for non-COLA workers. Further, the COLA only provided partial protection against inflation. I had expected a larger trade-off between COLA and wage components of settlements, but that only makes sense where other things are equal.

Why were these results different from my expectations? What was I missing? You may have your own theories, but my own have to do with the strategies for long-term contracts during periods of variation

TABLE 1
Wage Increases for Nonfarm Private-Sector Workers Covered by Collective Bargaining Agreements in Units
of 1000 or More Workers, 1973-1979

	1973	1974	1975	1976	1977	1978	1979
Percent of workers signing 1-year contracts							
All workers	16	13	19	9	9	9	6
Durable goods manufacturing	2	1	5	3	3	3	1
Percent of workers signing long-term contracts (3 or more years) that have COLA clauses							
All workers	64	80	60	69	71	48	68
Durable goods manufacturing	89	95	79	94	87	83	93
Ratio of wage changes in COLA to non-COLA contracts (ex-post)							
All workers							
1st year of contract only	1.68	1.30	1.49	1.51	1.25	1.25	X
3rd year of contract only	1.44	1.21	1.29	1.46	1.30	X	X
Durable goods manufacturing							
1st year of contract only	1.78	1.46	1.10	1.24	1.07	1.41	X
3rd year of contract only	1.22	1.37	1.22	1.36	1.28	X	X
Proportion of change in personal consumption expenditure (PCE) deflator offset by COLA clauses (ex-post)							
All workers							
1st year of contract only	.40	.41	.14	.47	.31	.31	X
3rd year of contract only	.49	.60	.48	.52	X	X	X
Durable goods manufacturing							
1st year of contract only	.63	.84	.51	.77	.58	.60	X
3rd year of contract only	.59	.66	.50	.63	X	X	X
Ratio of negotiated wage changes in contracts with COLAs to wage changes in contracts without COLAs.							
All workers							
1st year of contract only	.95	.97	1.4	1.15	.99	.90	X
3rd year of contract only	.89	.64	.73	.67	X	X	X
Durable goods workers							
1st year of contract only	.79	.80	.86	.79	.71	.84	X
3rd year of contract only	.62	.66	.67	.35	X	X	X

Source: Bureau of Labor Statistics, calculated from special tabulations. Notice, year refers to the date the contract was signed.

in inflation rates. The analysis is precisely the same required for deciding whether to invest in short- or long-term bonds. Depending on your degree of risk aversion, relative rates of return to long- and short-term contracts, the other elements of your "portfolio," the distribution of expectations about the time path of inflation between workers and employers, and expectations about future demand and supply in the labor market, periods of *abnormally* high inflation could induce longer contracts and less indexation. To the extent the data are consistent with that hypothesis, they are consistent with workers and employers playing quite a complex game of strategy. In the organized sector, there may be a ratchet. But my own view is that the length of contracts hangs most crucially on the *difference* between employers and workers in expectations. Obviously, more research needs to be done with these types of data.³

In short, the disembodied expectations theory giving rise to the ratchet and to the need for running loose labor markets to wring out inflationary expectations is not a view that can be held or rejected with any confidence. We simply do not have a good enough understanding of wage-setting behaviors.

II. Energy-Price Pass-Through

If wages are in general related to price changes, one question that immediately emerges is whether the responses to all price changes are equal. Many believe that there are subsets of the price index that are more or less important in determining wages and unit labor costs. The part that counts is sometimes called the core or underlying rate of inflation purged of transitory components that do not enter into people's expectations or into final product demands that feed back through derived demand for labor. Cynics will note that the noncore components happen to be those elements of the indices that have been rising the fastest and might be the ones you would pick to discard if you were anxious to play down the size of overall price changes. To the extent that workers and employers are bargaining over real wages, it does not make any difference what the sectoral source of inflation is unless, perhaps, workers can find substitutes more easily for some commodities. The latter is a comment about the proper way of constructing a price index. Some of the underlying inflation notions are designed to fix up defects in the Consumer Price Index as a measure of short-run general price changes. In any case, the evidence is no stronger on this question than

³To the extent that incomes policies bias settlements in favor of COLAs and fringes, they are also affecting the data in this table.

on the last. Putting separate components of price changes into an augmented Phillips curve does not seem to produce better results than using a complete but well-constructed index like the Personal Consumption Expenditures deflator from the National Income Accounts. One cannot reject the hypothesis that all price increases have the same effects on wages, but neither can one reject the converse. The question needs to be answered in a different way with a more complete structural model.

III. The Union/Nonunion Differential and Incomes Policy

The effect of inflation and unemployment on relative shares is, of course, a question on which a good deal of research has been done, though to the extent that every business cycle is different, so, too, is the precise answer to that question. The question peculiar to recent history has been the effect of the incomes policies that have been put in place during the peaks of our last two cycles. Policies such as the current Carter program have modest effects on wages, it seems, but we do not know how permanent such effects are.⁴

Given the role of labor and business in recent incomes policy debates and the National Accords between the AFL-CIO and the Carter Administration, it is interesting to ask about the union/nonunion wage ratio. The union/nonunion wage ratio increased by about 3.6 percent in manufacturing from September 1976 through the first quarter of 1980, while it declined .3 percent in nonmanufacturing. (This is calculated from the Employment Cost Index which only started in 1976.) During a recovery, one might have expected the differential to narrow, not widen. Two things are going on here. First, there was a large influx of new and mostly nonunion workers into the labor market and, to the extent that they are not perfect substitutes for union workers, that influx might have caused the special result for this past recovery. Second, because the Council on Wage and Price Stability (COWPS) evaluated COLA clauses prospectively at substantially less than the actual inflation rate, unionized workers were much less affected by the wage standards than nonunionized workers. Almost three-quarters of the slippage between actual and program-authorized pay increases for unionized workers was due to the way COLAs were handled.

The question how incomes policies affect wage structures has not been much studied, though the general impression is that such policies tend to compress wages via low-wage exemptions. (In the first year of the Carter program, the minimum wage rose more than the program limit and low-income workers were exempt.) Limiting absolute wage

⁴ See Cecchetti, McClain, McKee, and Saks.

changes in periods of inflation also limits relative wage changes. In general, incomes policies that stay in place very long begin to reduce the use of prices and wages for allocation and move an economy, often without thought, into planning. The problems of developing good wage indices at the firm level make it difficult to develop distortion-free wage targets. Yet it is tempting to try and keep incomes policies too long because they are so attractive compared to tighter monetary and fiscal policies. But what is incomes policy attractive at doing? Does it affect those disembodied expectations discussed earlier? Does it only change the timing of inflation? Does it speed the adjustment of wages to prices or does it slow it down? If effective, will it cause changes in relative shares? Is a command system of price and wage standards better or is it better to have a penalty or incentive scheme that allows those suffering the worst distortions to buy out of the standard? Can national bargains over real wages be made in a decentralized economy such as ours?

As promised, I raised more questions than I answered. On average, wages have been indexed to general inflation. As to the existence of the ratchet, one must be an agnostic and that suggests to me not sacrificing much output in the name of it, especially when higher unemployment buys so little inflation reduction. As to incomes policies, they have some temporary effect, but at what cost in equity and efficiency? We just do not know. Finally, while there is likely to be a level of unemployment below which inflation seems to accelerate, that level is itself a complex function of some of the things we do not understand. Policy-makers have to act as if they know the answers to these questions. The profession is not providing much guidance on the answers.

Collective Bargaining and Wage Determination in the 1970s

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In a recent study for the Brookings Institution, I reviewed a number of characteristics of the private collective bargaining sector.¹ These included: (1) a tendency for the proportion of the workforce covered by unionization to decline since the mid-1950s; (2) a tendency for earnings in the union sector to rise relative to earnings in other sectors—although not without interruption—during the period 1953–1976; (3) a persistent tendency, especially in more recent studies, to find considerable absolute union/nonunion wage differentials, particularly for production and nonsupervisory workers; (4) a tendency for more highly organized industries to be those with higher earnings, more fringes in the compensation mix, fewer female employees, higher capital-intensity of production, and lower quit rates—characteristics suggesting long-term employer-employee attachments which are reinforced by formal long-term labor-management contracts, seniority systems, and the like; and (5) a tendency for union wage-change determination to be relatively insensitive to real business-cycle conditions (e.g., unemployment) compared to nonunion wage change. This latter tendency seemed to involve more than just overlapping multiyear agreements which could not be changed in the short run. Even when long-term contracts are renegotiated, it is difficult to find much impact of current business conditions, other than previous inflation, as a determinant of wage change.

The history of union wage determination in the 1970s needs to be set against this background of tendencies. Economic circumstances during the seventies varied considerably. Government intervened in the labor market, both with formal wage controls and with “voluntary” wage guidelines. Inflation rates measured by year-to-year changes in the CPI varied from 3.3 percent in 1972 to 11.0 and 11.5 percent in 1974 and 1979. The official unemployment rate varied from 4.9 percent in 1970 and 1973 to 8.5 percent in 1975. Although there is disagreement about

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¹ Daniel J. B. Mitchell, *Unions, Wages, and Inflation* (Washington: Brookings Institution, 1980).

the causes and dating of the decline in productivity growth, the fact that the increase in output per hour in the 1970s slowed relative to the 1960s is unmistakable. Productivity growth in manufacturing appeared to be less affected by the adverse trend, as was the case in certain other industries where unionization is relatively high, such as telephones and trucking.

In short, the 1970s was a decade of periodic adversity and diversity. But through it all, the tendencies described above for the union sector remained evident. In particular, the unionization rate continued its decline. Claimed membership in unions and associations fell from 30.0 percent of nonagricultural wage and salary earners in 1970 to 26.6 percent in 1978. This was accompanied by a falling union "win rate" in NLRB representation elections (55 percent in fiscal 1970; 45 percent in fiscal 1979) and a mini-boom in decertification petitions. There was much talk in union circles of an upsurge in management attempts either to remain nonunion or to defeat or weaken existing unions. Considerable emotion was generated by the ultimately unsuccessful campaign by unions to amend the Taft-Hartley Act to discourage antiunion employer efforts.

While management may have been resisting organization more forcefully in the 1970s than in earlier years, those employers who were already organized, and who remained so, did not demonstrate increased resistance at the bargaining table. Data presented on Table 1 illustrate this point. Union/nonunion wage-change comparisons are not directly available for the entire period 1970-1979. However, wage-rate changes in the major union sector (agreements covering 1000 or more workers) can be compared with earnings changes for union and nonunion production and nonsupervisory workers. In the private nonfarm sector, major union earnings rose about 8 percent relative to all earnings during the seventies. For manufacturing (where union earnings constitute a greater proportion of all earnings), the gain was about 4 percent. In construction, also a highly organized sector, major union wage adjustments are not available for the entire period, but do show about a 7-percent gain relative to all earnings during 1973-1979. A broader index of construction union wage-rate changes gained about 9 percent relative to all earnings during the seventies.

Direct comparisons of union and nonunion wage changes are available for the latter part of the seventies. The Employment Cost Index for all occupations (Table 2) shows gains in the private nonfarm economy of the union/nonunion wage ratio of about 3.0 percent during

TABLE 1
Indexes of Wage Change, 1970-1979

Year	Private Nonfarm Sector			Manufacturing			Construction				
	Major Union ^a (1)	Union and Nonunion ^b (2)	(1) - (2) (3)	Major Union ^a (4)	Union and Nonunion ^b (5)	(4) - (5) (6)	Major Union ^a (7)	Urban Union ^c (8)	Union and Nonunion ^b (9)	(7) - (9) (10)	(8) - (9) (11)
1970	8.8%	6.8%	+2.0	7.1%	6.9%	+ .2	*	11.9%	8.3%	*	+3.6
1971	9.2	7.0	+2.2	8.0	6.3	+1.7	*	10.2	8.0	*	+2.2
1972	6.6	6.3	+ .3	5.6	5.8	- .2	*	7.1	6.8	*	+ .3
1973	7.0	6.5	+ .5	7.3	6.5	+ .8	4.8%	4.4	4.1	+ .7	+ .3
1974	9.4	9.4	0	10.3	10.5	- .2	9.1	9.0	8.4	+ .7	+ .6
1975	8.7	7.9	+ .8	8.5	8.5	0	8.1	8.0	6.2	+1.9	+1.8
1976	8.1	6.9	+1.2	8.5	7.5	+1.0	7.2	5.9	5.3	+1.9	+ .6
1977	8.0	7.4	+ .6	8.4	8.2	+ .2	6.5	5.5	4.0	+2.5	+1.5
1978	8.2	8.5	- .3	8.6	8.6	0	6.5	5.9	7.7	-1.2	-1.8
1979	8.8	8.4	+ .4	9.2	9.0	+ .2	7.0	7.0	6.9	+ .1	+ .1

* Not available.

^a Effective wage-rate change in agreements covering 1000 or more workers.

^b December-to-December change in hourly earnings index for production and nonsupervisory workers (or manufacturing or construction component) adjusted for interindustry shift and manufacturing overtime.

^c Change in union wage rates in cities with 100,000 or more inhabitants, early January to early January.

Source: *Current Wage Developments*, various issues.

TABLE 2
Union-Nonunion and Escalated-Nonescalated Wage Change

Year	Changes in Employment Cost Index						Annual Union Wage Increase Experienced by Year of Contract Expiration	
	Private Nonfarm Sector			Manufacturing			Escalated Contracts (7)	Nonescalated Contracts (8)
	Union (1)	Nonunion (2)	(1) - (2) (3)	Union (4)	Nonunion (5)	(4) - (5) (6)		
1976	8.1%	6.8%	+1.3	*	*	*	7.8%	6.6%
1977	7.6	6.6	+1.0	8.3%	7.4%	+ .9	8.8	8.6
1978	8.0	7.6	+ .4	8.7	7.9	+ .8	8.1	7.2
1979	9.0	8.5	+ .5	9.4	7.9	+1.5	8.4	7.3
1980	*	*	*	*	*	*	8.4	7.5

* Not available

Source: Columns (1)-(6) from *Current Wage Developments*, various issues. Columns (7) and (8) from *Monthly Labor Review*, December issues.

1976–1979.² For manufacturing, the relative gain during 1977–1979 was just over 3.0 percent. The omission of fringe benefits from these tabulations probably causes the relative union gain to be understated.³

While union workers generally gained in wages relative to nonunion workers, the gains were not distributed equally over the period, as can be seen from Tables 1 and 2. For the private nonfarm economy as a whole, the gains were concentrated in 1970–1971 and 1975–1976, although there was a net gain in the rest of the period, too. The concentration suggests that the relative insensitivity of union wage change to recession tended to boost the union/nonunion wage ratio during these two periods of high unemployment. Table 2 also indicates that union workers under contracts with cost-of-living escalators fared considerably better than their unionized nonescalated counterparts, at least for contracts expiring in 1976–1980. Some of this discrepancy may involve industry composition; in union construction—where contracts are seldom escalated—wage gains were more moderate than elsewhere in the union sector during this period.

It appears that even based on claimed membership, the absolute number of workers in the *private* sector who belonged to unions or associations declined during 1978–1980.⁴ (Net membership gains resulted from expansion into government.) Yet, private employment rose by 20 percent during this period. A continuous detailed industrial breakdown of U.S. private-sector union membership is not available. However, the Bureau of Labor Statistics (BLS) does publish annual estimates at roughly the two-digit level of workers covered by major agreements (1000 or more workers). In late 1969 there were estimated to be about 11 million such workers, a figure which dropped to just under 9.6 million in 1978. Such a drop can result from the shrinking of union units which remain in the sample, the shrinking of units which causes them to drop out of the “major” category, the conversion of units to nonunion status, or the complete evaporation of units through plant closings, bankruptcy, etc. The

² Certain commission sales personnel, such as stockbrokers, are included in the index on an earnings basis rather than on a wage-rate basis. This anomaly distorted the measured rate of nonunion pay during some years when sales volume accelerated.

³ Bureau of Labor Statistics data show union fringe benefits rising relative to non-union fringes during the first half of the 1970s.

⁴ Nongovernment membership of unions and associations (including non-U.S. members) fell from 1970 to 1978. It is not possible from published data to obtain data for only the U.S. private sector based on claimed membership. However, few government workers in Canada belong to U.S.-headquartered unions. If all government members are subtracted from total U.S. union and association membership during 1970–1978, a drop of about 600,000 workers is reported. Source: U.S. Bureau of Labor Statistics, *Labor Union and Employee Association Membership—1978*, press release USDL 79-605, September 3, 1979.

loss was basically centered in manufacturing; nonmanufacturing estimates showed little change during 1969–1978.

An interesting question is whether the drop in major coverage can be “explained” by employment developments in the various industries. Table 3 shows the results obtained by using 1969 as a base year for forecasting subsequent major union coverage. To minimize effects of the proportion of supervisory employees (who are generally nonunion), only employment trends in nonagricultural production and nonsupervisory workers were considered. Coverage-to-employment ratios for 1969 were mechanically applied to post 1969 employment in 31 industry classifications to generate expected coverage.⁵ The difference between the coverage which would have resulted if the overall coverage-to-employment ratio had remained constant and the expected ratio is labeled “coverage loss due to industry mix change” on Table 3. If overall coverage had kept pace with overall employment of production and nonsupervisory workers, major coverage would have reached just over 13 million workers instead of the actual 9.6 million. Using the 1969 coverage ratios for the 31 industries, about 1,441,000 “lost” workers of the total gap of 3,461,000 can be “explained” by adverse employment developments in highly unionized sectors. The remaining coverage loss, 2,020,000 workers, is reported as “due to unexplained causes.”

Unexplained coverage losses occur in all subperiods except 1969–1970 and 1973–1975. It is possible that these deviations from trend result from lags by BLS in scaling down covered employment during recessions. As Table 3 shows, the loss was concentrated in manufacturing. Coverage rose by more than expected only in mining, communications, and retailing (excluding restaurants). Generally, such tabulations must be regarded with caution, particularly when disaggregated. The point is simply that union coverage has tended to slip faster than can be explained by interindustry shifts in the pattern of production and nonsupervisory employment. Alternative data sources and procedures would produce different quantitative, but not qualitative, results.

It may seem strange that with union workers doing noticeably better than nonunion workers in terms of wages, nonunion workers did not

⁵ Employment data in late 1978 and coverage data in late 1979 were converted to the 1972 SIC code, making them incompatible with previous detailed estimates. Hence, Table 3 ends with 1978. Employment data were taken as of June of each year. Annual data might have been preferable, although coverage data are updated with a lag, but the change in SIC codes would have forced dropping of 1978. From 1978 to 1979, a substantial drop in workers covered by major agreements was reported. This drop occurred mainly in construction and trucking (manufacturing was virtually unchanged). The coverage ratio dropped from 16.5 percent to 15.1 percent, using the June employment figures.

TABLE 3
Loss of Major Union Agreement Coverage in Private Nonfarm Sector, 1969-1978
(1000s of Workers)

Period	Coverage Loss Due to Industry Mix Change ^a	Coverage Loss Due to Unexplained Factors ^b	Total Coverage Gap ^c	Sector	Unexplained Coverage Loss 1969-78 ^b
	(1)	(2)	(3)		(4)
1969-70	345	-297	48	Manufacturing	1,401
1970-71	127	177	304	Mining	-14
1971-72	103	734	837	Transportation	238
1972-73	-79	494	415	Construction	122
1973-74	289	-25	264	Communications	-73
1974-75	487	-1,042	-555	Retail exc. restaurants	-71
1975-76	108	640	748	All other	417
1976-77	26	751	777	Total	2,020
1977-78	35	588	623		
Cumulative 1969-78	1,441	2,020	3,461		

Source: Calculated from data appearing in *Monthly Labor Review*, various December and January issues, and *Employment and Earnings*.

^a Coverage which would have resulted from maintenance of 1969 coverage ratio for private, nonfarm sector minus predicted coverage based on 1969 coverage ratios for 31 industries.

^b Predicted minus actual coverage with prediction based on 1969 average ratios for 31 industries.

^c Coverage which would have resulted from maintenance of 1969 coverage ratio for private, nonfarm sector minus actual coverage = column (1) plus column (2).

flock to unions. However, the growing wage advantage associated with unionization also provided increasing incentives for nonunion management to resist organization and for already unionized firms to attempt to slip out from unionization. Such slipping out can be accomplished by greater reliance on imports, siting new plants in traditionally nonunion areas, subcontracting to nonunion sources, etc., or unionized firms may simply be out-competed by low-wage suppliers.

Will the slippage in union coverage of the workforce and the prospect of a stop-go economy induce unions to cease widening the union/non-union wage differential? There are statistical tendencies for industries and sectors which increase their relative wage position in one period to fall back into line subsequently. However, tendencies need not be realized (or can be overwhelmed) for long periods, as the experience of the 1970s demonstrated. The erosion of union coverage is essentially a long-term problem, and one which by definition is most likely to involve marginal members or potential members. Union wage goals are determined in the interests of the existing members who, as already noted, tend to be more attached to their current employers than the rest of the workforce. In any particular negotiation, the employment effect of the wage bargain is likely to be small and the strategy of the parties is likely to be dictated more by potential strike costs than by alleged wage-employment tradeoffs. Often, conscious concessions are made only when a dire threat appears. The imminent disappearance of the labor demand curve, rather than a possible small movement along it, is the primary motivator.

"Better for fewer" was the persistent theme of the collective bargaining sector in the 1970s. Possibly, the union wage advantage, with its accompanying fringes and escalators, will attract a surge of new members in the 1980s. Perhaps a discrete shift in public attitudes and policy will occur as it did in the 1930s, causing a disruption of previous tendencies. All that can be said is that these events, if they are coming, were no more evident in 1980 than they were in 1970.

DISCUSSION

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These three papers contain an unusual amount of material for discussion.

In his paper, Everett Kassalow sees three forces pressing toward change in recent years and expects these to continue to be important in the future.

He expects continuing stagflation to call forth a response in the form of incomes policy and possibly eventually some form of social contract. I agree that the political attractiveness of incomes policy makes a return engagement in some form virtually inevitable. In the absence of a national emergency I believe, however, that any policy that is not a shadow policy (as is the present version) will be imposed over the objections of most if not all of the affected parties, with the possible exception of the unions of government employees. As long as tax policies are not included in a program of restraint, the lagging performance of government employee pay may lead to their support of restraint.

I very much doubt that we are likely to have anything like a European-style social contract in the foreseeable future. The lack of an organized employer structure might not be as serious a hurdle as Kassalow and others believe. Our only attempt at something like a social contract so far, the "national accord," seems to have pretty much dispensed with employer participation. The crucial stumbling block in this country is that, unlike countries with parliamentary systems of government, the executive branch cannot guarantee to deliver its side of the bargain. The fate of the labor reform law and the common situs picketing bill illustrates the problem and it is even less likely that a more comprehensive social contract package could be delivered. Both executive and congressional leadership suffer from a lack of credibility in this respect.

I agree with Kassalow that the industries that are becoming dependent on government action of one form or another—primarily steel and autos at this time—are going to feel pressure on their bargaining settlements in the future. Both of these industries are prime candidates

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for the application of restraint. Even allowing for drastically reduced levels of employment, a rough calculation suggests that Chrysler and the UAW at a time of crisis negotiated *increases* in labor costs that would have absorbed a large part, probably most, of the government guaranteed loan funds over the three-year period of the contract. A cynic might conclude they were establishing a bargaining position.

I do not believe that this means that innovation will necessarily be precluded in the bargaining in industries receiving aid. Not only might bargaining focus on various forms of workers' participation, such as the board membership of Mr. Fraser, but there is a lot of room for innovation in controls over pay issues such as plant closings, large-scale transfers, severance pay, and other policies already in vogue in Europe. On a more positive note, some real productivity bargaining might appear where managements are energetic and innovative.

Turning to the impact of emerging interest groups on collective bargaining, there is a good chance that some formal role for groups such as women, minority, and environmental or public interest groups might develop. The most likely forum for their appearance would probably be on boards of directors. There has been a lot of talk of formalizing multilateral bargaining in the public sector, but relatively little action has occurred. It would be even harder to involve external groups directly in private bargaining. I agree though that government regulations and court decisions will increasingly restrict the freedom of the parties to arrive at their own solutions.

In his paper Dan Saks cites as good news the fact that the coefficient on lagged price terms in the Phillip's curve equation has been approaching 1.0 from below—that is, we are approaching a system of explicit or implicit indexing. I am not sure I agree that is good news, but I will limit myself to saying that it is not only expectations about future rates of inflation that are important. I believe that income policies will be increasingly concerned with dealing with unattainable expectations of future increases in real incomes in an economy experiencing both slow growth and substantial transfers of income to foreigners.

I found the comments about transferring some of the analysis developed in analyzing financial markets for bonds to analyzing what might be called the term structure of labor contracts very suggestive. Both involve the manipulation of future streams of income, but obvious problems in implementation abound. The financial markets must be about as close to perfect markets as we are likely to find, while labor markets may lie at the opposite extreme. For example, in theory a union might agree to accept a cut in current wages (a capital loss?) in return for a future COLA, but this is unlikely to happen.

I am not surprised that COLA clauses did not become universal in spite of the advantages they have produced in recent years. I suggest that the ability to secure a COLA clause is more the result of union strength rather than the result of some pattern of risk aversion and inflationary expectations on the part of unions and employers.

Finally, I found the calculations in Mr. Saks's Table 1 very interesting, as was his explanation of the widening of the union-nonunion differential in manufacturing from 1976 to 1980 rather than the traditional narrowing that occurs in prosperity persuasive. Not only was there a large influx of new and mostly nonunion workers, but it appears that they went into relatively low paid industries. I was somewhat startled by Mr. Saks's statement that the negotiated part of the wages for COLA workers was about the same as the negotiated raises for non-COLA workers. This implies that the entire inflation component of the wage increases of COLA-covered workers in recent years is a net gain over the noncovered workers. I remain somewhat skeptical of this conclusion.

Mr. Saks finds that three-quarters of the slippage between actual and program-authorized pay increases for unionized workers was due to the expedient way COLAs were handled by COWPS. Whatever else COWPS may be charged with, they are unlikely to be accused of holding exaggerated expectations of future increases in the CPI, at least officially.

I would like to comment on three aspects of Dan Mitchell's paper:

1. The impact of wage changes between union and nonunion groups on differentials. I haven't had time to analyze the statistics in detail, but I am surprised that the union-nonunion differentials found by Mitchell in recent years are not larger than they are. My initial impression is that Saks found larger union-nonunion differentials than Mitchell and that, unlike Mitchell, he concluded that this differential widened after 1976. I have the impression that the two papers produce different estimates for the differences between escalated and nonescalated contracts as well.

2. Since both Mitchell and Saks find union wages increasing relative to nonunion wages, Mitchell's observation that this may explain what appears to be growing resistance of nonunion employers to organization efforts sounds plausible. I would like to suggest that a case might be made that unionized employers over the long run have been offering less resistance to union wage demands. As recently as 20 years ago major national unions felt that it was necessary to produce elaborate justifications for wage increases for public consumption. Discussion of company profits, rates of productivity increases, and changes in the

CPI were prominent in the news as unions sought public support for wage claims. I haven't seen that kind of concern for public opinion by a major union for a long time, and I have the impression that these topics are not really the nitty gritty subject of discussion in the almost completely closed negotiations that occur in our major industries.

3. In many ways the most interesting material in Mitchell's paper is his attempt to begin to disaggregate the sources of the drop in union membership as a proportion of total nonagricultural employment. Overall, about 40 percent of his "coverage gap" appears to be accounted for by changes in the mix of industry employment. It would be interesting to know what explains the remainder of the decline in relative membership. Some part of it may be an artificial element caused by units dropping in size below the 1000 employee cut-off point as Dan points out, but it should be possible to identify other more interesting causes as well.

VII. EQUAL OPPORTUNITY: CURRENT INDUSTRIAL RELATIONS PERSPECTIVES

Pay Inequalities and Comparable Worth*

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A significant reexamination of current wage-setting practices is under way. This reexamination, perhaps as far-reaching as that occasioned by the advent of industrial unions and labor legislation of the 1930s and 1940s, springs from concern over the magnitude and persistence of the earnings gap between men and women. This gap is considered evidence of continued discrimination in employment relationships. At issue in the challenges to current wage-setting practices are the legislative intent of the Equal Pay Act, Title VII, and the Bennett Amendment; the assertion that current wage practices potentially cause and continue wage discrimination; and the debate over alternative policies for reducing the earnings gap. Two basic policy options have emerged to reduce the earnings gap. The first focuses on the regulation of the distribution of employment and educational opportunities; the second aims at the realignment of wage differentials among jobs. While both have the same intended consequences regarding the earnings gap, their strategies differ.

During the seventies, the regulatory agencies' and the courts' interpretation and enforcement of Title VII and the Equal Pay Act was consistent with the policy of distribution of employment and education opportunities. Under this policy, women and minorities underrepresented (in some cases excluded) in higher paying jobs within and

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* The author thanks D. Schwab, L. Dyer, P. England, D. Belcher, and G. Miller for their comments on an earlier draft.

across occupations and in education and training programs fill opportunities at rates greater than the rates at which they occur in the supply. To date, the legality of these "affirmative action" programs has been upheld in the courts.

Coupled with the accelerated sharing of opportunities is the Equal Pay Act, which ensures that women (and minorities, under Title VII) receive pay equal to men's pay for "substantially similar work." The strategic focus under the distribution of job opportunities policy is on the elimination of segregation across and within occupations through the regulation of the allocation of job opportunities and the elimination of unequal pay for jobs of similar work content. Thus, reduction in the earnings differentials is sought by the desegregation of jobs and the equality of pay within jobs.

Recently, the possibility of intervening in the process of determination of wage differentials among occupations has emerged. The argument underlying the need for realignment is that while it may be true that desegregation of occupations and jobs within occupations may eventually reduce the gap between men's and women's earnings, progress is slow.¹ Further, proponents maintain that the focus solely on job opportunities and equal pay for equal work overlooks a major source of discrimination. Jobs dominated by women may be valued less because they are "women's work," not because of any productivity-related attributes of the work performed.²

Studies of the determinants of wage differentials among occupations offer some insight into rationale behind the realignment policy. The persistent male-female earnings differential has been attributed to two factors. First, despite affirmative action programs, women tend to be concentrated in lower paying jobs and in occupations which provide limited potential for advancement. Second, the rise in labor force participation rates of women has resulted in significant proportions of women with lower seniority at or near the lower paying entry level jobs.³

Much of the empirical evidence supports the notion that a large

¹ P. England, "Assessing Trends in Occupational Sex Segregation, 1900-1976," forthcoming in *Sociological Perspectives on Labor Markets*, ed. I. Berg (New York: Academic Press, 1981).

² N. D. Perlman and B. J. Bass, *Preliminary Memorandum on Pay Equality: Achieving Equal Pay for Work of Comparable Value* (Albany, N.Y.: Center for Women in Government, Graduate School of Public Affairs, 1980); P. England and S. D. McLaughlin, "Sex Segregation of Jobs and Male-Female Income Differentials," in *Discrimination in Organizations*, eds. R. Alvarez, K. Lutterman & Associates (San Francisco: Jossey-Bass, 1979).

³ U.S. Department of Labor, Women's Bureau, *The Earnings Gap Between Women and Men* (Washington: U.S. Government Printing Office, 1979).

part of the male-female earnings gap may be attributed to overrepresentation of women in lower paying occupations and lower paying jobs within occupations rather than from women and men being paid unequally in similar jobs. When men's and women's earnings are analyzed within occupations, the income differentials are less than in the labor force at large.⁴ Some evidence suggests that within the same occupation, firms employing predominantly women tend to pay a lower average wage than those employing predominantly men; however, while the occupations are controlled in these studies, specific job content is typically not controlled. Evidence suggests that the more similar the work content, the less the inequality between men's and women's earnings. Yet the more similar the work content, the greater the chances of underrepresentation of women in the higher paid jobs and overrepresentation in lower paid jobs. In commenting on the empirical research on this issue, Fuchs observes, "Indeed, I am convinced that if one pushes the occupational classification far enough, one could explain nearly all the differentials. In doing so, however, one merely changes the form of the problem. We would then have to explain why occupation (and job) distributions differ so much."⁵

In sum, pay inequalities for work in similar jobs appear not to be a major factor in the earnings gap; rather, the distribution of women among occupations and jobs is the issue. From this perspective, the relevant question is why women end up in lower paying jobs than men.

Empirical research suggests a second, equally relevant question. "Rather than asking what causes women to be employed in lower paying jobs than men, let us ask what is it that causes female jobs to pay less than male jobs."⁶ The issue framed in this manner suggests the possibility that wages for jobs with equal productivity-related characteristics may be lower for women's jobs than men's jobs. Empirical work that explores what it is about the nature of jobs in which women are overrepresented that causes them to pay relatively lower rates is not common. It is possible that women may be concentrated in jobs which have lower productivity-related attributes than male-dominated jobs, or it may be that through overcrowding (through discriminatory practices and/or personal preferences) of women into certain types of

⁴ H. Sanborn, "Pay Differences Between Women and Men," *Industrial and Labor Relations Review* 17 (July 1964); V. Fuchs, "Differences in Hourly Earnings Between Men and Women," *Monthly Labor Review* 94 (May 1971), and "Women's Earnings: Recent Trends and Long-Run Prospects," *Monthly Labor Review* 97 (May 1974); and B. G. Malkiel and J. A. Malkiel, "Male-Female Pay Differentials in Professional Employment," *American Economic Review* 63 (September 1973).

⁵ Fuchs, "Differences in Hourly Earnings . . .," p. 14.

⁶ England and McLaughlin.

work, lower wages can be paid regardless of the value of the work content.⁷ More research directed at investigating the attributes of different jobs and valuing those attributes is required before the effects of the allocation process can be separated from the effects of the process of setting wage differentials within and across opportunities.

Strategies for the Regulation of Realignment

Evaluation of policy options includes consideration of the feasibility of implementation, the likelihood that the policy will achieve its objectives, and the possibility that other, perhaps unintended, consequences may occur. The remainder of this paper examines only the first: feasibility of implementation.

The problem confronting any policy of restructuring wage differentials among jobs is the lack of a feasible implementation mechanism. The mechanism problem was less severe under the distribution of job opportunities policy, since strategies for the validation of test and other entry and upgrading requirements had been relatively well developed and researched prior to the implementation.⁸ If realignment of the differentials between "women dominated" and "men dominated" jobs is to receive serious consideration, methods for accomplishing it must be developed and potential consequences evaluated. Further, some responsibility for analysis rests with those who conduct research in industrial relations. It seems clear from recent decisions that the courts are not inclined to supervise any realignment of wage structure to reduce the earnings gap until a process to achieve it has been developed and tested.⁹

Comparable Worth

The principal mechanism suggested to accomplish the restructuring of differentials is to set wages based upon the notion of comparable

⁷ M. Stevenson, "Relative Wages and Sex Segregation by Occupation," in *Sex Discrimination and the Division of Labor*, ed. C. Lloyd (New York: Columbia University Press, 1975); D. J. Treiman and K. Terrell, "Women, Work and Wages—Trends in the Female Occupational Structure Since 1940," in *Social Indicator Models*, eds. K. Land and S. Spilerman (New York: Russell Sage, 1975); and J. E. Rosenblum, "Hierarchical and Individual Effects on Earnings," *Industrial Relations* 19 (Winter 1980).

⁸ R. L. Thorndike, *Personnel Selection* (New York: Wiley, 1949); M. D. Dunnette, *Personnel Selection and Placement* (Belmont, Calif.: Wadsworth, 1966). This is not to suggest that the regulation of the distribution of employment opportunities is without methodological issues. Workable procedures for defining availability and the appropriateness of content validity strategies are examples.

⁹ A major exception is *IUE v. Westinghouse*. R. E. Williams and D. McDowell, "The Legal Framework of the Equal Pay Controversy," in *Comparable Worth*, ed. R. Livernash (Washington: Equal Employment Advisory Council, 1980).

worth or value. Comparable worth, which focuses on the comparison of jobs across rather than within occupations, has been defined as "jobs that require comparable (not identical) skills, responsibility, and effort."¹⁰ Yet in an analysis of the meaning and measurement of comparable worth, Schwab summarizes the present state of knowledge. "At present, however, there is no mechanism for defensibly establishing comparable worth."¹¹

Under current compensation practices, the differential "worth" or "value" of work is established through the interaction of a variety of forces, including market forces, forces attributed to collective bargaining, economic condition and policies of the employer, technology, and norms (including discrimination) found in the workplace. A variety of components, including job analysis, job evaluation, market surveys, negotiations, etc., constitute the wage-determination process.

Job evaluation, suggested by some as a possible mechanism to measure comparable worth, does not as currently designed and practiced accomplish this purpose. Through the systematic use of judgment, it does play a role in the setting of wage differentials through the identification of work attributes such as problem-solving, accountability, and knowhow for exempt work; responsibility, skill, and effort for non-exempt work. These attributes are correlated with an agreed-upon wage structure of selected benchmark jobs which represent only that portion of all the firm's jobs that are identified in the market. It is the agreed-upon wage structure for these benchmarks which serves as the criterion of value of work in current practice. This structure does not simply mirror the rates in the market; in fact, wide variations in rates for benchmark jobs are common. It also reflects the results of bargaining between employers and unions, organizational differences in pay policies (e.g., merit systems), and the higgling among managers within any employer. These negotiations reflect a variety of conditions facing the parties, their relative power, as well as the norms and customs of the work environment. The compensable factors, appropriately weighted to predict the agreed-upon structure, are then applied to jobs to generate the wage structure.

Worth, as assessed through job evaluation, reflects the agreed-upon wage structure for the selected jobs. The validity of the rates assigned to any job is dependent upon the ability of job evaluation to estimate the structure of agreed-upon rates. If the agreed-upon wage structure

¹⁰ Perlman and Bass, p. 2.

¹¹ D. Schwab, "Intra-Organizational Pay Setting and Comparable Worth," in *Comparable Worth*, ed. R. Livernash (Washington: Equal Opportunity Advisory Council, 1980).

includes discrimination, as the proponents of realignment policy allege, then job evaluation simply captures and reflects that discrimination in the rates it establishes.

Comparable worth implies that wage differentials should be based on work content and skills required to perform the work. Consequently, application of the comparable value notion requires the development of a universal taxonomy of job content/skill requirements capable of being applied across all occupations and all jobs within occupations. Without this, comparisons across occupations and across employers to identify comparable jobs would not be feasible. Current wage practices and related research suggest that such a taxonomy may be feasible, though considerable research remains. Certainly the compensable factors used in existing job evaluation plans suggest that universal attributes of job content are feasible.¹² However, relative values assigned to these factors remain based on a standard which includes the existing wage structures, thereby incorporating existing differentials between male and female jobs. Current research on quantitative job analysis suggests an approach to identify universal attributes.¹³

There has also been some work in which a tentative listing of skills relevant to job behaviors is identified.¹⁴ Thus, while research methodologies to develop a taxonomy of work/skills attributes exist, whether or not a taxonomy that applies to all jobs can be developed is still at question.

The issue of measurement of worth still remains. Existence of a work/skills taxonomy doesn't in itself establish an agreed-upon wage structure. Jobs with comparable work content and skills would be paid equally, but which skills and content should be valued more, or less? How are differentials established? Answers may lie in using the wage structure of male-dominated work as the standard. The basic approach would be to develop the work-skills taxonomy for all jobs, male and female. Next, establish as the criterion of worth an agreed-upon wage structure for all male jobs. The latter's wage structure is assumed to be the best nondiscriminatory estimator of the effects of market forces,

¹² The wide acceptance of the Hay Plan factors (accountability, problem-solving, and know how) by approximately 3000 diverse employers in diverse industries is a case in point. Hay & Associates Annual Report. 1980.

¹³ M. D. Dunnette et al., "Task and Job Taxonomies as a Basis for Identifying Labor Supply Sources and Evaluating Employment Qualifications," *Human Resource Planning* 2 (1979); and E. McCormick, *Task Analysis* (New York: McGraw-Hill, 1980).

¹⁴ G. C. Theologus, T. Romashko, and E. A. Fleishman, *Development of a Taxonomy of Human Performance* (Washington: American Institute of Research 7-26-1, 1970). Thirty-seven abilities were identified, ranging from verbal comprehension, ideational fluency, flexibility of closure, to finger dexterity.

collective bargaining pressures, and other factors influencing wage differentials. The work content/skill required factors are then correlated with the all-male wage structure. These correlates, weighted to estimate all-male differentials, are then applied to all female jobs to establish their wages. This approach, while conceptually intriguing, has several problems. For example, the approach also suffers from restriction of range, since the value of work and skill factors is based only upon male wages, which tend to be the higher paid jobs. Content and skills in lower paid work may be omitted or undervalued in this approach. While much of the above is speculative, the feasibility of this method nevertheless seems promising.

Concluding Comments

Regulation of the alignment of the wage structure and the allocation of job opportunities are not in conflict. It is clear that elimination of discrimination in the distribution of jobs, coupled with equal pay for similar work, will reduce discrimination in earnings. It should be equally clear that the focus on equal job opportunities and equal pay for equal work fails to insure that current wage differentials among jobs across occupations are nondiscriminatory. The basic position taken in this paper is that before employers, unions, regulating agencies, and the courts can supervise any realignment of wages for work performed predominantly by women, a mechanism to accomplish it must be designed and tested. Such a mechanism does not currently exist. It should be clear, however, that it may be methodologically feasible to develop an approach based on the notion of comparable worth. The approach, using a taxonomy of universal work components/skills required, and an agreed-upon wage structure of male jobs, needs to be further examined.¹⁵

Additional issues concerning the policy of realignment of the wage structure need to be examined. For example, the approach discussed here ignores supply-side considerations. What are the consequences of a realignment of wages for clerical and service occupations to more closely correspond to other occupations, for example, the skill trades or manufacturing assembly work? What are the implications of a re-adjusted structure on shortages and surpluses of skills? It has been argued by some that wage differences are overrated as allocating mechanisms; rather, differential opportunities (demand for skills) serve to

¹⁵ An alternative approach to developing a bias-free job evaluation plan, "part-correlation," in which the effects of sex (race) composition of jobs are partialled out has been suggested. See the *National Academy of Sciences Draft Guidelines on Job Evaluation Plans* (Washington: Bureau of National Affairs, 1980).

allocate. This may be small comfort to the employer who experiences shortages of computer programmers, engineers, and technicians, but is regulated against raising wages for these skills unless wages for other jobs with comparable, though not identical, skills must be raised also.

Finally, it is not at all clear that completely changing the wage determination process based on the notion of equal pay for jobs of comparable worth and skill will in any way influence the earnings gap between men and women. It assumes that jobs in which women are overrepresented are undervalued in current practice. We simply don't know that women (or minorities) on the average are overrepresented in undervalued jobs. A more basic point, of course, is that if society desires that the median earnings of women and men be more equal, then we ought to be sure that notions such as comparable worth will generate that objective.

Social Relations in the Workplace and Employer Discrimination*

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The fact that white males have a virtual monopoly of the best jobs and the highest incomes is explained by one school of economists as occurring simply because employers prefer things that way, even though employers lose money in enforcing it. Another school comes to the opposite conclusion as to whether the white male dominance of the best jobs is the most profitable arrangement for employers. This group in effect argues that a fair review of the candidates for all of the good jobs would show that all of the best candidates are white males, so that hiring and promoting them is indeed the most profitable way employers can operate, and is at the same time fair and nondiscriminatory. Both of these points of view strike us as unpalatable, rather too simple, and unilluminating of what we might call the scenes of everyday economic life, in which people perform and interact on the job, in which hiring and promotion decisions are made, and in which wages are set.

In this paper we present a set of ideas which emphasizes the importance of social relations among people of different race or sex in the workplace, and the connection between productivity and smooth social relations. This set of ideas suggests that discrimination is dictated by considerations of profitability in many cases and accounts for occupational segregation by race and sex, for the relegation of minority people to dead-end jobs, and for the lower wages they earn on average.

Productivity as the Outcome of a Social Process

Our analysis starts from the premise that considerable numbers of

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black women, black men, and white women have the capacity to perform a wide variety of tasks in entry-level jobs usually reserved for white men, and have the ability, by which we mean the intelligence and the drive, to perform them as well as the white men who customarily get those jobs. We are leaving aside consideration of those tasks for which specialized education or training or experience or strength would be required. We are concerned here with ability to perform the multiplicity of tasks the vast majority of white males' entry-level jobs require—driving a truck on the highway, serving as police officer, management trainee, painter, apprentice crafts worker. Our argument does not depend on the assumption that the distribution of abilities is the same or nearly the same in all race-sex groups. We are taking a far more conservative position, namely, that the distributions have enough overlap so that the proportion of the best candidates who are white male is not close to 100 percent in many of the situations where the proportion of white males who are hired is 100 percent or close to it.

Something excludes the able candidates who are not white male. We would locate that "something," not in the lack of innate capacities of a high proportion of the excluded group and not, principally, in the indulgence in bigotry or in complicated statistical calculations on the part of employers. We would rather draw attention to the fact that having innate ability is a necessary but not sufficient condition for performing creditably on any job. Workers (including immediate supervisors) affect each other's performance, and a person of sufficient innate ability (whether inborn or developed through training) to perform well on a job in a milieu which is cooperative, nonhostile, and facilitating may show low or negative productivity in a hostile milieu.

The analysts of the human capital school seem to characterize an individual's productivity as almost entirely under that individual's control. He or she is born with certain capacities, develops them through training or education, "chooses to invest" in himself or herself, and then presents the prospective employer with these capacities for appraisal and reward. What this view slights is the fact that productivity grows out of a situation in which human beings interact with each other and therefore is, at least in part, social in nature.

The employer who wants high productivity must be acutely concerned about social relations in his establishment. Employers may be anxious to pull new groups of workers into the workplace if they can be paid lower wages than the workers already in place. They may want simply to hire the cheapest labor that can be found regardless of race

or sex. But the reaction of the employees already in place—which takes the form of racism and sexism (or jingoism when the newcomers are foreigners)—may provide the barrier. Even in a new establishment, racism and sexism can create severe operating problems. Thus racism and sexism pose management problems for employers who want to draw upon the less expensive sources of labor but do not want to face the associated costs of workplace disruption. Labor market discrimination in a variety of forms on the part of the employer may be the outcome. In part, the problem may arise because workers who hold slots fear the consequences of the entry of a new wave of workers with lower standards of compensation. Part of the problem may arise from the difficulties men may have in interacting with women as equals, or whites with blacks as equals. Bonacich [2], Marshall [8], Swinton [9], and Cox [3] have argued that workers who hold a privileged status may desire to exclude others. What has not been emphasized in the literature is the effect of the breaching of race or sex barriers on productivity, although Arrow's work [1] carries that implication.

In a milieu of employee hostility, employers who don't share bigoted attitudes, or would be willing to overlook them for profit, are motivated to avoid productivity-reducing troubles. Employers may calculate or know through experience that the problem of reduced productivity may outweigh the benefit of lower wages to the profit-and-loss statement. If they know that their existing workforce members will deny the newcomer training, respect, or civility, then the newcomer will look "less productive" to the employer. The employers might as well carry out their "preferences."

Social Relations in Work Establishments

In almost any work establishment, the employees need to interact with each other for there to be any output at all, and the quality and smoothness of their interactions will powerfully affect the establishment's productivity. If there is a group of employees doing the same job, the members of that group will contribute more to the productivity of the establishment if they interact cooperatively—if the experienced workers are willing to teach newcomers the ropes, and if there is an absence of personal tensions resulting from slights, insults, or attempts to establish dominance relations. If one person is assigned to supervise a group of employees, the supervisor will be more effective in expediting production if the supervisor has no personal characteristics that make it difficult for some of the assigned subordinates to give respect and to submit to direction.

When they come to the job, American workers bring with them ideas about the status conferred in society by being of the male sex and having a white skin, as well as ideas about the roles customarily played in the home and in social life generally by men and women, by whites and blacks. Obviously, these ideas are likely to influence workers' interactions with fellow workers. Evidence which sociologists have collected by systematic observation shows that ideas of sex dominance, for example, have an important effect on job behavior.

A particularly vivid description of the part that workers' ideas of sex roles play in relations among workers on the job was provided by Whyte [11] in reporting a study of restaurants done in 1947. The investigators whom Whyte sent to observe noticed that when a waitress, in the course of her duties, had to interact with a male employee of the restaurant in a way atypical of the manner in which females and males interact in ordinary life, there was potential for trouble of a sort which would adversely affect the productivity of the establishment. Whenever a woman had to "set in motion" a man—as when a waitress had to get a bartender to make a drink which a customer had given her an order for—there was likely to be resentment on the part of the man. This resentment resulted in behavior which, in some cases, caused a deterioration of the service received by the restaurant's customers. In Europe, waiting on tables is typically a man's job, possibly for some of the reasons that emerge in Whyte's findings.

The waitresses studied by Whyte were in a traditionally female job for the United States. Studies of women who have been introduced into nontraditional jobs or into situations which simulated conditions in such jobs have demonstrated the problems which arise and, by implication, the threat to productivity which such problems pose. Judith Long Laws [7], who reviewed research on this issue by sociologists and psychologists, says ". . . the possibility that male co-workers will explicitly and deliberately arouse sex role conflicts by baiting the woman recruit cannot be ruled out. Research on women in non-traditional occupations documents a whole range of harassment and sabotage by male co-workers and sometimes supervisors . . ." [7, p. 64].

The historical reaction of white workers to the placing of black workers in jobs which are nontraditional reveals a parallel pattern. Longstanding enmity between black laborers and white-dominated unions is a premier manifestation. The unions have played a major function in excluding blacks from those sectors of the workplace dominated by the presence of organized labor [5]. David Taylor's study [10] of the Chicago labor market found that there were some jobs for

which black and whites were both recruited, but employers who recruited blacks paid them less and provided them with no prospects for upward mobility. Whites may more easily accept the intrusion of black workers when there are evident guarantees that the blacks will not compete with them over the occupational life-cycle.

Race/Sex Territories in a Firm

If even a very small proportion of whites are in a mood to make trouble for blacks who are moving into nontraditional placements or even if a small proportion of men make trouble for women moving into nontraditional placements, this may be enough to cause substantial unrest in the workplace. Where the person making trouble is a long-term employee, loaded down with valuable experience in the firm, whose loss would be a serious blow to the productivity of the organization, the employer is faced with a serious loss if he insists on resolving the incident in favor of the newcomer.

We would conjecture that employees who deal in personnel matters for business firms and other establishments develop or have handed down to them a few simple "axioms" on race and sex, which these days one would not expect to find written down in any manual:

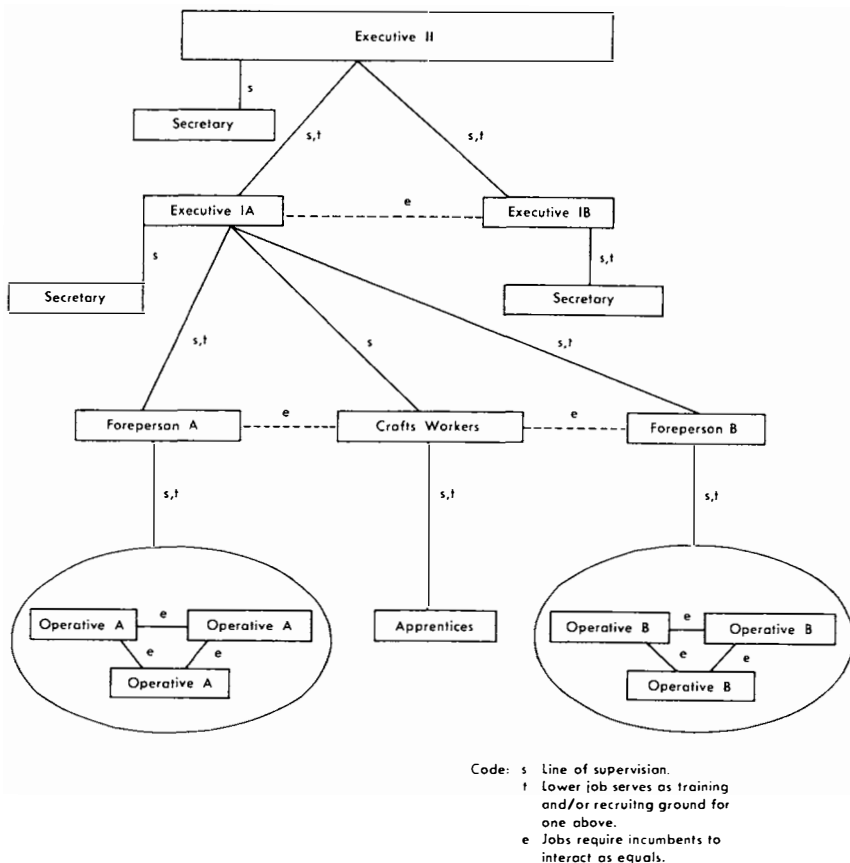
1. People who work in the same job and/or must interact as equals will interact more smoothly if they are all of the same race and sex.
2. If a person is supervised by someone who by race and/or sex has an inferior social status, tensions may arise.
3. If the occupations which constitute the training ground for another occupation are open to people of a race and/or sex whose presence in the latter would create frictions, the pool of able persons eligible for promotion would be reduced.

We suggest that these axioms, in the absence of governmental pressure to do otherwise, will be actively used in making decisions about whom to hire and whom to promote for specific jobs.

The operation of these axioms and their effect on race-sex assignments can be illustrated by the example of a hypothetical and highly simplified work establishment or "internal labor market" [4], shown in Figure 1. The firm is shown as having two kinds of operatives, each group supervised by a foreperson, who reports to a low-level executive with "line" functions (IA). There is another low-level executive (IB) with "staff" functions, who also reports to the higher-level executive. Each of the executives has a secretary. In addition, there are crafts workers who fix the machines on which the operatives work, and who

must interact on an equal basis with the forepersons. The crafts workers pass through a period as apprentices. In Figure 1 we show lines of supervision (marked s) and lines of training (marked t) showing that some jobs serve as training and/or recruiting grounds for others. We also have indicated lines between jobs which require their incumbents to interact as equals (marked with an e).

Figure 1. Hypothetical Organization of a Work Establishment



Consider the problem posed for the management of this establishment, which is interested in establishing a race/sex occupational pattern which will minimize unit labor cost. The lower wage which blacks and women can be paid will be a factor favoring their hiring and promotion, but the "axioms" of interaction developed above will be a factor against their use in most jobs. Even under the assumption that man-

agement knew and believed that good candidates for all the entry-level jobs (operatives, crafts apprentices, and secretaries) could be found in both races and both sexes, we would be likely to observe occupational segregation by sex and race.

Management might be expected to try to find as many slots as possible to put blacks and women into because of their cheapness, subject to the cost constraints suggested by the "axioms." Axiom 1 suggests that if any occupation is opened to a particular race-sex group, then all members of that occupation must be of that group. Axiom 2 suggests that the most likely slots for blacks and white women are entry-level positions. Axiom 3 suggests that jobs at all levels must be reserved for the group that is to be given the top-echelon jobs so as to provide adequate training opportunities for successors to the present incumbents.

The top executive is likely to be a white male, given the status quo within firms as well as conditions in other firms from which candidates for this job can be recruited. If this is so, then to provide a training ground within the firm for successors to the present incumbents, either Executive IA or Executive IB or both must be white male. If Executive IA is white male, then one of the forepersons and all of the operatives under the foreperson must also be white male. If the crafts are unionized, they are also likely to be white male, and this makes white male incumbency of the Executive IA position mandatory. If Foreperson A is a white male, fulfilling the need for a training ground for Executive IA, then Foreperson B and Operatives B may be black and/or females. Mitigating against this would be the difficulties possibly to be encountered in relations between Foreperson B and the crafts workers. Similarly, Executive IB might be a minority person, if the relations between Executive IA and Executive IB are not an important feature of the job of Executive IB.

So far we have been discussing the effects of behavior by individual male or white workers when attempts are made to increase the territory available to minority groups. There is an additional element which suggests itself—the idea of cohesive same-sex same-race groups occupying and defending "turf," an idea suggested by Bonacich. Here the idea is that there may be concerted efforts to maximize each group's territory. Employers who may want to hire blacks and women because of their cheapness may find it easier to do so if they carve out for them territory which is least desirable for white males. Thus, employers may purposely structure jobs that are dull, dirty, dangerous, and dead-end so as to have jobs that white males do not covet and do not make trouble over.

Policy Considerations

We have presented a productivity motive for employers' practice of race and sex discrimination. We are not suggesting that in the interest of productivity, government prohibitions on discrimination should be eased or abolished. First, to do so would be to trade equity for material gain in this case. Second, if a serious effort were made to enforce anti-discrimination laws, the productivity effect might be shortlived. The rise in respect for blacks and women which would accompany their elevation in the workplace would react back on societal relations and thus make further integration in the workplace progressively easier.

Employer discrimination persists and is difficult to eliminate because it is productivity based. Perhaps if enforcement agencies and firms paid more attention to ways to smooth nontraditional placements, and to deal with noncooperative white and/or male employees, more progress could be reported. More field research such as that of Kantor [5] into what actually happens when women and black men are placed in non-traditional jobs is needed. Her research suggests that more nontraditional placements rather than fewer might ease the productivity problem.

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DISCUSSION

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During the 1970s, research on labor market discrimination divided, naturally enough, into theory, measurement, and policy, with the bulk of the work falling into the middle category. The only unusual feature of this division was that each of the three strands of research often appeared to be uninformed by developments in other areas. You can see some of this reflected in two of the papers for this session. The papers by Bergmann and Darity and by Milkovich both address the question of the historical tendency toward job segregation of men and women. The former paper is concerned with explaining the phenomena theoretically; the latter with a new policy proposal intended to remove wage disparities that may result from the segregation. Some might find it odd that the policy would be pursued before the underlying behavior was understood. Overall, the papers indicate a remarkable amount of irresolution on fairly basic issues.

The paper by Bergman and Darity (B&D) grapples with the unsatisfactory state of the theory of labor market discrimination. Although the authors have made a sensible choice in focusing on the implications of hostile worker interactions, there is a basic tension in the paper. The tension is between skepticism concerning the adequacy of standard microeconomic analyses of labor market discrimination and the difficulty of specifying a powerful explanation of why the market forces that seem to operate in other situations fail here. In my view, the tension is never resolved satisfactorily.

First, it is important to remember that the theory advanced by B&D assumes a benign employer. This preserves a standard market orientation with respect to employer motivations and circumvents the awkwardness of having a theory based on employer prejudice in which it is not at all clear that the employer gains. Instead they postulate that white male workers make it tough on women or racial minorities who are introduced into the workplace. (The origin of the white male atti-

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Editor's note: The third paper presented in this session, "Regression Analysis of Pay Differences by Race and Sex," by Gail Blattenberger and Stephen Michelson, will be published elsewhere.

tudes are not really delineated in the paper—a fault they find with recent “divide-and-conquer” approaches to discrimination theory. However, an explanation is not absolutely essential to their argument, and, in any event may be beyond the bounds of economic analysis.)

Second, the paper is a bit slippery on whether the authors view women and racial minorities as substitutes or complements to white males (or both). Much of the time the authors appear to view the race-sex groups as substitutes (e.g., by stressing the substantial overlap in the skill distributions and the fact that they are concerned with access to entry-level positions). But at times they seem to be concerned with relationships between complements (e.g., supervisors and workers) as in their internal labor market example.

If the haves and have-nots are substitutes, it seems to me that B&D’s view reduces to the model of employee discrimination originally advanced in the work of Becker and Arrow. The truly benign employer will not mix the workforce for exactly the reasons the authors posit—the frictions and morale effects that work to reduce productivity. The employer will specialize in whichever group is cheapest and, in general equilibrium there will be employment segregation by firm but not by job.

This is where some of the tension enters: the authors have postulated standard market motivations for employers, but if employers follow through on those motives, the problem that concerns the authors does not exist. If they feel that these responses do not operate, then their analysis does not indicate why the market response is truncated. The paper lacks a persuasive explanation of why (in this situation) firms specializing in a female or minority workforce do not emerge. In an economy with considerable turnover of firms, there is great potential for this sort of adjustment, even if historically firms were owned by white males. Why don’t the benign but profit-oriented employers in the new firms pursue the motives the authors attribute to them and specialize in the cheapest race-sex group? If the adjustments do not occur, then (a) there must be imperfections in the capital market that prevent unprejudiced employers from acquiring firms, or (b) there may in fact be human capital differences that contribute to race-sex differences in job level. The paper would benefit from a clarification of this issue.

Suppose instead that the haves and have-nots are *complements*. This could occur if the various race-sex groups were basically substitutes for entry-level positions (as the paper seems to maintain) but higher positions were held by white males. (However, the complementarity seems a bit awkward in a paper with benign employers and strong

reservations about the power of the human capital approach to explaining economic differences by race and sex.) In this situation it is still not obvious that exclusion is the solution. Again, the earlier neoclassical analyses of these very motivations stressed the role of compensating wage differentials in resolving the tensions that this paper stresses.

More generally, the paper is virtually silent on the wage implications of the analysis, although this is an issue that gets considerable attention in empirical work on discrimination and in the earlier theoretical literature. Under the motivations attributed to employers, there should be no wage differentials. If various race-sex groups are substitutes, the well-known implications of discrimination by the worker majority is employment segregation by firm (as noted above) but no wage differentials by race and sex. If the race-sex groups are complements, minority workers may be paid less than their marginal product if white male supervisors must be paid a premium to work with women and minorities. But this view then requires a more explicit explanation of why all the supervisors are white males. Are there in fact human capital differences? Or, does the (B&D) theory ultimately rest on some employer prejudice?

The Milkovich paper basically focuses on the same issue—why there may be separate sets of entry-level jobs for men and women—from a policy perspective, and the focus is more clearly on wages. The comparable worth idea seems to resurrect issues that centrally planned economies have addressed without notable success in efforts to determine a wage structure by central direction. It raises the classic issue of whether planners can acquire sufficient information to set wage structure that would eliminate the effects of discrimination without generating offsetting inefficiencies. Milkovich is persuasive on some of the limitations of current personnel techniques for estimating comparable worth.

There is also at least one potential limitation in his proposed approach suggested by labor market theory. Wage differences among jobs reflect in part the role of nonpecuniary conditions of work on job choice. Men and women may be substitutes in a human capital sense but have different preferences (on average) for the desired mix of pecuniary and nonpecuniary compensations from a job. If women prefer proportionately larger nonpecuniary compensation, female wages will be lower than male wages in jobs of equivalent content. The reverse would be true if men preferred proportionately larger nonpecuniary compensation. The point is that an efficient wage structure will reflect group differences in *tastes* as well as the skill factors stressed in the

Milkovich paper. The importance of nonpecuniary incentives in labor markets raised two difficulties for the implementation of the comparable worth idea. First, they are difficult to delineate and evaluate in a comprehensive way. Second, even if the first problem is solved, the approach advocated by Milkovich will lead to error in the assessment of comparable worth when there are significant male-female differences in the role of nonpecuniary factors in job choice.

VIII. INDUSTRIAL RELATIONS IN WESTERN EUROPE

The Development of Industrial Relations in European Market Economies*

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Organization for Economic Cooperation and Development

This paper offers (1) some reflections¹ on the nature of industrial relations systems in European market economies and the lines along which they have evolved; (2) a review of developments in three key areas of industrial relations—collective bargaining, workers' participation, work organization, and working conditions, and the role of the state; and (3) a point of reference to the United States in the context of the challenges which face both Europeans and Americans.

A European Industrial Relations System?

The European countries considered here have widely differing traditions and circumstances. They include some of the world's oldest industrial powers. In a few of them, industrial relations development has

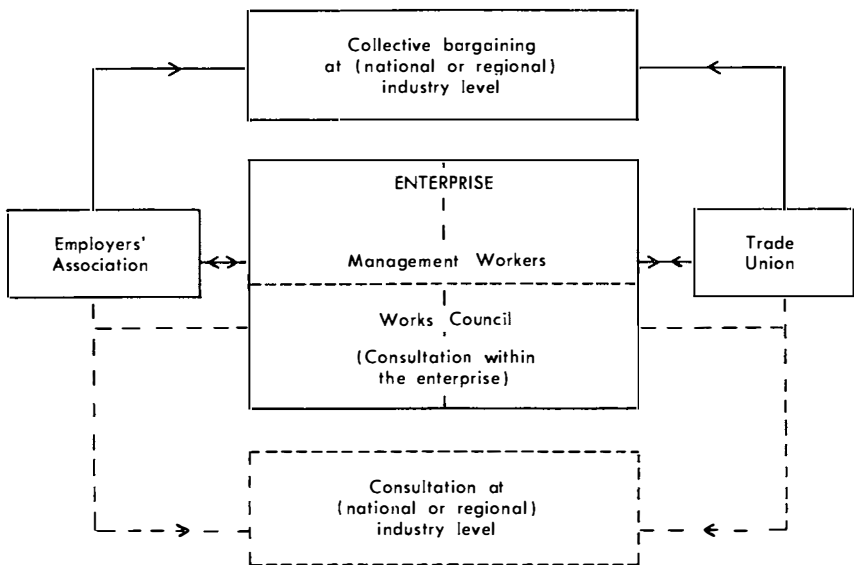
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* This paper presents Mr. Clarke's personal views, which are not necessarily those of the OECD.

¹ To supplement the rather selective bird's-eye view offered in this paper, readers are referred to: E. Kassalow, *Trade Unions and Industrial Relations: An International Comparison* (New York: Random House, 1969); J. Barbash, *Trade Unions and National Economic Policy* (Baltimore: Johns Hopkins University Press, 1972); J. S. Schregle, "Labour Relations in Western Europe: Some Topical Issues," *International Labour Review* (January 1974); S. Barkin, ed., *Worker Militancy and its Consequences, 1965-75* (New York: Praeger, 1975); H. A. Clegg, *Trade Unionism under Collective Bargaining* (Oxford: Blackwell, 1976); C. Crouch and A. Pizzorno, eds., *The Resurgence of Class Conflict in Western Europe Since 1968* (London: Macmillan, 1978); J. Dunlop and W. Galenson, eds., *Labor in the Twentieth Century* (New York: Academic Press, 1978); B. C. Roberts, ed., *Towards Industrial Democracy, Europe, Japan and the United States* (London: Croon Helm, 1979).

been almost linear; in others, war or major political upheavals have led to substantial changes. However, except for Italy, which experienced considerable change in the late 1960s, and Portugal and Spain, where new systems have been shaping up in the last few years, the basic structure of present European industrial relations systems was in place by 1952. That structure contained some fairly uniform elements: reduced to very crude fundamentals, the "European model" looks something like Figure 1.

Figure 1



This diagram illustrates two key European features, firstly, the importance of the national (or regional) industry level of interaction, and, secondly, the division between matters on which employers' and unions' interests clearly differed and those on which they were broadly shared. Basically, conflictual matters were dealt with by collective bargaining outside the enterprise (so that the unions had no direct role inside), while common interests were discussed within the enterprise—though in some cases, as suggested by the dotted lines, there might be informal links with the outside organizations and possibly national consultative machinery. It should be added that the national-central (confederal) level of interaction is also important in some countries and that, for simplicity, the role of state agencies has been left out of the diagram.

For those unfamiliar with the European scene I should add that in the years following the war the setting up of a works council or com-

mittee was required by law or by central collective agreement in nearly all West European countries except Britain, Ireland, and Switzerland. The councils were not intended to talk merely about production or grievances but, to some extent, embodied the common interests of the work community, and they were given specific rights to information consultation, and joint decision-making and, though rarely, unilateral decision-making. In "social" matters particularly they were meant to provide some check on arbitrary management. Commonly the councils were deemed to represent the whole workforce, union and nonunion workers alike, and in some cases their members were not necessarily trade unionists.

The neat model I have described was never generally applicable; it did not fit the British and Irish cases, for instance, with their highly developed shop steward systems. Today, it has become far less accurate, even as a skeletal structure. But in the great majority of countries the structure is still identifiable and the changes which have occurred have mainly been accretions to the structure, or changes in its operation. Three of the many changes which have taken place in European industrial relations, as follows, seem to me particularly important.

The Areas of Change: 1. Collective Bargaining

Still the preferred method in Europe for determining wages and working conditions, collective bargaining has changed in several ways. In most of the countries there has been a movement away from the old emphasis on the national- or regional-industry level: in a few instances and respects, bargaining has moved toward the central, or confederal, level, but to a much greater extent the movement has been toward bargaining in the individual enterprise or workplace² (attracting with it increased workplace union organization). There has been some talk of transnational bargaining. So far there are scarcely any real examples, but there has undoubtedly been a considerable increase in international trade union coordination, both in relation to major multinational enterprises and industries and more generally. (This is not, of course, merely a European trend.)

Though the development has not been uniform, the subject matter of bargaining has widened out considerably over the years. In Italy, for example, unions have negotiated enterprise investment policies, the provision of community amenities, and joint handling of work shortages. The Swedish Codetermination Act, 1976, sought to extend the scope of bargaining to cover all matters in the enterprise of concern to unions. And bargaining has come to cover many more white-collar and public

² See N. F. Dufty, *Changes in Labour-Management Relations in the Enterprise* (Paris: OECD, 1975).

employees and managers. Lastly, collective bargaining has aroused some concern, in several countries, by a tendency for its outcome to be seen by governments as likely to stimulate inflation.

The Areas of Change: 2. Workers' Participation, Work Organization, and Working Conditions

A major area of change in European industrial relations has been the strengthening of workers' participation in management. Most North-western European countries have legislated for worker representation on boards of directors (be it on single-level or on two-tier—supervisory and management—board structures). In the Federal Republic of Germany such representation comes very close to parity with that of shareholders in some industries and firms, but in most countries worker-directors are decidedly in a minority. In practice, boardroom representation of workers does not seem to have had any great effect on either business efficiency or workers' satisfaction, but it may well have helped to facilitate change.

The powers of works councils, a long-established form of participation, have been considerably widened over the years, providing additional opportunities and extents of participation. Opinions about the councils tend to be lukewarm, but there is no move to diminish or abolish them—though in Italy the traditional works committees, provided by inter-confederal agreement, were generally replaced, following the great changes at the end of the 1960s, by very different factory councils, having bargaining functions.

The extension of occupations covered by collective bargaining, and of the subject matter of bargaining, has provided additional means for workers to have more say in managerial decisions.

The nature and organization of work have been much discussed in Europe, notably from the point of view of increasing workers' say in the design and carrying out of tasks, but also with a view to reducing absenteeism and labor turnover and otherwise increasing productivity. A number of countries have set up state agencies and research programs to promote advance in this field, and to improve the work environment. While changes in work organization have not covered any great number of workers, they have commonly had good results, both for efficiency and for work satisfaction, and they have undoubtedly had an impact on the thinking of future generations of managers.

Viewed overall, the wave of interest in participation in management which mounted in Europe at the beginning of the 1970s seems to have slackened, but modest changes toward greater participation continue

and it may be expected that the subject will return to the fore when the world economy improves.

The Areas of Change: 3. The Role of the State

The most general European tradition has been for the state to provide a (more or less comprehensive—according to national tradition and culture) legal framework for industrial relations and, in some cases, to make limited provisions concerning minimum wages or working hours. Additionally, a number of countries (but not all) have long had state services for conciliation, mediation, and arbitration, though governments themselves have commonly preferred to stand outside industrial conflict. Lastly, the state has always had to deal with its own industrial relations problems as an important employer itself.

In some countries, notably Austria, the Federal Republic of Germany, Sweden, and Switzerland, the principle that industrial relations are regulated, within the law, by unions and employers themselves has been generally maintained. On the whole, however, the state has come to play a much greater part than formerly in industrial relations. The most important reason for this increased involvement springs from the apparent conflict,³ mentioned above, between the outcome of collective bargaining and the economic policies governments wish to follow. This conflict has led governments to employ, in many countries and on many occasions, a wide variety of measures including wage freezes, or limitation of increases, establishment of special agencies to review increases, and incomes policies agreed with trade unions and employers. Alternatively, or additionally, governments have used monetary and fiscal policies to influence the bargaining climate. The twin role of government as economic regulator and employer, given the substantial rise in public employment common in Europe over the postwar years, has presented particular problems in regulating wages in the public sector.

Of recent years one of the most striking developments has been a growth in efforts by governments, unions, and employers to achieve consensus as to the outcome of collective bargaining, sometimes positing restraint on assurances concerning specific government policies: Ireland, Norway, and Britain at the time of the "Social Contract" are noteworthy examples.

Two questions remain: What are the present underlying tendencies in European industrial relations, and what can be noted from comparing European developments with those in the United States?

³ See *Collective Bargaining and Government Policies* and *Collective Bargaining and Government Policies in Ten OECD Countries* ([both] Paris: OECD, 1979), and J. Addison, *Wage Policies and Collective Bargaining in Finland, Ireland, and Norway* (Paris: OECD, 1979).

The main forces for change in any industrial relations system may be crudely classified as sociopolitical, economic, and technological, though such forces are usually so intertwined as to be difficult to disentangle. In the 25 or so years of continuous economic growth, until 1974, the sociopolitical forces had the most direct impact on European industrial relations. More extensive and new-style education, the protection afforded by the Welfare State, generally full employment, frequently improved bargaining power (and some of it due to greater capital intensity and tighter integration of industrial processes), and entrenched expectations of annual improvement seem to have been most prominent in influencing attitudes and shaping the changes reported above. By 1968–72 considerable pressures for change had built up in a number of countries.⁴

The setbacks of 1974 and the generally colder economic climate since then pushed the economic factor to the fore. The force of workers' expectations came up against the harsh reality that little was available to permit further improvement. The speed of adjustment varied considerably between countries. In some, workers quickly lowered their expectations; in others, pressures for high wage increases continued strong—and, whether it be cause or effect, these were the countries with the highest rates of inflation. The new substantial energy price rises of 1979–80 presented a further challenge to collective bargainers. There was anxiety amongst economic policy-makers about the likely consequences if these were to pass through into higher wages, but so far bargaining has adjusted fairly effectively in most countries.

The changed economic climate also had an effect on trade union strength and policies. Current union priorities tend to be reduction of unemployment, maintenance (and of course, where possible, improvement) of members' living standards, and pressure on governments not to reduce social expenditure on account of economic stringency.

Europe and the United States

European industrial relations have clearly been subject to much more change than those of the United States, though many of the pressures for change have been common to both regions. Firstly, most European countries faced considerable change in postwar reconstruction and catching up with American economic performance. Secondly, the American model has changed little because it has been resilient

⁴ See J-D. Reynaud, "Industrial Relations and Political Systems: Some Reflections on the Crisis in Industrial Relations in Western Europe," and R. O. Clarke, "Labour-Management-Disputes: A Perspective," both in *British Journal of Industrial Relations* (March 1980); and Crouch and Pizzorno.

enough to satisfy the demands made upon it. The size of the country and the extent of decentralisation of industrial relations have also been significant. And acceptance of the market economy, and absence of ties with political parties, has meant that American unions have not sought the radical political and industrial changes pursued by many European unions, which are often linked, or share common aims, with political parties which may be governing a country or leading the parliamentary opposition.

Whether European systems have proved more effective than the American in terms of efficiency or social advance is too complex to deal with here, and the role of industrial relations in such matters is difficult to isolate, but certainly a good number of European countries have attained American living standards. Concepts of social advance differ between the two regions, but in both the systems have enabled many workers' aspirations to be met. And, broadly speaking, though tensions will continue high, American and European systems alike seem sufficiently stable and adaptable to respond to most of the challenges of the 1980s. The main possible exception is the capacity of some European countries to find a means of reconciling the desires of collective bargainers and economic policy-makers, particularly when the economic climate improves, but some problems are also to be expected from changes in industrial and occupational structures.

The Quality of Working Life: An Industrial Relations Perspective

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In their excellent and still timely review article of trends and issues in the area of humanization of work and the Quality of Working Life (QWL) Delamotte and Walker¹ stressed the controversial and equivocal nature of the subject. After more than 10 years of QWL debate, conferences, research, national and company-level policies, government and foundation subsidies, and QWL projects/experiments, QWL is still very much alive in the industrial world, but no less controversial than in the early seventies.

QWL as a movement with its own high priests and its own vernacular has made definite inroads into the policy discussions of supranational organizations (ILO, EEC, NATO, OECD), national governments, employers, trade unionists, and social scientists. Particularly in the Scandinavian countries and West Germany, the QWL movement has reached a high degree of institutionalization. QWL has become a part of life and is here to stay, despite the ambivalent attitude of many national trade union federations and union locals.

QWL as a concept has had a very strong sensitizing function. It is still rather ill-defined and includes qualitative improvements in the diverse areas of (1) health and safety, (2) participation in organizational decision-making, (3) work restructuring and the design of jobs. The central focus of this paper will be on the third area: QWL projects aimed at redesigning the work organization in order to improve the quality of work in terms of increased worker autonomy, worker control over work, and job satisfaction. The paper's main argument is that QWL projects should be basically different from traditional organizational change and reorganization processes in terms of goals, structure,

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¹ Y. Delamotte and K. F. Walker, "Humanisation of Work and the Quality of Working Life—Trends and Issues," *I.I.L.S. Bulletin*, No. 11 (1974), pp. 3–14. Another good introduction to QWL is A. B. Cherns and L. E. Davis, "Assessment of the State of the Art," in *The Quality of Working Life*, eds. L. E. Davis and A. B. Cherns (New York: Free Press, 1975).

process, and outcomes. If this is not the case, workers and their organizations will have little incentive to move to a more cooperative stance in this area.

Consciously or unconsciously following Marx's lead, the division of labor is seen by those advocating QWL changes in work context as the key to social relations in organizations. As was the case with the advocates of scientific management and human relations, QWL theorists attempt to attain highly integrative organizations. In its most radical perspectives this view holds that those who work should also manage. Many of the notions and concepts used in the QWL literature are innovative in the sense that they clash head on with the established or conventional wisdom about the organization of work (specialization, separation of doing and thinking, time and motion study). Work is redefined from the physiological view of the engineers to the psychological perspective of the QWL advocates. Maybe even more important, the independent variable technology in traditional organizational design has, in theory at least, become dependent on human needs, preferences, and skills.

The question still awaiting more definitive empirical answer is whether or not a new paradigm of work has emerged which is a feasible alternative to bureaucratization, as claimed, for example, by Emery,² a vehement QWL advocate in the social-technical tradition. New approaches to the design of organizations and work have shown, however, that technological constraints can be considerably modified and that different technological alternatives can be generated, providing more freedom for the design of the social organization of work.

QWL has forced students of industrial relations, employers, and trade unions to refocus their attention to some extent on the content of work and the immediate place of work, and somewhat away from the traditional areas like wages, working conditions, and income distribution. While this relative refocusing must be judged very positively, at the same time it is the task of industrial relations to put QWL and its theories in the proper perspective.

Trade Unions and QWL

Comparing the West European scene with the situation in the U.S., it is evident that trade unions and trade union federations on both sides of the Atlantic have problems in formulating an unambiguous policy toward QWL. This equivocal trade union attitude is striking given the different ideological perspectives on which the respective industrial re-

²Fred Emery, *The Emergence of a New Paradigm of Work* (Canberra: Centre for Continuing Education, 1978).

lations systems are built. One of the central paradoxes is worth mentioning in this context. At the ideological level, U.S. unions are relatively dedicated to capitalism and believe in profits and the free enterprise system. This harmonious ideology, however, is translated into an antagonistic collective bargaining system which at the plant level often results in conflict-filled union-management relations. Western European unions in general propagate antagonistic socialist ideologies which call for the demise of the capitalist system. However, within this antagonistic context there is room for relative harmonious labor-management relations at the plant level. This interesting phenomenon can be explained to a certain extent by the fact that collective bargaining at the plant level is less developed than in the U.S. and by the trend in the last decade that wage negotiations at the industry and organizational level generally take place within some nationally agreed upon guidelines.

The relative emphasis on improving labor-management relations at the plant level in the context of QWL projects³ is therefore quite unknown in Western Europe. In the U.S. context of unionized plants improving industrial relations at the plant level using key concepts as problem-solving, integrative bargaining, and joint labor-management cooperation committees seems a prerequisite for QWL projects. Given the more harmonious relations at the plant level in Western Europe, where the managerial prerogative is probably less challenged by trade unions and more so by legislation (e.g., workcouncil act), this first phase in QWL projects of improving union-management relations is generally absent.

At a more general level, however, trade union concerns about QWL in the U.S. and Western Europe do not differ much. There are at least six fundamental problems⁴ which make it extremely difficult for national unions to incorporate QWL in their major operating policies:

- The historic distrust of integrative management approaches which do not explicitly allow for and include a trade union as an institution. From this perspective some QWL projects can indeed be classified as a management strategy aimed at union-avoidance or union-substitution.

³ See, e.g., B. Macy, "The Bolivar Quality of Work Life Program: A Longitudinal Behavioral and Performance Assessment," *Proceedings of the Industrial Relations Research Association*, 1979, pp. 83-93.

⁴ See on this issue, e.g., Jack Peel, "European Trade Unions and the Quality of Working Life," in *The Quality of Working Life in Western and Eastern Europe*, eds. C. Cooper and E. Mumford (London: Business Press, 1979), pp. 38-43, and Joep F. Bolweg, *Job Design and Industry Democracy* (Leiden: Martinus Nijhoff, 1976).

- The underlying individual ethic of QWL is directly opposed to the unions' collective ethic. The "common rule" reflects the collective trade union principle that equity can only be achieved through uniformity.
- The specifics of QWL are very difficult to incorporate in collective bargaining agreements. Individualization of work favors neither collective action nor the expression of collective claims.
- The wide variety of form, content, and outcomes of QWL projects so far is partly due to the diverse management intentions and goals with such projects.
- The union-developed systems of job regulation can be upset by QWL.
- The employment issue (job security) has become the overriding trade union concern in the early 1980s. QWL has definitely been assigned a much lower priority.⁵

QWL at the National Level

QWL is not a grass-root concept. QWL's role is more central in the national and political arenas than at the shopfloor level. In Western Europe all governments are funding QWL projects and research in order to find solutions for a wide variety of different problems facing the modern welfare state. The Federal Government of West Germany, for example, spent \$2,500,000,000 in total for the "Humanisation of Worklife" program in the period 1974–1979. Particularly in West Germany, Sweden, Norway, and Denmark QWL research has attained a high degree of institutionalization.⁶ Not only has QWL research managed to establish itself as a politically and economically accepted field of study, it has also attracted financial and organizational support from society to a degree which, from a comparative point of view, is exceptional.

In addition to the ideological and political undercurrents of the QWL notion, QWL is raised in the context of a number of critical societal issues. Some of these issues are strongly connected to the economic downturn and rising unemployment levels. At least in Europe, QWL seems recession proof, as the interest for the topic has not faded in the last five years. In The Netherlands QWL is suggested, in a rather pretentious manner, as a strategy against the following societal problems:

⁵ Case reports of QWL projects in a large number of countries tentatively suggest a negative employment effect of QWL, mainly caused by increasing individual (multiskilling) and organizational flexibility.

⁶ See the special issue on Scandinavian and Swedish work research in *Economic and Industrial Democracy* 2 (May 1980).

- The classical problems of worker alienation, worker motivation, absenteeism, and turnover.
- The rising number of people on the payroll of the welfare state who are rejected as unfit to work. It is argued that better work and working conditions could decrease the size of this fast growing group (in The Netherlands, 550,000 with a labor force of 5.5 million).
- The continuing labor market imbalances given unemployment levels of 5.5 percent. The Dutch labor market scene combines both increasing unemployment and hard-to-fill vacancies. Making lower skilled positions more attractive to the unemployed could reduce these labor market imbalances.
- The lacking organizational innovativeness. Here it is argued that more flexible organizational forms and higher quality jobs will stimulate individual creativity which will ultimately lead to higher rates of organizational innovation.
- The corporate and bureaucratic decision-making processes which are increasingly seen by the public as static and maladaptive. This last point overlaps to some extent with the issue of innovation.

In terms of these broad problems, Dutch trade union spokesmen generally underwrite QWL as a valuable strategy. Problems arise, however, when at the level of individual organizations QWL projects get more concrete content.

Another area in Western Europe into which QWL has made strong inroads in the last decade is the legislative activity concerned with the work environment. New laws have been passed to replace outdated safety and health legislation. No longer are safety and health the central issues of this new legislation, but less defined goals as the individual workers' well-being have come to the fore.⁷ In Denmark, West Germany, The Netherlands, Norway, and Sweden, legislation has emerged which to some extent tries to come to grips with the social and psychological aspects of work, particularly as these issues are influenced by the way work is organized. A broader objective of this new wave of work environment legislation is to generate employee activity in relation to all work and work-environment issues. Organizational-change processes are stimulated in the direction of the broadly defined goals. These laws provide a basic framework to be worked out in consultation and negotiation with local trade unions, work councils, and/or health and safety committees.

The importance of this new type of work environment legislation

⁷ *Ibid.*

for industrial relations is considerable. This legislation, together with new work council laws and stipulations in recent collective bargaining agreements, opens up the whole area of organizational change, reorganization, and the organization of work for discussion with workers and their representatives. Increasingly, new forms of work organization and changes in the work environment can no longer be unilaterally dictated by management. An important management prerogative is thereby potentially eroded. More pluralistic legitimizing procedures are required before organizational changes can be introduced. However, the new challenge is now transferred to the local level: how to make these new powers and procedures work at the level of the individual organization.

QWL at the Level of Organization⁸

The implementation of QWL experiments within complex organizations is more problematic than are general developments at the policy level. At this level political, ideological, and utopian rhetoric is replaced in most instances by a more practical and pragmatic attitude of management, unions and workers alike. Here the central question becomes: "*What is it worth to me?*" Payoffs for all parties involved seem a necessary condition for joint worker-management cooperation in this area.

Organizations are very complex phenomena with several contradictory dynamics and logics. Any organizational change program has to come to terms with at least three of these dynamics:

- Work itself expresses two universal but opposed principles or motions, one toward creation, the other toward control.⁹
- Organizations are essentially control systems. The conflict between individual freedom and organization control or, as psychologists define it, between personality and organization is thus generic.
- Management's legitimate role in furthering productivity and efficiency (cost-discipline) is countered by the workers' protective response, aimed at strengthening their security position and maximizing their degree of relative autonomy.¹⁰

In addition to these three basic principles, we find in commercial or-

⁸ The choice of the term *organization* is very deliberate. The attempts to make organizations more human are confronted with organizational dynamics and constraints that are inherent in any form of complex organization, whether business organizations, public bureaucracies, or nonprofit organizations, whether operating under a free enterprise system or under a state-regulated economy.

⁹ A. Touraine, *Sociologie de l'action* (Paris: de Seuil, 1965).

¹⁰ For a concise treatment of these countervailing logics, see Jack Barbash, "Industrial Relations," *IRRA Newsletter* 2 (May 1980).

ganizations the picture complicated by the distributive issue of dividing the results of the undertaking among the different stakeholders.

Since the end of the last century management theorists and social scientists have vigorously tried to develop new organizational models and methods of working directed at smoothing over the earlier mentioned internal organizational contradictions, often with the pretension of solving these basic contradictions. It is this naive organizational model which estranges many QWL advocates from IR practitioners and theorists alike. Unfortunately, and this seems particularly the case in the U.S., some management circles seem very open to QWL consultants who preach QWL as a nonunion management strategy without realizing the inadequacies of the underlying organizational model.

One task for worker representatives at the start of QWL experiments thus becomes testing management's sincerity, and by doing so recognizing management's legitimate role in furthering productivity and efficiency. Management, generally reacting to practical organizational-control problems like absenteeism, low quality, etc., should recognize that redesigning existing organizations will always imply new insecurities for workers and that therefore a defensive trade union stance at the organizational level is quite understandable, given the inherent logics of organizations, management, and industrial relations. Also, the relative power position of the different stakeholders, in an organizational-change project aimed at solving concrete organizational problems and in the meantime improving QWL, deserves full attention. Whether workers are represented in a steering committee by their unions, their work council members, or by other elected representatives, in almost all instances they are the underlying group in terms of expertise, information, education, and time available for preparation. Dennis O'Leary et al.¹¹ describe very aptly and in a colorful way their experiences in a "democratic work group" consisting of three process workers and three company representatives in an Australian QWL project. The following citation is subheaded *Never Smile at A Crocodile*:

Education: Company—two university-trained people and probably one school certificate. Workers—three people who would be lucky to share a school certificate amongst them. Scores for being articulate logical and confident: Company 3, Workers 0.

Teamwork: Company—two people who had already made up their minds that they were not about to give a damn thing, plus one "me too-er." Workers—three people unsure of what

¹¹D. O'Leary et al., "Worker Participation: Fact of Fallacy" (Chippendale, Australia: Federated Artificial Fertilizers and Chemical Workers Union, 1977).

they wanted and with very little idea of how to get it: Company 3, Workers 0.

Q.W.L. Knowledge: Six people sitting there without a clue: no score.

Soft Lights and Sweet Music! Company using its own home ground conference rooms, pleasant smiles, first names, tea and biscuits, workers overawed and overwhelmed. Game, set and match to the Company.¹²

The citation illustrates the invalid assumption of equal power on steering committees of most QWL projects. This organizational reality is too often neglected or smoothed over in QWL approaches, in which implicit equal power assumptions dominate. My own consultancy experience in Dutch QWL projects underlines the weak position of worker representatives in "vertical slice groups."¹³

Accepting the essential characteristics of organizations as controlling worker behavior and the central management functions as increasing organizational efficiency and effectiveness, the constraints of a QWL change project are very well defined. At best management will engage some of its resources in a QWL project because of pragmatic considerations. In most instances these considerations involve malfunctioning organizational-control systems as indicated by absenteeism, low quality, and in some instances recruitment problems. In the context of a QWL project, faltering organizational control can be compensated within certain limits by increasing worker self-control. More autonomy and regulatory power at the workforce will necessarily be embedded in the larger hierarchical organizational-control system. Despite QWL optimism, the range of feasible organization design alternatives is rather limited. The range seems to be widening somewhat, but bureaucratic and hierarchical elements still are necessary prerequisites for formal organizations.

If outcomes of a QWL project are successful in terms of both organizational goals and workers' QWL, one central issue from an IR perspective remains to be settled: whether or not to share the financial gains with the workers? If some form of productivity bargaining or profit sharing is not allowed for, and if the gains in terms of QWL are not spectacular, trade unions and work councils can hardly afford sponsoring such projects over any extended period of time. Workers and union membership will likely then decide that it simply isn't worth it.

¹² *Ibid.*

¹³ Joep F. Bolweg, "Van Ondernemingsstatuten naar Medezeggenschap I-V." (Tilburg: IVA, 1978, 1979, and 1980).

Towards a Contractual QWL Approach¹⁴

Local trade unions and work councils in those West-European countries that don't have fully developed local union branches (e.g., Austria, Germany, The Netherlands) cannot afford to ignore management QWL initiatives. Any organizational-change project, and therefore a QWL project, will encompass the above described issues of efficiency (cost discipline), control, authority, and power distribution. Whether or not an individual QWL project has the potential of benefiting the workers can only be judged at the level of the organization involved. It is therefore at this level that trade unions should test management QWL initiatives and decide whether or not to sponsor and legitimize management endeavors in this area. The content of the project and the conditions under which it is set up should be negotiable, and the results of these negotiations can be laid down in a project contract.

This approach also is an attempt to operationalize the frequent call from Industrial Relations observers for the use of a pluralistic organizational model in organizational-development and change projects.¹⁵ Instead of assuming an integrative model of organizations, the contractual approach to QWL builds on the earlier advocated stakeholders' theory of organizations. The requirement of a contract before the start of a QWL project injects the specific workers' interest into the preliminary phases of the project. Such a contract can regulate the following issues connected with a QWL change program: (1) the objectives of the project; (2) guarantees on resulting wage, productivity, and employment levels; (3) composition, rights, and responsibilities of the project's steering committee; (4) the project's budget; (5) experimental period of the project and discontinuance rights of both parties; (6) periodic evaluations of the project by the parties; (7) the dissemination of information; (8) conflict regulation, including the possibility of submitting conflicts arising from the project to binding arbitration; (9) protection against dismissal of persons involved in the project (e.g., in The Netherlands the same legal protection that work council members enjoy may be given); (10) special provisions for older workers or for those who

¹⁴ Many QWL advocates will reject the here presented approach on grounds of its bureaucratic character which interferes with an important QWL objective: de-bureaucratization. From an IR perspective, safeguarding the interest of the parties involved in a QWL project, even in a somewhat bureaucratic manner, seems, however, a prerequisite for a successful QWL undertaking.

¹⁵ See, e.g., Thomas A. Kochan and Lee Dyer, "A Model of Organizational Change in the Context of Union-Management Relations," *Journal of Applied Behavioral Science* 12 (1976), pp. 59-78, and Kenneth W. Thomas, "Worker Interests and Managerial Interests: The Need for Pluralism in Organization Development," *Proceedings of the Industrial Relations Research Association*, 1976, pp. 338-344.

do not want to participate on a voluntary basis; (11) selection and position of external consultants; (12) organizational change and research methods to be excluded (e.g., sensitivity training, questionnaires); (13) updating of job descriptions and job classification as the project progresses, including the use of "broad banding"; (14) procedures and proposals on how to deal with the positive financial outcomes of the project, which can be expressed in terms of total net savings per employee (e.g., the introduction of some form of profit-sharing or productivity bargaining could be in order here).

The contractual approach goes far beyond what is called the psychological contract in the Organizational Development literature.¹⁶ Under the contractual approach, management is forced to make its position explicit on a variety of issues critical to organizational-change projects. The consequences of a QWL project can become more visible in the earliest phase, and if top-management and worker representatives agree on the content of a contract, a total system commitment to the project is assured. It is not unlikely that in those early discussions elements of productivity bargaining are introduced. By allowing for a form of productivity bargaining, unexpected surprises later on in the project can be minimized.

Hull proposes in his *Guide to Work Organisation*¹⁷ concrete ways of testing management. In his view a quick monetary test always sorts the sheep from the goats. An example of such a test: "Put in a request that if multi-skilling comes in, the company should pay the workers the top rate for the skills they have achieved, *whether working in that classification or not*. Throw in retraining costs as well, and watch the response."¹⁸

It is argued in this paper that given the dominating control logic of organizations, a number of conditions must be fulfilled for a QWL project to distinguish itself from more traditional approaches to organizational change. Goals, structure, process, and outcomes of a QWL project should distinctly differ from regular organizational-change projects. If this is not the case, workers' and workers' organizations' interests in QWL-change programmes will be rapidly fading. A contractual approach is advocated here in order to substantiate the claims that QWL projects are indeed beneficial to both the workers and management interest.

¹⁶ See Edgar Schein, *Process Consultation: Its Role in Organization Development* (Reading, Mass.: Addison-Wesley, 1971).

¹⁷ Daryll Hull, *The Shopstewards' Guide to Work Organisation* (Nottingham: Spokesman, 1978).

¹⁸ *Ibid.*, p. 125.

If it is possible to arrange the above proposed contract at the start of a QWL project, chances are that the project will be successful from both a workers' and an organizational perspective.

One final caveat is in order. A contract in itself is not a sufficient condition for a successful QWL project. The contracting parties and, in particular, the worker-representatives must have the instruments and the power to enforce the terms of the contract and survey the project's progress. These necessary requirements should not be underestimated.

Co-determination and Its Contribution to Industrial Democracy: A Critical Evaluation

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The notion of co-determination in industrial relations implies a share in decision-making. Therefore, its realization requires establishing a system of granted procedures, differentiated according to levels and phases of decision-making related to conditions of work. Thus far, co-determination in West Germany is enterprise- and plant-oriented.

Structure and Coverage of Co-determination

According to the structure of industrial relations in this country, traditionally negotiations between unions and employers' representatives usually take place at industrywide and regional levels, leaving enterprise and plant negotiations to works councils and managerial representatives. Therefore, the systematic establishment of co-determination has considerably enlarged union influence at the enterprise level and fostered their control over basic orientations and strategies of works councils.

The basic fundament for co-determination is legally formulated in the *Works Constitution Act* of 1972, enlarging the legal rights of works councils in private enterprises, generally established since 1920; the *Co-determination Act* of 1951, establishing full parity co-determination within the supervisory boards of the mining and steel producing industries, and a Labor Director as a full member of the managing board; the *Co-determination Act* of 1976, establishing "countervailing" parity in supervisory boards of limited liability companies with more than 2000 employees; and the *Personnel Representation Act* of 1974, providing for the election of personnel councils in public services and enterprises.

The main instrument for implementing co-determination is the works council elected by all employees of the respective firm, regard-

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less of their union affiliation, and operating on an elaborated legal basis. In fact, however, works councillors usually cooperate closely with union officers or hold union functions themselves.¹

Works councils cannot call a strike, but they have the right to sue management in case of alleged breach of contractual or legal rights. In such rare cases, the Labor Courts come into action. Usually, failure to agree leads to referring the issue to an Arbitration Tribunal.

There is a large variety of rights granted to works councils, covering information, consultation, and co-determination rights in personnel, social, and economic matters.

Labor directors have been established in the West German mining and steel producing industries by the Co-determination Act of 21 May 1951. Usually, these directors are trusted men of the unions. Thus, a basic dual allegiance is established: the labor director is responsible both for the effective management and for effective representation of the workers' points of view. Labor directors, according to the Co-determination Act of 1976, have clearly managerial functions.

In dealing with co-determination in supervisory boards (usually convening quarterly), two types of legal provisions have to be considered. The Co-determination Act of 1951 prescribes a parity of "capital" and "labor" representatives, the latter ones being nominated by works councils and unions. Both parties elect, by cooptation, one "neutral" man. The Co-determination Act of 1976 extends this system to all German companies with more than 2000 employees. There are, however, two restrictive provisions. At least one employee representative should be nominated by the so-called *Leitende Angestellte* (employees with managerial functions). In impasse situations, the chairman (nominated by the shareholders) casts the decisive vote.

Table 1 displays how institutionalized co-determination rights were distributed among the 21.6 million employees in West Germany in 1978.

Results from Evaluation Studies

Available research findings provide data for an evaluation of co-determination according to the following dimensions: (1) degree of information of employees and their representatives; (2) degree of participation in works council elections and works assemblies; (3) degree of representation of employee structure by works councils, according to age, sex, education, and qualification; (4) degree of communication between (a) a works council and its constituency (b) a works council

¹ For a concise description, see Friedrich Fuerstenberg, *Workers' Participation in Management in the Federal Republic of Germany* (Geneva: International Institute for Labour Studies, 1978).

TABLE 1

6 million employees	Coal and steel industries	Full parity co-determination in supervisory boards and labor director in management board. Works councils.
4.1 million employees	Large companies with more than 2000 employees	Counterbalancing parity in supervisory boards. Works councils.
9 million employees	Smaller companies	One-third of seats for employee representatives in supervisory boards. Works councils.
9.4 million employees	Other private enterprises with more than 5 employees	Works councils.
3.6 million employees	Public service	Personnel councils.
3.0 million employees	Private enterprises with less than 5 employees	No institutionalized co-determination.

Source: *Süddeutsche Zeitung*, 27 February 1979.

and management, (c) a works council and union; (5) degree of problem-solving capacity concerning (a) personnel matters, (b) social matters, (c) economic matters; (6) general evaluation by employees; (7) co-determination in supervisory boards.

Selected findings hint at considerable information gaps and disparities. They clearly show that this fundamental prerequisite of co-determination needs steady improvement, which is a rather long-term process of mutual learning.

A representative system of co-determination always poses the problem of adequately considering the social structure and different interests of the constituency. Works councils in West Germany duly reflect the relative strength of blue-collar and white-collar interests. Besides, however, inadequacies of representation according to sex, age, skill grades, and nationality often occur.

The relations between works councils and the respective unions usually are quite intensive. In most enterprises, union officers participate in works council meetings from time to time. They also address Works Assemblies quite regularly. Of course, communication between works councils and union intensifies according to the degree of unionization of the employees.

Available data generally show a rather favorable perception of the West German model of institutionalized co-determination by those directly concerned, in spite of much criticism in details.

Generally, co-determination at supervisory board levels has resulted

in a gradual modification of entrepreneurial goals toward a more socio-economic orientation. Also, collective agreements are now concentrating more upon the regulation of typical facts, leaving enterprise-oriented decisions to co-determination institutions.

The recent Co-determination Act is evaluated differently by employers and unions. From the employers' point of view, five problems are coming up: the contradiction between parity and the property principle, the endangered autonomy of collective bargaining, the issue of managerial employees, the election procedures for nominating workers' representatives for the supervisory board, and the position of the labor director.

Contrasting to these opinions, the unions refer to other problems, especially the so-called evasion strategy of some firms. By reorganizing combines, by altering the capital composition, and by changes in the legal form of the enterprise, in 1978 about 30 companies tried to avoid extended co-determination in supervisory boards. Another factor affecting the chances for co-determination in supervisory boards is a series of tactical devices and strategies to diminish the power of this institution. Such strategies may focus upon: (1) reduction of competence by changing the statutes; (2) establishing rules of procedure giving advantages to shareholders' representatives, such as double vote for the chairmen voting in committees with a nonparity composition; and (3) an aggravated obligation for secrecy.

Scope of Co-determination Within the Industrial Relations System

The contribution of co-determination to fostering industrial democracy in West Germany can only be assessed by analyzing its proper place within the total industrial relations system. Its basic functions in maintaining a properly working industrial relations system can be analyzed in three dimensions:

1. Co-determination is basically a strategy of cooperative unionism. The reasons for adopting such a strategy are many-fold and important. West German trade unions were reestablished after World War II as integrative associations, representing jointly the interests of workers with different political and ideological affiliation. The resulting concentration on social and economic issues and the independence from political movements mark a decisive difference between West German industrial relations and those, for example, in France or Italy. But according to their own tradition, West German unions never considered themselves as mere labor market parties like North American unions do.

According to the structure of West German industrial relations, they always aimed at the settling of larger issues, with relevance to macro-societal structures. There is still a considerable minority of "reformers," opposing union activities' getting used up in daily routine. But the conceptualization and realization of reforms are only possible by getting involved in decision-making processes. The attempt to institutionalize such influence is quite logical. In the course of implementing the different co-determination laws, thousands of new functions and positions for trade union officials have been created, thus establishing a network of influence which cannot easily be abandoned. At the same time, much functional knowledge has been acquired, resulting also in increased union concern with new types of problems. Gradually the unions developed an intellectual and functional infrastructure matching their claim for co-determination and enabling them to enter into conflictual cooperation with the employers' side on many more issues than traditionally defined by the scope of collective bargaining.

2. The relative success of the co-determination system was possible only because the employers' side and the involved managers became convinced that such a system provided an efficient sociotechnology for conflict management. The relatively low number of work stoppages and the exceptionality of strikes clearly show that there are now different means for settling conflicts. Works councils proved to be part of an efficient grievance machinery within the plants. Co-determination in supervisory boards adds to conflict management by offering a chance for discussing all major issues and possible problems for the workforce in advance of measures to be taken. Gradually, consultations and negotiations start before the problem really has come up. By their growing information potential on enterprise matters, the unions are able to become active in early stages of processes of social, technological, and economic change affecting the industrial world. The strike as an ultimate means for pressing forward workers' claims becomes necessary only in rare cases of fundamental dissent. As a consequence, however, bureaucratized procedures and oligarchic structures develop, particularly excluding the workforce at the shop floor from participation. Thus, an efficient co-determination at higher levels, directed toward conflict management, poses the problem of its proper foundation in activities among the rank and file.

3. Those who plead for more militancy and direct, mandatory democracy in industrial relations usually regret the strong union involvement in managerial affairs. But putting ideological considerations aside, the fact remains that the growth of an administrative, segmented,

intrafirm labor market in large companies calls for new union strategies. From this point of view, co-determination is a rather pragmatic approach toward influencing work conditions in highly organized and dynamic structures. The effects of investment policy, for example, upon work structure and workers' qualification cannot be influenced by traditional bargaining techniques. Instead, the whole process of arriving at investment decisions and implementing them by technological, economic, and possible social planning needs to be accompanied by steady communication and consultation in order to avoid an outcome detrimental to workers' basic interests. It is precisely this communication and consultation structure, combined with chances for greater influence, that co-determination at present provides. Its greater efficiency in terms of organization structure, however, is somewhat matched by restricted participation. Thus, the demand for more self-determination at the workplace level is an inherent dynamic factor in the West German co-determination system.

DISCUSSION

CLAUDIO PELLEGRINI
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The papers deal with a great number of issues in specific countries and in cross-sectional analysis. First I will raise some questions regarding these larger issues, and second I will examine, for the sake of comparison, the Italian situation with regard to a specific area, namely, the issue of participation and industrial democracy.

In the paper presented by Clarke we are told that workers' participation and the role of government are areas of change in the industrial relations panorama. Unfortunately, the scheme offered in the figure does not graphically capture the increasing government intervention. The features of the latter, however, are undergoing some changes related to the economic uncertainty of recent years. In the past the traditional Keynesian instruments of economic policy were used successfully by governments to reconcile different interests in global policies. In contrast, we currently have organized groups that bargain for ad hoc intervention. The theoreticians of the so-called neo-corporatism have contributed to the analysis of the nature and risks of this bargained governmental intervention, particularly the fragmentation of economic policy and the inability of unorganized groups to defend their interest. The neo-corporatist approach has been used successfully as a tool of analysis mainly in countries such as Italy and Great Britain; the question is whether it can be utilized in other circumstances as well.

In Bolweg's paper, attention is shifted to the enterprise level. His suggestion of a contractual approach for the implementation of Quality of Work Life (QWL) programs is interesting and I personally favor it. His proposal also could be listed under a vision of enlarged collective bargaining. And this is the only way to assure that QWL programs do not diminish union roles. Bolweg may encounter criticism (not my own) that QWL requires cooperative attitudes, while he argues for a contractual approach that entails bargaining and, often, conflict and is not well suited for the more cooperative purposes of QWL programs.

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Editor's note: The fourth paper presented at this session, by Costa Rehn of the University of Stockholm, will be published elsewhere.

Furthermore, a contractual approach requires a decentralized bargaining structure and, consequently, not all industrial relations systems can accommodate his suggestion.

The firm level is also favored in the case of co-determination. Fürstenberg has emphasized the cooperative attitudes that underlie the co-determination model, that is, its role as a communication device which prevents conflict and creates functional knowledge. The works councils have been granted the right to participate in and influence the decision-making process of the firms, and as a *quid pro quo* there are peace-obligation clauses that the works councils must respect.

In such a system, conflict can develop under union coordination only outside the firm, on a limited number of issues, and at the territorial level. The main shortcoming in this division of tasks between unions and works councils is that if the works councils cannot reach an adequate solution on some issues, the alternative way of finding a solution by conflict is not available. This explains why, in recent years, there have been cases where employees have resorted to conflict channeled outside of traditional institutions.

After having heard the paper by Rehn, which focuses on Swedish events, I would like to underscore a few elements. In the recent past Swedish unions have increasingly directed their attention to the investment process of the firm. Obviously, in a period when the industrial structure must undergo changes brought about by world-wide economic problems, the investment policy is crucial. Not only is investment policy a new and challenging area, but the union's task is made more difficult because an essential element of the previous industrial relations model in Sweden is missing—the presence of a labor government.

It might also be useful, as a comparison, to say something about how the issue of participation is dealt with in Italy. There the debate over how to influence the decisions of the firm is currently one of the most prevalent, and the term industrial democracy (ID) is, as usual, the general catch-all that covers the various positions. I will try to summarize how the features of the Italian setting are influencing the debate.

As was the case when the issue of ID gained momentum in Great Britain, one basic problem is whether the participation process should be embedded in conflictual institutions, such as collective bargaining, or in more cooperative ones, such as co-determination. Because institutions such as the works council (“*commissioni interne*”) have disappeared in Italy since 1970, one deals only with a union structure which is articulated at various levels. At the factory level, members of the

factory council are elected by all employees (members and nonmembers of the union), and automatically are recognized as union representatives. Thus the unions are representative of the whole workforce, even in the absence of union-shop provisions.

The factory council, which has bargaining power, has increasingly become the center of the industrial relations system in Italy, and it will be the cornerstone of any industrial democracy project. Because of the lack of more cooperative institutions such as works councils, and because the ideology of participation is against the grain of Italian society, the conflictual way of participating through collective bargaining has been central in the past, and it still is. However, in the past few years four considerations have moved to the forefront.

First, it has been realized that it impossible to solve everything by a collective bargaining, contractual approach. Second, there is a growing understanding that both conflict and cooperation are inevitable elements of any bargaining and contractual relationship. Third, because of their increased strength, within the past ten years unions have become parties in the functioning of many institutions. Thus the unions, who so eagerly defend their autonomy, must face the reality that they are involved in a network of public functions but without a clear definition of their participative role. Fourth, one of the main elements of bargaining at the national level in the past five years has been the right of the union to be informed at the regional, county, firm (about 300 employees), and sector levels regarding the production forecast, the level of employment, the redesign of jobs, and new investments and their location. This information process has generated on the union side something similar to the functional knowledge that Fürstenberg mentioned. What happened is that the unions encountered numerous difficulties not only in obtaining good information, but also in using it later in a coordinated way.

As a result of these elements that I have briefly described, particularly the fourth one, there is a growing debate over the different ways that the unions have proposed to implement an ID program which will ultimately produce more employee influence in the decision-making process at the levels of both firm and the national economy. There are two principal proposals, one from the CGIL and one from the CISL. The first takes into consideration the limits and inadequacies of the rights to information obtained by contract and their use. It proposes legislative action that would require management to present a firm plan to the union and to the government agencies in charge of economic planning as a precondition for obtaining governmental economic incen-

tives. Under this plan, the union would be able to obtain sufficient information to make bargaining meaningful and, at the same time, a link would be generated between union, company, and government action. The other proposal, particularly supported by CISL, started with the idea that in order to have a co-decision it is necessary for the parties to have equal power. Specifically, this means that the employees must be given a means of influencing the accumulation process. Thus, the plan envisages the creation of a fund, generated through the withholding of wages, which could be used for new investments. Obviously, the union would have a say in any such investments.

The two proposals are not necessarily antithetical. Both avoid any attempt to transfer a co-determination model to Italy. Both try to find a way to combine (and this is not simple) a decentralized bargaining process with the successful governmental intervention in the economy. At this point it is difficult to say what the practical results of this debate will be. However, the very fact that there is a debate is a symptom of a change in the Italian industrial relations system. And in content, if not in the envisaged proposed form, there is a growing similarity between Italy and many other European countries.

IX. BEHAVIORAL APPROACHES TO INDUSTRIAL RELATIONS

Mediation and Organizational Development: Models for Conflict Management

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The U.S. industrial relations system was designed to contain the endemic conflict between union and management. A wildcat strike, or unauthorized work stoppage during the term of a collective bargaining agreement, occurs when the industrial relations system fails to contain labor-management conflict. This afternoon I am going to discuss and contrast two models—mediation and organizational development—for third-party intervention when a union-management relationship is unable to avoid frequent wildcat strikes.

Before I discuss the models I would like to describe the situation which stimulated us to consider them.

A few years ago, Steve Goldberg and I spent some time studying wildcat strikes in the bituminous coal industry.¹ We found that some mines had many more wildcat strikes than others. We concluded that mines with frequent wildcat strikes had qualitatively different union-management relations than mines with few wildcat strikes. We were not able to determine whether the quality of the union-management relationship was a cause or an effect of wildcat strikes, but we were able to rule out enough alternative hypotheses to be quite confident

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¹ J. M. Brett and S. B. Goldberg, "Wildcat Strikes in the Bituminous Coal Mining Industry," *Industrial and Labor Relations Review* 32 (July 1979), pp. 465-483.

that the cause of wildcat strikes lies within the local union-management relationship.

This spring we were asked to act as third-party consultants at a mine that had experienced 27 wildcat strikes in the preceding 23 months. The entire day-shift had been jailed the preceding summer for striking in defiance of a district court injunction; the union was under a "life of the contract" injunction against striking. The mine was losing money, one-third of the workforce had been laid off, and serious consideration was being given to closing the mine due to low productivity and high costs believed to be due to the wildcats.

Conflict management via third-party intervention typically proceeds through three stages. First, the parties perceive that the level of conflict is unacceptable and that they need the assistance of an expert or a neutral. Second, the third party diagnoses the conflict situation, and finally the third party proposes strategies for change.² As I discuss each of these stages of conflict management at the mine, I shall contrast the mediation and organizational development models for third-party intervention.

The Third-Party Role

The stimulus to seek third-party assistance in this situation was line management's threat to close the mine. The threat, backed up by a layoff of one-third of the workforce, was credible to both company labor relations officials and the district union officers. They jointly sought third-party assistance from us, because we were viewed as experts by virtue of our research on wildcat strikes and Steve had credibility as a neutral by virtue of his eight years as an arbitrator in the industry. Bill Ury, who joined us, provided process expertise by virtue of his background in international mediation.

The first point I would like to make in contrasting mediation and organizational development is that neither provided a proper third-party model for this situation. The situation called for a third-party role that was substantially larger than that of a typical mediator and rather different from that played by a typical OD consultant.

Mediators typically work with the parties after they reach a collective bargaining impasse. A mediator's goal is short-term—to facilitate a collective bargaining agreement. While mediators use many of the same techniques as OD consultants, unlike OD consultants, they are not concerned with bringing about a permanent change in the parties'

² R. H. Kilman and K. W. Thomas, "Four Perspectives on Conflict Management: An Attributional Framework for Organizing Descriptive and Normative Theory," *Academy of Management Review* 3 (1978), pp. 59-68.

ability to manage conflict. The wildcat strike situation at this mine clearly called for a permanent change in the parties' ability to manage conflict.

OD consultants typically work with interpersonal or intergroup conflict within management. Their goal is to bring a permanent reduction in the amount of uncontrolled conflict in the system.³ While this is an appropriate goal for this mine, the interorganizational context of union-management conflict is very different from the intraorganizational context of conflict within management.

Kochan and Dyer and Strauss argue that OD models are inappropriate for the union-management context.⁴ For example, because companies are structured hierarchically, the third-party consultant is usually brought in by a superior to deal with conflict between subordinates or subordinate groups. The consultant's relationship is with the superior. The consultant's diagnosis and recommendations for change are made to the superior who has the authority to implement the change.

In contrast, we were brought in jointly by the two parties to the conflict. While management had the authority to implement unilateral change in management practices, because the union is a democratic and not a hierarchical organization, the union leadership did not have the authority to implement unilateral change in union practices. Any recommendations which required change in the parties' interaction pattern required joint agreement. Whereas the OD consultant to management has to sell the change strategy to management, the third-party consultant in a union-management relationship has to sell unilateral changes and mediate bilateral change.

Diagnosis

Both mediators and OD consultants attempt to diagnose the conflict by investigating the parties and the situation. The focus of a mediator's

³ This is perhaps an inappropriate characterization of most OD consultants' conflict-management goal. Kochan and Dyer and Strauss characterize OD consultants' conflict-management goal as the desire to reduce the total amount of conflict in the system. Strauss says OD consultants "assume the main impediments to agreement are misunderstandings, personality differences, and immature, nonauthentic relations"; that conflict when approached with trust and authenticity will yield a win-win solution. While this is a fair characterization of much of OD, it does fail to recognize the organization structure and design subfields within OD. Here conflict is viewed as structural, not psychological; it is not bad per se; and structural, not behavioral, interventions are needed to control conflict. T. A. Kochan and L. Dyer, "A Model of Organizational Change in the Context of Union-Management Relations," *Journal of Applied Behavioral Science* 12 (January 1976), pp. 59-78; G. Strauss, "Can Social Psychology Contribute to Industrial Relations?" in *Industrial Relations: A Social Psychological Approach*, eds. G. M. Stephenson and C. J. Brotherton (New York: Wiley, 1979), p. 384. See also Kilmann and Thomas.

⁴ Kochan and Dyer.

inquiry is much narrower than that of the OD consultant. The mediator seeks to understand each party's perceptions of the collective bargaining issues. He/she also attempts to determine if interpersonal relationships or the setting in which the negotiations occur is interfering with the parties' ability to reach an agreement.

The OD consultant's diagnostic orientation depends on his/her perspective on conflict management. Kilmann and Thomas describe four perspectives.⁵ The first two perspectives focus on the situation. The second two on the parties.

The first perspective assumes that conflict develops in the interaction process between the parties. An OD consultant with this perspective would want to observe the parties' interacting. The second perspective assumes that conflict develops because of conditions in the interpersonal or intergroup environment which interfere with the parties' ability to resolve issues. An OD consultant with this perspective would interview the parties, probing to uncover rules, procedures, incentives, social pressures, and control mechanisms which might be stimulating the conflict. The third perspective assumes that conflict develops because of the underlying concerns or agendas of the parties. The fourth perspective assumes that conflict results because of unchangeable characteristics of the parties themselves. A consultant with the third or fourth perspective would interview the parties, probing to determine whether the parties' behavior in the conflict situation was or was not changeable.

The mediator's diagnostic focus reflects the first and third perspectives. These perspectives seek the cause of the conflict in the parties' interaction process and/or in the parties' perceptions. The mediator, however, because his/her goal is the short-term resolution of a collective bargaining impasse, is much more likely than the OD consultant to focus on particular issues.

Our wildcat strike situation called for a diagnosis more similar to that of a multiperspective OD consultant than to a mediator. There were no specific issues to mediate at the time of the assessment. Our previous research provided us with both a process model of the developmental phases preceding a wildcat strike and a structural model of environmental events associated with frequent wildcat strikes.⁶ In our assessment, we were able to test the new situation against the research models. We found no evidence during the on-site assessment to reject these models. Interviews with the parties also indicated that conflict

⁵ Kilmann and Thomas.

⁶ J. M. Brett, "Conformity and Wildcat Strikes in the Coal Mining Industry," paper presented at the American Psychological Association, August 1977.

at the mine was tightly intertwined with the personalities of both union and management officials.

Strategies for Change

Mediators' change strategies are the same strategies used by most conflict management consultants. In OD, these techniques are called interpersonal peacemaking and process consultation.⁷ In interpersonal peacemaking, the third party attempts to change the parties' perceptions and attitudes and, as a result, bring about a change in behavior. In process consultation, the third party attempts to change the parties' behavior directly by changing their interaction pattern.⁸

Two programs have applied interpersonal peacemaking techniques to union-management conflict. Blake and Mouton's program calls first for a period of perceptual and attitudinal restructuring, based on role-play techniques, and then joint development of superordinate goals.⁹ The program is based on Sherif's classic research on intergroup conflict, known as the Robbers' Cave experiments.¹⁰ In these experiments at a camp, Sherif divided boys into groups and generated intergroup conflict by having them compete in win-lose situations. Later, Sherif eliminated the conflict by having the teams cooperate to achieve a superordinate goal. Blake, Shepard, and Mouton's program has been implemented in at least one union-management situation, but no in-depth evaluation data are available.¹¹

The second program is the Federal Mediation and Conciliation Service's Relations by Objectives or RBO program. This program uses the same techniques of attitudinal and perceptual restructuring and superordinate goal-setting that Blake and Mouton's program uses.¹² The program has been used in over 50 union-management situations and it has

⁷ R. Walton, *Interpersonal Peacemaking: Confrontations and Third-Party Consultation* (Reading, Mass.: Addison-Wesley, 1969); E. H. Schein, *Process Consultation: Its Role in Organization Development* (Reading, Mass.: Addison-Wesley, 1969). See also R. Fisher and W. Ury for a description of mediators' techniques, *International Mediation: A Working Guide* (New York: International Peace Academy, 1978).

⁸ These are rather pure descriptions of the two techniques. Many practitioners mix the two techniques.

⁹ R. Blake, H. Shepard, and J. S. Mouton, *Managing Intergroup Conflict in Industry* (Houston: Gulf Publishing, 1954).

¹⁰ M. Sherif, O. J. Harvey, B. J. White, W. R. Wood, and C. W. Sherif, *Intergroup Conflict and Cooperation: The Robbers Cave Experiment* (Norman, Okla.: University Book Exchange, 1961).

¹¹ Blake, Shepard, and Mouton.

¹² T. A. Kochan, *Collective Bargaining and Industrial Relations* (Homewood, Ill.: Irwin, 1980); J. J. Popular, "Labor Management Relations: U.S. Mediators Try to Build Common Objectives," *World of Work Report* 1 (September 1976), pp. 1-3.

been submitted to outside evaluation.¹³ Both programs use techniques, attitudinal and perceptual restructuring, and superordinate goal-setting, assumed to be useful in eliminating conflict. The assumption underlying these techniques is that conflict is bad and needs to be eliminated. We believe that both the assumption and the techniques are inappropriate in a union-management setting.

The assumption is inappropriate for two reasons. Conflict may be bad—that is, cause ineffective inter- and intragroup performance—but it may also be unavoidable. In the union-management situation, conflict is structural with respect to economics and power.¹⁴ The more money and power for the union, the less for management. On the other hand, conflict, or at least controllable conflict, may be good—that is, cause effective inter- and intragroup performance. The easiest way to see this is to consider again Sherif's experiments at the boys' camp. The boys were playing tug-of-war and baseball. Interteam rivalry stimulated high levels of intrateam performance. It was only when the rivalry spilled off the playing field into other camp activities—that is, when the conflict was uncontrolled—could one argue that the conflict was dysfunctional. In the union-management situation, Slichter, Healy, and Livernash argued and Freeman and Medoff are trying to show that controlled union-management conflict increases organizational functioning.¹⁵

The techniques of attitudinal and perceptual restructuring are inappropriate because there is no research evidence that attitude and perceptual change achieved in a training session effects a behavioral change.¹⁶ Note that Sherif intentionally did not use these techniques.

¹³ One report was written by Professor Anthony Sinicropi, University of Iowa; it is not publicly available. The other is a doctoral dissertation—Denise Tanguay Hoyer, "A Program of Conflict Management: An Exploratory Approach," *Proceedings of the Industrial Relations Research Association*, 1979, pp. 334–335.

¹⁴ T. Kochan, "Collective Bargaining and Organizational Behavior Research," in *Research in Organizational Behavior*, eds. B. M. Staw and L. L. Cummings (Greenwich, Conn.: JAI Press, 1980).

¹⁵ S. H. Slichter, J. J. Healy, and E. R. Livernash, *The Impact of Collective Bargaining on Management* (Washington: Brookings Institution, 1960); R. B. Freeman and J. L. Medoff, "The Two Faces of Unionism," *The Public Interest* 57 (1979), pp. 69–93. Evolutionary models of social behavior as developed by Donald Campbell and applied to intragroup conflict by Karl Weick, if extended to intergroup conflict, would also argue that conflict is good because conflict preserves the groups' abilities to adapt to their joint environment better than does compromise. D. T. Campbell, "Ethnocentric and Other Altruistic Motives," in *Nebraska Symposium on Motivation*, ed. D. Levine (Lincoln: University of Nebraska Press, 1965), pp. 382–411; Karl Weick, *The Social Psychology of Organizations*, 2d ed. (Reading, Mass.: Addison-Wesley, 1979), pp. 119–143, 220.

¹⁶ J. Campbell and M. Dunnette, "Effectiveness of T-Group Experiences in Managerial Training and Development," *Psychological Bulletin* 70 (1968), pp. 73–103.

Sherif stimulated cooperation by providing superordinate goals. The Robbers' Cave Boys' Camp began to work together to achieve a common goal.

The superordinate goal-setting technique is inappropriate for union-management conflict because, while there are some potential superordinate goals in union-management settings, there are always many goals in conflict. In our situation, the day-to-day issues which were erupting into wildcat strikes were issues of economics and power. Interestingly, it was the joint realization that unless the strikes ended the mine would close which brought the parties together to try to control the conflict, but recognition of this superordinate goal neither eliminated the conflict nor showed the parties how to control it.

One strategy we recommended was process consultation. Bill Ury spent the summer working with both parties to try to improve their interaction pattern. His role was defined more like that of an OD consultant than a mediator in that he did not try to mediate particular issues, but made suggestions to improve the parties' negotiating behaviors when difficult issues arose.

A second change we recommended was in the make-up and responsibilities of the parties. It is only the naive consultant who comes in and says fire person X and your conflict will be resolved. This consultant ignores the possibility that it is forces exerted on X's role, not X him- or herself, which cause the conflict and that X's replacement, Y, will feel the same pressures and behave in the same manner as X. Obviously, too, on the union side, one cannot recommend firing an elected official. We carefully did not recommend that management fire anyone, but that they add a labor relations expert whose role would absorb some, but not all, the labor relations responsibilities at the mine.

It is important to see the difference between adding a role and replacing a role incumbent. When you add a role, the forces exerting pressure on the new role need not be the same as the forces continuing to exert pressure on the old role. While this change strategy effectively altered the membership of one party, it was a change strategy stimulated by our belief that wildcat strikes are stimulated by conditions or forces in the local union-management environment which shape the parties' negotiating behavior. This strategy effectively altered environmental forces on the role which carried major management responsibility for labor relations.

The third change we recommended was a set of procedures designed to increase foremen's incentives to settle grievances. This change strategy was also designed to alter environmental forces, this time on the

foreman's role. If this change were effective, it should reduce the amount of conflict moving upward in the system.

Our final recommendation was designed to control conflict that could not be contained within the grievance procedure. The key to controlling conflict that cannot be eliminated is to contain it within normative structures which channel the conflict to its resolution.¹⁷ OD has much less experience than industrial relations with such structures. The collective bargaining system is a normative structure designed to contain the endemic conflict between union and management. We negotiated a new normative structure to channel the conflict at this mine which had previously erupted in wildcat strikes. This structure consisted of a pattern of behaviors to be engaged in by each party, if a strike threatened. This pattern of behaviors was worked out in some detail and cast as a formal written agreement, signed by local union leadership and mine management.

The introduction of a new normative system into a union-management relationship requires more than the agreement of union leadership and management. It requires the concurrence of the union members-employees. Because the union, unlike management, does not have an hierarchical authority system, an agreement between union leadership and management does not insure ratification of that agreement by the union membership.¹⁸ In this situation the union membership failed to ratify the agreement. The reason the membership failed to ratify the agreement and an evaluation of whether or not we, as third parties, could have done more to facilitate its ratification are issues beyond the scope of this paper. I do not think, however, that the failure to ratify in any way diminishes the theoretical soundness of this intervention strategy.

Conclusion

In summary, neither mediation nor organizational development provides a complete model for third-party intervention when a union-management relationship is unable to control conflict during the term of the collective bargaining agreement. The third party's goal and diagnostic and intervention techniques are those of a sophisticated and versatile OD consultant. The third party's methods to facilitate intra- and interparty negotiations are those of mediation. Finally, this mine has not had a strike in the seven months since the interventions.

¹⁷ P. Brickman, "Role Structures and Conflict Relationships," in *Social Conflict*, ed. P. Brickman (Lexington, Mass.: Heath, 1974).

¹⁸ J. M. Brett, "Behavioral Research on Unions and Union-Management Systems," in *Research in Organizational Behavior*, Vol. 2 eds. B. M. Staw and L. L. Cummings (Greenwich, Conn.: JAI Press, 1980), pp. 177-213.

Competitive Processes and Patterns of Selection in Union Mergers*

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I. Introduction

In this session I intend to describe a way of studying unions as organizations which differs substantially from the research approaches described by the other speakers. The research under discussion focuses on populations of organizations rather than on single organizations or on individuals in organizations. The theory which informs it is dynamic rather than static. By this I mean that it focuses on the time path of some dependent variable. It does not assume equilibria at any particular point in time but does use models which suggest movement toward equilibria over time. The primary causal mechanism on which attention is focused is the competition between organizations forms, which is reflected in the population dynamics of various kinds of unions. Rather than treating such competition, and other kinds of conflict, as abnormal or deviant, this approach assumes that all organizations must struggle to exist. In so doing, it explicitly rejects explanations of current organizational structure and operations through reference to what organizations "need." Just as any union leader can defend virtually any practice as serving the long-run needs of the membership, if the long run is extended far enough into the future, scientific explanations based on purported functional needs of the organizations cannot fail if the time horizon is extended far enough. In short, such theories are difficult to disprove. They also offer easy bases for argumentation to be used by those whose interests lie in defending the status quo. If unions and other organizations are the way they are because being that way serves organizational needs, then those who diverge from the usual pattern, or push for change, can be dismissed as working counter to the best interests of the whole. Our attention is directed, then, to survival and the

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failure to survive. We wish to see if we can identify characteristics of structure and operation which give some kinds of unions survival advantages over others. We wish to find out what characteristics of union memberships, the firms, agencies, hospitals, and the like for which they work, and the societies in which they are imbedded lead to these competitive advantages.

Such an approach is particularly timely, I believe. The falling share of the civilian labor force in unions clearly suggests that each of the characteristics just mentioned is almost certain to undergo dramatic change in the next few years, or unions as we know them are likely to become endangered species. If they do survive at all, they are likely to be organized in ways which reflect memberships comprised by government and other service employees, situated at levels frequently above the bottom of the organization's authority line.

Regardless of the point in time at which one focuses one's attention, it is difficult to read about unions without being struck by their highly political nature. They are political in the sense that they live in a world of struggle. Unions compete with each other and with employing organizations for the participation of members. Union leaders struggle to gain or maintain control. Those which succeed too well spawn complacent memberships. Those which gain too little risk loss of certification. Such features of unions' life virtually guarantee diversity. That is, organizational characteristics of unions vary, and our purpose is to explain that variety.

The dynamic nature of the theory offers promise of using previous institutional research on unions to good advantage. While most of contemporary organizational research is not only based on static theoretical analysis, its data sources and I believe even its aesthetic appreciation is profoundly ahistorical. I do not believe one can easily understand any organization without a knowledge of its history. The rich case study literature on unions offers much information which can be used in a quantitative study of organizational populations if one would take the time to search it out. My colleagues and I are in the process of doing that and the rest of this presentation describes how we are going about it and what we hope to find.

II. Ecological Analysis

Biologists conventionally classify ecology studies into population and community subject specialties. Population ecologists study the numbers of various kinds of organisms and the dynamics, particularly the competitive interrelationships, which those dynamics display. For them,

the population of some species is the unit of analysis. Community ecologists, on the other hand, study communities of species sometimes called "ecosystems." Obviously, knowledge of the first is logically prior to knowledge of the second.

Organizations researchers have for some time been interested in interorganizational relationships and have developed such concepts as "organization sets" and "organizational networks" in an effort to develop versions of community ecology. In fact, most of what is ecological in the speciality of "human ecology" in sociology is based on community ecology ideas which were common in biology prior to World War II. Human ecology has not progressed much since such pioneers as Park, Burgess, McKenzie and Hawley wrote in the forties and fifties, largely, I suspect, because population ecology has been so sorely neglected.

I cannot hope to present a thorough description of theory in population ecology in the time allotted here. Some fundamentals are in order, however. First, the theory I have been pursuing along with my colleagues is quite formal. The dynamic models which are used to represent the processes have been developed over many years in biology. To use them, one must be able to classify units in such a way that their numbers can be counted. In our research, we require a species analogue. We call this an "organizational form" and we have described it as a "blueprint for organizing" (Hannan and Freeman, 1974, 1977). One may use technology as the basis for distinguishing forms, or membership composition, or political structure. Hannan and I prefer to define forms which are useful given the theoretical problem at hand, rather than to attempt to construct some elaborate typology purportedly useful for all research. That is, we do not pretend, either of us, to be the Linnaeus of organizations. An obvious example of a distinction of form which is likely to prove useful in this research is the distinction between craft and industrial unions.

A second fundamental conceptual tool is the idea of a niche. The term, as used by Hutchinson (1957), refers to the set of resources and other factors that limit population growth. Each organizational form, like each species, has a fundamental niche, and a realized niche. The former is the set of conditions under which a population can reproduce in the absence of competition from other forms. The latter is the observed set of conditions, or segments of resource continua, actually used by the population. If it is assumed that the population of any given organizational form has some finite adaptive capacity, which it can spread over various niches, a tradeoff between generalism and spe-

cialism is implied. Specialists spread very rapidly when conditions appropriate to the constrained resource bases they use exist. They do very badly when those conditions change. Generalists never do quite as well as specialists, but are less vulnerable to most of uncertainty. Which will persist is in part a function of the amount of time required for an environmental change. For example, are cycles of unemployment of long periodicity or closely packed together? If they are close together, specialists may ride out the troughs to take advantage of the peaks in employment. Similar observations may be made for the distribution of organizing activity over space. The issue is whether the union in question experiences selection pressures as an average, over time or across locals. Such issues should affect the mechanisms used by unions to pool financial strength and to exercise political influence, and they should color the relationships between locals and national headquarters.

If we scan the American labor movement in 1980, we can see great variety in the organization of unions. Size differences are enormous, and the distributions are greatly skewed. Some unions organize a narrowly specialized set of crafts or work roles, while others organize wherever and whenever they can. Some unions are regionally specialized while others are truly international. Similarly, some organize a set of work roles in only one industry, while others organize across industrial lines. At various points in time, some unions organize only a certain ethnic group, or sex or race, while others make no pretense of protecting one such group against another. Some unions have more democratic political structures than others. There are similar variations in economic wealth, membership numbers, and age composition of membership. These differences in turn have important effects on the level of commonality in material interest within the unions as, for instance, younger workers are frequently more militant than older workers within the same union.

We can identify a number of mechanisms through which population dynamics affect the level of variety one may observe in such characteristics at any given moment in time. First, we can see different ways in which unions are organized in the first place. Sometimes they spring up during the course of strikes. Sometimes they grow out of clubs and other associations not explicitly set up to act as bargaining agents or as strike organizers. And sometimes they split off from already existing unions. Similarly, labor unions disappear through disbandment and merger.

These processes are affected, I think, by a number of factors, many of which are obvious. Technical change is one such readily apparent factor. As technology develops, jobs with attendant skills are created

and destroyed. Technology also affects the interdependencies which in turn affect unions through the flow of work in which their members participate. Patterns of industrial organization have similar effects. Heavily concentrated industries may make narrowly specialized, autonomous craft unions difficult to maintain. On the other hand, rapid turnover of employing organizations may make for smaller bargaining units and hiring hall services of craft unions. The devices used by employer management, and government cooperation or opposition to such devices, may make some forms of organization unviable. Finally, human demography can be expected to affect union organizational populations. Ethnic in-migration, movement from rural to urban areas, labor shortage or super-sufficiency all affect the conditions under which various kinds of unions compete.

If this line of reasoning is to prove useful, the variables or complexes of variables listed above must be measurable, and such measures must be available over rather long periods of time. Fortunately, such measures are available. We turn now to research intended to provide assessments of the processes under discussion.

III. Empirical Research

An intensive study of the population ecology of labor unions is under way at Berkeley and Stanford. In it, we are studying national labor unions in the United States, "national" denoting unions which organize in at least two states. The Berkeley part of the project, which I have been directing, has been gathering numerical data on the life histories of unions from 1890 to 1975. We are particularly interested in dates of founding and disbandment, and in merger. For merger, we seek not only the date of the merger, but the names of the merging unions. During the period mentioned there were some 491 national unions, 133 disbandments, and 171 mergers.

As one might expect, unions are more frequently disbanded in the early years of the labor movement. In modern times, national unions are much more likely to disappear through merger. It is instructive to ponder why this should be so.

In the 1901 Convention of the A.F. of L., a dispute broke out over rights to organize certain kinds of mine workers whose work involved building wooden mine supports. There the so-called Scranton Declaration asserted for the first time the principle of "paramount craft." The issue was whether claim could be laid to a large variety of specialized applications of a particular technology, or whether a single union could claim all. During 1902-1904 the A.F. of L. accepted some 45 additional

narrowly specialized craft unions. At the same time, the carpenters continued to expand, repeatedly coming into competitive conflict with the Woodworkers, among others. By 1911, the Woodworkers were virtually out of business and the A.F. of L. accepted the idea of "one organization for one trade." The early definition of a trade was based on the tools used, and later came to concentrate on the materials (see Christie, 120-136).

In this example, we see the paradox of specialism/generalism among unions. Small, specialized unions have memberships whose common interest, reflected in similarity of work and status, are more likely to be solidary. An external threat affects all members in the same way. However, the specialization of membership also implies specialization of resource base. Such unions are subject to catastrophic change, to destruction resulting from losses in strike actions which more generalized unions might ride out. By changing to the "paramount craft" doctrine, the A.F. of L. made such specialized organizing more difficult, and disbandments became less common. We can see in this example that changing policies in larger scale organizations, including government, can affect the niche structures of the various kinds of unions. Similarly, we can speculate that the rates of change in membership bases probably have an effect on the probability of disbandment or merger. Rapidly declining membership is more likely to bring on disbandment than is gradual decline. What one sees at any point in time is the product of such continuing processes.

The Berkeley side of the project gathers data on union membership, founding, disbandment, and merger. One would obviously also wish to know something about the business conditions in the industries being organized. Such data are available, aggregated to various levels in the Standard Industrial Classification scheme, and in similar ways. To use them, we have to disaggregate them to levels comparable to union boundaries. We have been doing this by coding the proportions of membership in various SIC coded industries (at the two-digit level). We have then used these to weight sales, employment, and input-output data for the unions. (Sources include NLRB Election Reports, available since 1961, the Directory of National Unions which reports representational data, number of locals, membership size, and the like, and the reports, "Employment and Earnings" and "Work Stoppages.")

The Stanford part of the project, being directed by Michael T. Hannan, involves coding information of union organizing strategies from historical sources. Unions vary enormously in the work roles, industries, geographical locations, sex, and race or ethnicity of the people

they attempt to organize. Some are specialized on all these dimensions at one point in their histories. Others, such as the Knights of Labor, were avowedly out to organize all working people everywhere (with the exception of people in certain suspect financial occupations such as bankers). To date, over 300 unions have been studied and coded. Examining the life histories which result allows one to see unions branching out in time as they attempt to organize different crafts, or the same craft in more numerous industries, or expanding from a power base in the Northeast. One can also observe parallel contractions. Finally, we are interested in the occurrence of ideological or politically inspired unions as opposed to bread-and-butter unions. In coding this difference, we have assumed the latter unless clear evidence exists for the former.

Of these dimensions, we have had most trouble classifying ethnicity and sex of membership. This is because what unions profess and how they behave are frequently different, and because the demographic composition of the workers being organized affects the composition of the union membership. It is often impossible to tell whether a highly specialized membership results from policy or luck.

Previous research on merger processes (Freeman and Brittain, 1977) supported the idea that unions manage their dependencies through merger processes. When recessions appear, unemployment rises and strains are placed on unions finances. These pressures make some kinds of unions less viable. Unions often react by seeking mergers. In periods of membership contraction, mergers are more likely between unions organizing the same kinds of workers. Such mergers do not increase the internal diversity of the memberships, and they reduce competition between unions. In times of expansion, mergers are more likely to be between unions organizing workers whose work is sequentially ordered in some work flow. We called these "symbiotic" interdependencies. Finally, in periods of expansion, mergers are more likely to involve unions of approximately the same size. When membership is contracting, they tend to involve size disparities.

So far, we have identified two categories of substantive issues in which we are interested. First, we want to know the conditions under which new unions are born and under which they disappear. Second, we are interested in their level of specialism or generalism. A third issue involves their internal leadership structure, particularly the tenure of their officers. One cannot read much union history without being impressed by the very long periods through which some leaders have maintained their positions. The Stanford part of the project has directed effort toward coding the reasons for turnover of union leadership.

Whether leaders die, lose an election, and on occasion abscond with union funds are of obvious interest, although some patterns of turnover are clearly more likely to be accurate in the data than others. Among other important issues, these data can be used to establish dominance in mergers. That is, who is absorbing whom.

IV. Conclusion

The purpose of this presentation has been to provide an exposition of a manner of analyzing unions as organizations which is, if nothing else, somewhat new. It does offer the potential of making better use of the rich historical record on unions and it takes into account the highly charged conflictual nature of their existence. It is also obvious that it can do no better than the historical records on which it is based. In addition, one must perforce oversimplify reality. This will always be the case where the purpose is a search for generalizations. This issue is not whether they hold up in every instance, but whether they capture commonalities in the general experience under study. There can be no doubt that union scholars whose work is likely to take case study form will object that each union is unique, just as anthropologists have argued for Boaz's cultural relativism. I suspect that such a reaction stems more from how one has spent one's time and energies than on any objective validity of the study. That is, what seem like very small differences, when viewed across large numbers of unions or long spans of time, seem like very important distinctions when one's attention is focused on a single case over a short time duration. It should be kept in mind, however, that one style of research buttresses the other. The studies I have described here could not take place without the detailed case studies which have been so common in industrial relations. But one has a difficult time interpreting the experience of a single unit without imbedding that experience in generalizations.

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Union-Management Ideological Frames of Reference in Bargaining

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The concept of ideology has frequently been cited in the industrial relations literature as an important variable affecting the pattern and practice of union-management (U-M) relations.¹ Ideology may be discussed in terms of an individual's (group's) total ideology or his/her ideology with respect to a particular area of social life (e.g., politics, U-M relations, religion, etc.). Ideology should be considered a multi-dimensional concept reflecting components of beliefs, values, and attitudes toward ideas, objects, or persons within an individual's (group's) world of experience.

A U-M ideological frame of reference is defined as an organization of beliefs, values, and attitudes which form a relatively permanent perceptual framework serving to shape and influence the general nature of an individual's behavior in the area of union-management relations. In general, individual union or management members tend to adopt over time the ideological frame of reference of their respective reference or peer groups as a result of their exposure to relevant socializing experiences. Union-management beliefs function as an important part of a union or management member's general perceptual and interpretive framework used to attach meaning to experiences encountered in everyday life.

The primary purpose of this paper is to provide an empirical analysis of the extent to which the ideological frames of reference of union and management negotiators are basically similar or dissimilar in nature and to examine the relationship between U-M beliefs and negotiators' perceptions of success in labor negotiations. The ability of a negotiator to perceive accurately and attach meaning to the relevant conditions and events which may affect the bargaining process is critical to a negotiator's selection and subsequent performance of appropriate be-

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¹ See, for example: John Dunlop, *Industrial Relations Systems* (Carbondale: Southern Illinois Press, 1958); Richard E. Walton and Robert B. McKersie, *A Behavioral Theory of Labor Negotiations* (New York: McGraw-Hill, 1965).

haviors leading to the attainment of desired bargaining outcomes. Union-management beliefs serve to shape and influence the perceptions of union and management negotiators about the bargaining process.

Sample and Data Collection Methods

A written survey questionnaire was mailed to plant-level union and management practitioners responsible for contract negotiation and administration functions in their respective organizations. There were 33 usable union responses (35 percent return rate) and 36 management responses (46 percent return rate). Union respondents were drawn from 16 states (61 percent Midwest) and represented 25 different international unions (70 percent private sector). Management respondents were drawn from 13 states (72 percent Midwest) representing primarily private sector (97 percent), manufacturing (81 percent) firms.

The perceptual responses of union and management negotiators concerning their relative success in four major subprocesses of bargaining (i.e., distributive, integrative, intraorganizational, and attitudinal structuring), during their most recently completed contract negotiation were measured using five point Likert-type scales.² Negotiators also responded concerning their general level of satisfaction with contract negotiations, grievance procedure, and quality of the union-management relationship.

The semantic differential technique was used to measure the connotative (affective) meaning of each belief to each respondent.³ Respondents rated each belief on eight bipolar adjective scales measuring three factors (evaluative, potency, and activity), which have been shown to be particularly relevant to the explanation of the manner in which different individuals attach meaning to particular words or phrases. Each scale was scored by assigning a value of from one to seven to each scoring category on the scale.

A preliminary study using the semantic differential technique found significant differences between the scores of union and management respondents on ten of 24 beliefs considered to be representative of the ideological frame of reference of union and management representatives

² For an example of this approach to bargaining research, see Richard Peterson and Lane Tracy, "Testing a Behavioral Theory Model of Labor Negotiations," *Industrial Relations*, 16 (1977), pp. 35-50. The direction of perceptual response scores are indicated by one (+), three (mixed), five (-).

³ Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, *The Measurement of Meaning* (Urbana: University of Illinois Press, 1957).

concerning the conduct of U-M relations in the United States.⁴ The ten beliefs on which differences occurred between union and management respondents in the preliminary study were used to form the U-M ideological frame of reference measured in the present study. These ten beliefs are presented in Table 1.

TABLE 1
Concepts (Beliefs) Which Represent Union-Management Ideology

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1. *Free enterprise system* (Capitalism).
 2. *Seniority* as a factor in personnel decisions (e.g., promotion, layoff, etc.).
 3. *The right to engage in a legal strike/boycott.*
 4. *Union security* (e.g. union shop/agency shop).
 5. *The right to continue work operations during a legal strike/boycott.*
 6. *Management rights* (e.g., to hire, to direct and control the operations of the workplace, etc.; except as constrained by a labor agreement).
 7. *The use of work quotas to measure employee performance (productivity)* (i.e., the use of scientific methods to establish objective and fair standards of work performance).
 8. *Business unionism* (i.e., bargaining between union and management representatives should be limited to job-related issues such as wages, fringes, and work rules).
 9. *Legitimacy of union* (i.e., unions serve a legitimate and useful function as the exclusive representative of bargaining unit employee's interests in employee-employer relations).
 10. *Access to information* (i.e., each party (union and management) should have access to information (e.g., financial, technical, administrative), relevant to a particular problem or issue).
-

Results

Table 2 presents an analysis of the differences between the group mean scores of union and management respondents on each of the ten beliefs measured. Consistent with the findings of the preliminary study, there are clear differences between the responses of union and management negotiators on each belief. Such differences also occur in the expected direction (e.g., union more positive toward *seniority* than management but less positive toward *management rights*, etc.). However, it is important to note that neither group appears to evaluate the meaning of these beliefs in negative terms (i.e., responses range along a continuum from very positive to less positive to neutral.).

The largest differences between union and management respondents concerned their feelings about union security and the legitimacy of

⁴ The 24 beliefs were drawn from discussions with union and management representatives as well as a review of the relevant literature concerning ideology in U-M relations. Details of the preliminary study are available from the author.

TABLE 2
Analysis of Differences in U-M Ideological Frames of Reference^a

Ideological Concept	Mean Score		T Value	Ideological Concept	Mean Score		T Value
	U	M			U	M	
1	3.13	2.49	-2.78*	6	3.27	2.31	-4.86**
2	2.38	3.73	8.26**	7	4.07	2.83	-7.12**
3	2.36	3.56	7.94**	8	3.73	2.85	-3.22*
4	2.16	4.21	12.61**	9	1.85	3.64	10.37**
5	4.56	2.82	-8.56**	10	2.23	3.73	7.16**

^a Belief scores are measured on a seven-point scale. Direction of scores is indicated by one (+), four (neutral), seven (-).

U = union; M = management

* significant at $p < .01$; ** significant at $p < .001$.

unions. These differences persist despite the relatively long-term nature of the bargaining relationships represented in the sample.⁵ This suggests that organizational survival remains an important issue for many unions.

A series of stepwise regression models were run for the purpose of providing a descriptive analysis of the potential effects of U-M beliefs on negotiators' perceptions of various bargaining outcomes.⁶ These results are presented in Table 3 for management negotiators and Table 4 for union negotiators. Only models significant at the .05 level are shown.

In general, both union and management negotiators perceived relatively positive (good) success in all four major bargaining subprocesses (i.e. distributive, integrative, intraorganizational, and attitudinal structuring). Satisfaction measures (i.e., contract negotiations, grievance procedure, and quality of relationship) generally produced a mixed response with management negotiators reporting being moderately more satisfied than union negotiators.

Only in intraorganizational bargaining did management negotiators report a significantly ($p < .05$) greater degree of success than union negotiators. Union negotiators also reported perceiving that management typically held greater relative bargaining power than their own side, particularly on economic issues.⁷

⁵ Average duration of the bargaining relationship for management respondents = 22.6 years; for union respondents = 19 years.

⁶ Norman H. Nie et al., *Statistical Package for the Social Sciences*, 2nd ed. (New York: McGraw-Hill, 1975), pp. 320-367.

⁷ Management negotiators tended to perceive the relative bargaining power of both sides as relatively equal. This difference was significant at $p < .05$.

TABLE 3
Stepwise Linear Regression Models: Management Predictors^a

Model	Beta	F
1. Dependent Variable = Success in Distributive Bargaining		
Predictors: Legitimacy of unions (belief 9)	.38	5.99*
Success in integrative bargaining	.28	3.70
Access to information (belief 10)	.27	3.15
Adjusted R ² = .31		6.28**
2. Dependent Variable = Success in Integrative Bargaining		
Predictors: Satisfaction with contract negotiations	.23	2.52
Success in attitudinal structuring	.29	5.80*
Success in intraorganizational bargaining	.28	4.26*
Satisfaction with quality of relationship	.30	4.94*
Motivational orientation	.21	2.81
Adjusted R ² = .51		8.39**
3. Dependent Variable = Success in Attitudinal Structuring		
Predictors: Success in integrative bargaining	.24	2.80
Free enterprise system (belief 1)	.34	5.53*
Past history of chief spokespersons	.32	4.88*
Legitimacy of unions (belief 9)	.26	3.23
Adjusted R ² = .29		4.50*
4. Dependent Variable = Success in Intraorganizational Bargaining		
Predictors: Success in integrative bargaining	.57	12.40**
Free enterprise system (belief 1)	-.44	8.57**
Right to continue work operations (belief 5)	-.31	4.93*
Quality of relationship	-.22	1.51
Adjusted R ² = .40		6.86**
5. Dependent Variable = Satisfaction with Contract Negotiations		
Predictors: Satisfaction with grievance procedure	.45	17.16**
Success in integrative bargaining	.46	17.76**
Legitimacy of unions (belief 9)	-.28	7.02*
Right to continue work operations (belief 5)	-.19	3.19
Adjusted R ² = .61		14.87**
6. Dependent Variable = Satisfaction with Grievance Procedure		
Predictors: Satisfaction with contract negotiations	.48	11.66**
Access to information (belief 10)	-.30	4.69*
Adjusted R ² = .38		11.76**
7. Dependent Variable = Quality of Relationship		
Predictors: Success in integrative bargaining	.57	22.69**
Free enterprise system (belief 1)	-.19	1.78
Management rights (belief 6)	-.21	2.26
Business unionism (belief 8)	-.25	3.45
Duration of organizational membership	.21	2.83
Adjusted R ² = .51		8.13**

^a Only models significant at .05 level, and with F > 1.0 for each individual predictor are included.

* Significant at p < .05; ** Significant at p < .01.

TABLE 4
Stepwise Linear Regression Models: Union Predictors^a

Model	Beta	F
1. Dependent Variable = Success in Distributive Bargaining		
Predictors: Motivational Orientation	-.43	6.85*
Adjusted R ² = .16		6.85*
2. Dependent Variable = Success in Integrative Bargaining		
Predictors: Motivational orientation	.35	5.39*
Satisfaction with contract negotiations	.42	8.69**
Right to continue work operations (belief 5)	-.18	1.47
Adjusted R ² = .37		7.35**
3. Dependent Variable = Success in Attitudinal Structuring		
Predictors: Satisfaction with contract negotiations	.34	3.62
Success in integrative bargaining	.27	2.32
Adjusted R ² = .23		5.77*
4. Dependent Variable = Satisfaction with Contract Negotiations		
Predictors: Quality of relationship	.45	16.12**
Success in attitudinal structuring	.29	6.93*
Management rights (belief 6)	.31	8.94**
Education level	-.19	3.67
Success in integrative bargaining	.19	3.17
Satisfaction with grievance procedure	.14	1.32
Adjusted R ² = .71		14.21**
5. Dependent Variable = Satisfaction with Grievance Procedure		
Predictors: Right to strike (belief 3)	.32	4.73*
Duration of bargaining relationship	-.33	5.28*
Satisfaction with contract negotiations	.35	6.31*
Business unionism (belief 8)	-.25	2.78
Adjusted R ² = .36		5.39**
6. Dependent Variable = Quality of Relationship		
Predictors: Satisfaction with contract negotiations	.73	36.33**
Past history of chief spokespersons	-.24	3.40
Union security (belief 4)	-.17	1.62
Adjusted R ² = .55		14.18**

^a Only models significant at .05 level, and with F > 1.0 for each individual predictor are included.

* Significant at p < .05; ** Significant at p < .01.

Success in integrative bargaining appears to produce a positive effect on management negotiators' perceptions of other bargaining outcomes. This "spillover" or "halo" effect does not appear to be as strong for union negotiators. Somewhat surprisingly, success in distributive bargaining was not found to be a significant predictor of union or management negotiators' perceptions of success in any of the models tested.

Perhaps the economic climate in which these negotiations took place was such that the ability of either side to win significant gains on economic issues was limited. This may have lessened the importance of success in distributive bargaining as a barometer for influencing success in other bargaining areas. Another important factor was that both union and management negotiators held an integrative motivational orientation (MO) towards the labor negotiation process (i.e., tended to view bargaining as primarily a cooperative process which benefited both sides).

Specific U-M beliefs were found to aid in the prediction of union or management negotiators' perceptions of bargaining success in most of the models reported in Tables 3 and 4. However, no single belief was found to be predictive of success in any bargaining subprocess across both union and management groups. Beliefs about the free enterprise system, legitimacy of unions, and access to information appear to be particularly relevant to management. Beliefs about the right to strike, management rights, and union security appear to be most relevant to union negotiators. This suggests that within the ideological frames of reference of union and management negotiators not all U-M beliefs may be of equal importance at all times in helping to shape and influence a negotiator's perceptions of bargaining conditions, events, and/or outcomes.

Summary and Discussion

The research findings reported here are clearly exploratory in nature. Caution should be exercised in attempting to interpret the independent effects of particular bargaining variables or U-M beliefs as predictors of specific bargaining outcomes. Intercorrelations among some independent variables and an inability to report some data due to space limitations do not rule out the theoretical feasibility of other relationships among the variables.

Clear differences between the ideological frames of reference of union and management negotiators (as a group) were found. However, this does not preclude the theoretical possibility that within a specific union-management relationship negotiators for each side may share a similar rather than dissimilar ideological frame of reference.

The largest ideological differences between union and management negotiators concerned beliefs about union security and the legitimacy of unions. These differences are likely to become even more pronounced in the immediate future as an increasing number of employers appear willing to challenge some established practices and patterns of union-management relations now in existence.

It is difficult to draw any firm conclusions about the specific effects of union-management ideological differences on negotiators' perceptions of success in bargaining from the data presented here. The data do suggest that specific U-M beliefs do influence the perceptions of negotiators regarding success in particular bargaining areas. A limitation of the data reported here is that in only a small number of cases were data available from both union and management negotiators regarding the same set of contract negotiations.

Hopefully future research in this area will focus on examining the role of union-management ideology in affecting the process and outcomes of interaction in specific union-management relationships where the degree of ideological similarity/dissimilarity between the parties is known. Currently research is under way to provide a comparison of bargaining outcomes experienced by negotiators who share a similar or dissimilar U-M ideological frame of reference and to extend the present analysis to include more direct (economic) measures of success in bargaining.

X. CONTRIBUTED PAPERS: PUBLIC-SECTOR BARGAINING

Does Final-Offer Arbitration Encourage Bargaining?*

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The search for an acceptable alternative to the strike for settling public-sector labor disputes has led to the development of a variety of arbitration schemes for this purpose. The first type is conventional arbitration (ARB) where a neutral third party simply imposes terms of agreement in the event that the parties fail to reach a negotiated settlement.¹ A number of observers of the early experience with conventional arbitration have suggested that arbitrators have a tendency to “split the difference” between the positions of the parties. It is alleged that this results in a “chilling” of bargaining and excessive reliance on the procedure.²

An alternative to conventional arbitration which is becoming increasingly popular and which purports to be free of the chilling problem is final-offer arbitration (FOA).³ Under an FOA procedure, each

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¹ Conventional arbitration is utilized in a number of states—Alaska, Maine, Minnesota, New York, Oregon, Pennsylvania, Rhode Island, Washington, and Wyoming—to settle labor disputes among certain categories of public employees.

² See Carl M. Stevens, “Is Compulsory Arbitration Compatible with Bargaining?” *Industrial Relations* 5 (February 1966), pp. 38–52; Peter Feuille, “Final Offer Arbitration and the Chilling Effect,” *Industrial Relations* 14 (October 1975), pp. 302–310; and Charles Feigenbaum, “Final-Offer Arbitration: Better Theory than Practice,” *Industrial Relations* 14 (October 1975), pp. 311–317.

³ Some variant of this procedure is used to settle public-employee labor disputes in Connecticut, Iowa, Massachusetts, Michigan, New Jersey, and Wisconsin. FOA is also used to resolve salary disputes involving major league baseball players. See James B. Dworkin, “The Impact of Final-Offer Interest Arbitration on Bargaining: The Case of Major League Baseball,” in *Proceedings of the Industrial Relations Research Association*, 1976, pp. 161–169.

party submits a final offer and the arbitrator selects one or the other of the offers which then becomes the settlement. The distinguishing feature of FOA is that the arbitrator is *not* allowed to fashion a compromise between the final offers.

The purpose of this study is to present and evaluate a consistent theoretical framework which justifies both the criticisms of ARB and the alleged superiority of FOA. As a prelude to the development of the framework, Section I contains a brief discussion of the role of any type of dispute settlement procedure in the collective bargaining process as well as a discussion of how arbitration procedures fulfill that role. In addition, two explanations for a failure to reach agreement in the presence of an arbitration procedure are discussed. In Section II the analytical framework is developed. It is shown that the conclusion that FOA is more successful than ARB at encouraging negotiated settlements is incorrect because it is based on an overly simplistic view of the FOA process which neglects the ability of the parties to influence the outcomes under FOA by manipulating their final offers. The last section contains a brief summary as well as some conclusions which can be drawn from the analysis.

I. The Role of Dispute Settlement Procedures

The crucial role of any dispute settlement procedure in the collective bargaining process is to provide incentives for the parties to reach agreement without resort to the procedure. In terms of evaluation, this means that one criterion for a good dispute settlement procedure is that it be used infrequently.⁴ The incentive for settlement is derived from the costs which the particular procedure imposes on the parties in the event of disagreement. In order to avoid these costs, the parties presumably will concede in negotiations so that agreement can be reached. The strike imposes costs on the parties in a direct and obvious manner having at the first level to do with lost wages and sales or profits. Arbitration, on the other hand, does not impose direct costs of such magnitude.⁵

The major source of costs of arbitration is the uncertainty concerning exactly what the arbitrator will decide. To the extent that the parties

⁴ A second consideration is that the dispute settlement procedure must provide acceptable outcomes, and, since the procedure determines the range of even negotiated settlements, arbitration procedures need to be evaluated in light of their effect on negotiated as well as arbitrated outcomes. See Henry S. Farber and Harry C. Katz, "Interest Arbitration, Outcomes and the Incentive to Bargain," *Industrial and Labor Relations Review* 33 (October 1979), pp. 55-63, for a more detailed discussion.

⁵ Positive direct costs of arbitration (such as time and attorney's fees) are assumed to be negligible.

are risk averse, each will be willing to concede a portion of the expected arbitration award in order to avoid the risk of having the arbitrator impose a settlement which is very unfavorable to the particular party.⁶ The larger the costs that uncertainty imposes on the parties, the more the parties will concede to avoid the costs and the less likely it is that the parties will actually resort to arbitration.

In order to understand the relationship between the magnitude of the costs imposed by arbitration and its actual usage rate, we must resolve the apparent paradox that arbitration is ever used when, *ex post*, both parties would have been better off to avoid the uncertainty and to reach a negotiated settlement on the same terms. There are two major explanations for a failure to reach agreement. The first is what can be called information problems. If the parties have divergent expectations concerning the distribution of potential arbitration awards, then this may offset the costs of disagreement and result in the absence of a contract zone of potential settlements which are preferred by both parties to arbitration. For instance, if each party expects an arbitrator to be relatively favorable to its side, then each may be unwilling to concede enough from these incompatible positions to allow an agreement to be reached. How much the parties are willing to concede depends on their respective costs of disagreement. The larger these costs, the more the parties will concede and the less likely it will be that a given divergence in expectations will lead to disagreement.⁷

The second major explanation for a failure to reach agreement in an environment where arbitration of some sort is the dispute settlement procedure is that at least one party may want to place the responsibility for an unfavorable outcome on the shoulders of a third party (the arbitrator).⁸ This shifting of responsibility is important for political reasons if the leaders need to convince their constituency that they were

⁶ See Farber and Katz for a detailed discussion of the role of risk and risk preferences in conventional arbitration. See Henry S. Farber, "An Analysis of Final-Offer Arbitration," *Journal of Conflict Resolution* 24 (December 1980) for the analogous discussion on FOA.

⁷ The notion of divergent expectations as a cause of strikes has a long history. J. R. Hicks, *The Theory of Wages* (London: Macmillan, 1963), pp. 146-147, argues that ". . . the majority of strikes are doubtless the result of faulty negotiation. If there is considerable divergence of opinion between the employer and the union representatives [about the strike outcome] . . . then the union may refuse to go below a certain level . . . and the employer may refuse to concede it. . . . [U]nder such circumstances, a deadlock is inevitable, and a strike will ensue; but it arises from the divergence of estimates and from no other cause. . . . [A]dequate knowledge will always make a settlement possible."

⁸ See Feuille; Craig Olson, "Final-Offer Arbitration in Wisconsin After Five Years," in *Proceedings of the Industrial Relations Research Association*, 1978, pp. 111-118; and James L. Stern et al., *Final-Offer Arbitration* (Lexington, Mass.: D.C. Heath, 1975).

not to blame for the bad outcome. This may be particularly important for union leaders who have to deal with a sometimes militant rank and file. However, in the public sector the employer is concerned with winning elections as well, and the arbitration procedure may be used to that end.

It is important to note that the larger the costs of disagreement, the more expensive it is for the leaders to utilize the arbitration procedure for their own political purposes. Thus, as with divergent expectations as an explanation for disagreement, the larger the costs of disagreement, the less likely it will be that there will be disagreement for institutional or political reasons.

II. The Analytical Framework

In the context of the above discussion, the essence of the criticism of conventional arbitration is that ARB does not impose sufficient costs on the parties. The result is that it is utilized too frequently, both where there are relatively minor differences in expectations and for political reasons. It has been suggested that final-offer arbitration is a more costly procedure and hence more effective in encouraging negotiated settlements because, as Carl Stevens has suggested, FOA “. . . generates just the kind of uncertainty . . . that is well calculated . . . to compel them [the parties] to seek security in agreement.”⁹ It is the validity of this claim that is investigated in this section.

Suppose that the parties are bargaining over the split of some uni-dimensional pie of fixed size. This ignores potential complications introduced by the multi-issue nature of actual collective bargaining as well as the inherent indivisibility of issues such as work rules. Nevertheless, this construct enables us to focus on the problem of interest here. Let S represent the share of the pie which goes to the union. The yield to the employer is $1 - S$. Let A represent the share of the pie which the union's position yields to itself, and let B represent the share of the pie which the employer's offer yields to the union. The yields to the employer of the union's and the employer's offers are $1 - A$ and $1 - B$, respectively.

To understand where these offers come from, the behavior of the arbitrator must be modeled. Under ARB it has been suggested that the arbitrator splits the difference between the positions of the parties or in a less constrained way finds a compromise. It is clear that the naive split-the-difference model is not realistic because it would provide the parties with the incentive to make their offers as extreme as possible.

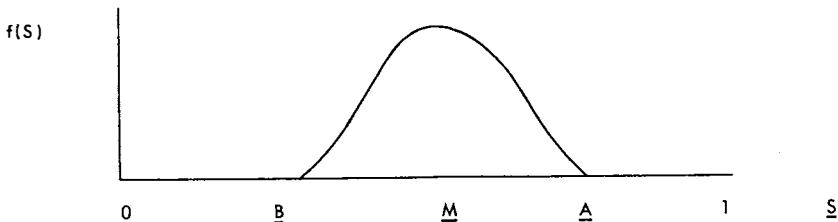
⁹ Stevens.

This sort of behavior is not generally observed because as either party begins to take an extreme position, the arbitrator will tend to disregard that party's position as unreasonable. This suggests that the arbitrator has some exogenous notion of what is an equitable split of the pie, and, while he may consider the positions of the parties in fashioning an award, he evaluates these positions in light of the exogenous equitable settlement. It is the uncertainty surrounding what the arbitrator feels is an equitable outcome which makes arbitration a costly alternative.

In formulating their offers, the parties are aware that, while they have some influence over the outcomes, if they are too extreme the arbitrator will tend to weight their position less heavily. The process which generates the positions of the parties is one where each party is trading off having a favorable influence on the arbitration award with the chance that the arbitrator will consider it unreasonable and be more heavily influenced by the other party's position. It is interesting to note that it is likely to be true that the parties adopt final positions located around their expectation of the arbitrator's notion of the equitable outcome.¹⁰ Thus, while the outcomes look like the arbitrator has split the difference, the fact is that the parties have located their offers around the expected outcome.

Figure 1 contains a representation of the final positions of the parties (A and B) as well as the distribution of arbitration awards conditional on these final positions. The probability density of any particular outcome being awarded by the arbitrator ($f(S)$) is measured along the vertical axis. It is clear from the figure that the arbitrator fashions some sort of compromise, but that it is not of the naive split-the-difference variety. The distribution is nondegenerate because of the uncertainty concerning the arbitrator's notion of the equitable settlement. The value M represents the common mean of the distribution of arbitration awards conditional on the last position of the parties.

Figure 1. The Distribution of Awards Under ARB

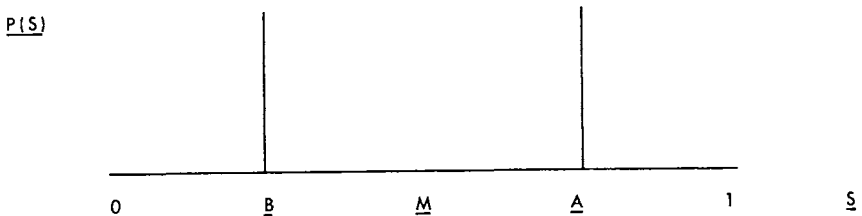


¹⁰ See Henry S. Farber, "An Analysis of 'Splitting-the-Difference' as a Description of Arbitrator Behavior," January 1980, mimeo, for a detailed analysis of this model.

Given the uncertainty concerning the arbitration award, each party is willing to concede something from the expected arbitration award (M) in order to avoid the risk of an unfavorable outcome. The union is willing to accept something less than M , and the employer is willing to concede something more than M . The difference between these positions is the contract zone of potential settlements which are preferred by both parties to arbitration.¹¹ This contract zone is a direct reflection of the costs which the arbitration procedure imposes on the parties. Hence, its size can be used as an indicator of the ability of ARB to induce negotiated settlements.

The central issue is how FOA alters this analysis. At the simplest level, replacement of ARB by FOA prevents the arbitrator from fashioning a compromise between the positions of the parties. Referring to Figure 2, we can see that this results in a distribution of arbitrated outcomes which has all of its probability mass located at the offers of the parties (A and B). The vertical axis measures the probability (P) that a particular split of the pie (S) is chosen by the arbitrator.

Figure 2. The Distribution of Awards Under FOA



If it is assumed (unrealistically) that the final positions of the parties are invariant to the change in the dispute settlement mechanism from ARB to FOA, that under FOA the final offers are equally likely to be selected by the arbitrator, and that the distribution of arbitration awards under ARB is symmetric, then it is straightforward to show that FOA does indeed impose larger costs on the parties than does ARB. The proof relies on the notion of stochastic dominance and mean-preserving spread in the economics of risk and uncertainty.¹² Intuitively, the average arbitration award (M) is unchanged, but the distribution of

¹¹ Note that while the union is willing to accept less than M , its optimal position for arbitration is greater than M . Similarly, while the firm is willing to concede more than M , its optimal position for arbitration (B) is less than M . This has serious implications for the effect of arbitration procedures on concessionary behavior. See Farber, "An Analysis of 'Splitting-the-Difference'"

¹² See Josef Hadar and William R. Russell, "Rules for Ordering Uncertain Prospects," *American Economic Review* 59 (March 1969), pp. 25-34; and Michael Rothschild and Joseph E. Stiglitz, "Increasing Risk: I. A Definition," *Journal of Economic Theory* 2 (1970), pp. 225-243.

awards has been made riskier by moving all of the probability mass to the extremes. As a result, all risk-averse agents will prefer the ARB distribution to the FOA distribution. This is equivalent to saying that the parties are willing to give up more to avoid the risk inherent in FOA than they are willing to give up to avoid the risk inherent in ARB. Thus, the FOA-induced contract zone is larger than the ARB-induced contract zone, and FOA will be relatively more successful than ARB at inducing negotiated settlements.

This seems to be the conceptual framework which has led researchers to expect that FOA will be a more effective dispute settlement procedure than ARB. However, it is based on a number of crucial assumptions which are not likely to be true. First, it will only be the merest coincidence that the final positions under FOA will be identical to the final position under ARB. To examine this more carefully, it is reasonable to assume that the arbitrator under FOA selects the final offer which is closest to his notion of an equitable settlement. The parties don't know with certainty what the arbitrator feels is the equitable settlement. In this situation, the parties face a tradeoff in setting their final offers between increasing the value of their offer if it is selected and reducing the probability that the arbitrator selects their offer. This provides a risk-averse party with the opportunity to mitigate the risk of the arbitrator's selecting the other party's offer by moderating its own position. The parties have control over the arbitration outcome under FOA in a more fundamental way than under ARB.

It is entirely possible that the final positions will be less extreme under FOA than under ARB, and if this is true, the stochastic dominance argument used above fails. It can no longer be concluded that FOA is a riskier, and hence costlier, procedure than ARB. Intuitively, if the final positions are less extreme under FOA than under ARB, there is some positive probability that the arbitration award will be more extreme under ARB than under FOA, and it is not possible to evaluate a priori whether FOA or ARB is the riskier procedure.¹³

A second assumption which fails is the assumption that the final offers are equally likely to be chosen by the arbitrator. As an empirical matter, it is unlikely that the parties are equally risk averse, and it can be shown that the more risk-averse party submits an offer which has a higher probability of being selected than the offer of the less risk-averse

¹³ See Henry S. Farber, "Mechanisms for Settling Public Sector Labor Disputes: A Comparative Evaluation of Conventional Arbitration and Final-Offer Arbitration," August 1979, mimeo, for an analysis of the relative merits of FOA and ARB on a number of criteria. It is shown that for some reasonable specifications and parameter values, indeed, ARB is costlier than FOA.

party.¹⁴ This is because the more risk-averse party bears a higher cost for any level of risk and as a result submits a more reasonable offer to lessen the probability of a bad outcome. Once again the stochastic dominance argument fails, and it can no longer be concluded that FOA is a costlier procedure than ARB.

Lastly, the validity of the assumption that the distribution of arbitration awards under ARB is symmetric is largely a function of the symmetry of the parties' prior distribution on the arbitrator's notion of the equitable settlement. While this distribution may well be symmetric, there is no compelling theoretical reason for believing that this is the case.

III. Summary and Conclusions

The analytical framework implicit in most studies which contrast FOA and ARB suggests that FOA is riskier than conventional arbitration. It was demonstrated in the last section that this result is based largely on the erroneous implicit assumption that the parties adopt the same final positions under both FOA and ARB. This neglects the fact that under FOA the parties are able to influence the arbitration award in a fundamental way by adjusting their final offers. It is likely that the parties will attempt to mitigate the risk inherent in FOA through such adjustment of their offers. The parties do not exert the same degree of control in conventional arbitration. The ability to mitigate the risk under FOA reduces the cost of using this procedure, and it is not clear a priori whether or not FOA is superior to ARB in its ability to encourage negotiated settlements.

Given the central role which industrial relations researchers have played in the development of alternative dispute settlement mechanisms in the public sector, it is important that the implications of newly proposed mechanisms be understood. Given the theoretical ambiguity as to the alleged superiority of final-offer arbitration, the role of careful empirical evaluation performed in the context of a well-defined model is highlighted. However, it may be true that there is no definitive answer and that FOA is better in some circumstances while ARB dominates in others.

¹⁴ See Farber, "An Analysis of Final-Offer Arbitration."

Local Government Initiated Collective Bargaining: The Northern Virginia Case *

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Introduction

Prior to state legislation mandating public-sector bargaining, local governments have frequently initiated bargaining with their employees as a means of stabilizing labor relations. A fairly recent example of this occurred in the late 1960s, when the Northern Virginia jurisdictions of Alexandria, Arlington County, and Fairfax County, without state authorization, began bargaining with public employees in an attempt to retain the members of their workforces and to compete with Washington, D.C., for the additional workers needed to provide service for their growing populations. In the District of Columbia, all public employees were bargaining under the authorization of Executive Order 10988 (and later Executive Order 11491). Virginia did not then, and does not now, have legislation authorizing collective bargaining with any public employees in the state.

After approximately seven years, the bargaining relationships in the Northern Virginia jurisdictions were nullified by the Virginia State Supreme Court in *Commonwealth v. Arlington County Board*.¹ A study which took place 18 months after the collective bargaining was nullified indicated that both management and union officials generally were happy with the bargaining relationship when it was in effect and felt that it had been beneficial to management.²

Collective Bargaining Initiated by Management

In most instances, theories of initiation of public-sector collective bargaining rest heavily on response to public-employee pressures for a

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* The author expresses appreciation to Jerald F. Robinson for providing the initial direction for this paper.

¹ 217 Va. 558 (1977).

² James K. McCollum, "Status and Function of Northern Virginia Local Unions After *Commonwealth v. Arlington County Board*: A Case Study," Doctoral Dissertation, Virginia Polytechnic Institute and State University, 1979.

greater voice in their work environment. For example, Bakke's eight conditions which manifest the predisposition toward public-sector bargaining are primarily conditions that develop within employee groups.³ It has been suggested by others that public employees demand the same rights as those enjoyed by private-sector workers;⁴ that public-sector workers today are militant and less willing to sacrifice for the public than in previous eras;⁵ and that public employees may need collective bargaining to give them a sense of dignity.⁶ These explanations are, no doubt, operative in initiating public-sector bargaining in many locations, or may emerge after a bargaining relationship has been decided upon by management. There is also, however, a long tradition of management initiation of public-sector bargaining in local government.

Unlike the private sector, where management is required to bargain subject to the provisions of the National Labor Relations Act, in the public sector some echelon of management, broadly defined, initiates the bargaining relationship. Thus legislators or administrators establish guidelines for public-sector bargaining before it takes place, and it comes about with management sponsorship, either at the state or local level.

Before any state laws authorized bargaining with public employees, such action was often initiated by local governments. For example, Philadelphia began bargaining with its employees in 1939, long before Pennsylvania had a public-sector bargaining law.⁷ Cincinnati began formal public-sector bargaining in 1951,⁸ and New York City established its "Little Wagner Act" in 1954.⁹ In 1959, the year of Wisconsin's

³ E. Wight Bakke, "Reflections on the Future of Bargaining in the Public Sector," *Monthly Labor Review* 93 (July 1970), pp. 21-22.

⁴ Craig E. Overton and Max S. Wortman, "One More Time: What Is Collective Bargaining in the Public Sector All About?" *Journal of Collective Bargaining in the Public Sector* 5 (1976), pp. 3-13, and Gus Tyler, "Why They Organize," *Public Administration Review* 32 (March/April 1972), p. 100.

⁵ Mollie H. Bowers, *Labor Relations in the Public Safety Services* (Chicago: International Personnel Management Association, 1974), pp. 24-29, and John H. Burpo, *The Police Labor Movement: Problems and Perspectives* (Springfield, Ill.: Charles C Thomas, Publishers, 1971), p. 11.

⁶ Eli Rock, "Practical Labor Relations in the Public Service," *Public Personnel Review* 18 (April 1957), p. 78.

⁷ Kenneth O. Warner and Mary L. Hennessy, *Public Management at the Bargaining Table* (Chicago: Public Personnel Association, 1967), pp. 99-100.

⁸ W. Don Heisel, "Anatomy of a Strike," *Public Personnel Review* 30 (October 1969), p. 221.

⁹ Sterling D. Spero and John M. Capozzola, *The Urban Community and Its Unionized Bureaucracies* (New York: Dunellen Publishing Co., 1973), p. 65. The public-sector labor relations program was introduced by Mayor Wagner in an interim executive order in 1954. In 1958, Wagner issued Executive Order 49 which formalized public-employee collective bargaining.

pioneer public-sector bargaining law, Klaus reported that many local governments, nationwide, were already recognizing employee organizations and authorizing "meet and confer" status for them.¹⁰

Reasons for Local Government Initiation of Bargaining

While the pressures from public-employee organizations may be the proximate cause for legislation to establish a bargaining relationship, there are generally three underlying factors that may stimulate managers to take this action. One factor is the job market. Collective bargaining brings about a more rigorous examination of the competitive labor market than any other process. When labor is in short supply, management must pay above the market rate for recruiting and retaining its workforce. Among employee groups such as police, firefighters, and social workers, government dominates the market and sets the wage rates.¹¹ Thus, if the area's competing governmental units include unionized workforces, there could be an inclination for nonunion local governments to initiate collective bargaining so they can create conditions under which their wage levels will be competitive with those of other unionized employees.

A second factor underlying management initiation of collective bargaining is the isolation it affords management from public recrimination engendered by the bargaining relationship. When collective bargaining results in wage increases that necessitate increased tax burdens, the unions may be management's scapegoat (albeit management receives a commensurate wage increase). Union demands, rather than unilateral decisions by elected officials or appointed administrators, are held responsible for increased taxation.¹²

The third factor that may motivate managements to initiate local government collective bargaining is that of eliminating unwanted political influences in public personnel practices. A collective bargaining relationship can bring an end to favoritism and nepotism which may have become entrenched in local government appointment, promotion, and layoff procedures.¹³

¹⁰ Ida Klaus, "Labor Relations in the Public Service: Exploration and Experiment," *Syracuse Law Review* 10 (1959), p. 184.

¹¹ Walter Fogel and David Lewin, "Wage Determination in the Public Sector," *Industrial and Labor Relations Review* 27 (April 1974), p. 412.

¹² Jack D. Douglas, "Urban Politics and Public Employee Unions," in *Public Employee Unions: A Study of the Crisis in Public Sector Labor Relations*, ed. A. Lawrence Chickering (San Francisco: Institute for Contemporary Studies, 1976), pp. 99-106.

¹³ Spero and Capozzola.

The Northern Virginia Case

All of the above factors were operative to some extent in the initiation of collective bargaining with public employees in the three Northern Virginia jurisdictions. Caught in a competitive market with unionized Washington, D.C., the three contiguous jurisdictions passed ordinances allowing collective bargaining with police, firefighters, teachers, and blue- and white-collar workers.¹⁴ The political leaders of the three jurisdictions (city councilmen, county board members) were very careful to establish exogenous processes as the proximate causes of increasing the tax burden of the residents.¹⁵ The bargaining with public employees carried out by management bargaining teams, which included labor lawyers from Baltimore, sufficiently divorced the elected officials from the process of wage raising.

While there had been little pressure for bargaining from employees prior to establishment of the relationship,¹⁶ the response to management's initiative was rapid. Employee groups chose various bargaining agents through the election process. Some chose local associations as their bargaining agents; others chose international unions.¹⁷ The bargaining agents negotiated agreements for their members calling for increased wages and fringe benefits and many other provisions found in private-sector labor contracts. These improvements did not upset the

¹⁴ Jerald F. Robinson, "Public Employee Organization and Collective Bargaining in Virginia," in *Public Sector Labor Relations in Maryland: Issues and Prospects*, ed. Donald W. O'Connell (College Park, Md.: Public Sector Labor Relations Conference Board, 1972), pp. 23-25.

¹⁵ Collective bargaining with public employees is one example of the isolation of elected officials from causes of tax increases. Another example occurred in May 1978 when the elected officials in all three jurisdictions announced the lowering of the tax rate. In actuality, all property owners paid almost twice as much in taxes that year because all real property had been reassessed to a much higher amount than their previously assessed value. See "City Lops 16 Cents Off Tax Rate," *Alexandria Gazette*, May 9, 1978, p. 1-A; "County Trims Tax Rate by 10 Cents," *Alexandria Gazette*, May 9, 1978, p. 1-A.

¹⁶ An example of how some employee groups were drawn into collective bargaining appeared in "Arlington Police and Firemen Protest County Board Treatment," *Washington Post*, July 10, 1974, p. C-2. "Three years ago with the 'blue collar' workers of Arlington unionized, representatives of the police and fire associations were summoned to the County Manager's office. We were asked to represent our employee groups in what was termed 'collective bargaining'. . . . It was explained by the County Manager, that the County Board, since they were negotiating with the union, wanted to treat all employees in 'like' fashion."

¹⁷ The firefighters of Alexandria and Fairfax County had representation from the IAFF, while the Arlington County firefighters retained a local association as their bargaining agent. The police of Arlington and Fairfax Counties chose the Teamsters, while Alexandria's police were represented by a local association. Blue-collar workers in all three jurisdictions elected AFSCME representation, as did the white-collar workers in Alexandria. The white-collar workers in Arlington County created a local association, and the white-collar workers of Fairfax County were never represented in collective bargaining.

jurisdictions' leaders nor the electorate.¹⁸ All parties accepted the bargaining relationship, officially designated a "meet and confer" relationship, and worked within the legal framework established for it in each jurisdiction's personnel regulations. In response to questions of state legislators, the Virginia Attorney General found no fault with the relationship as long as the local governments were able to make the final decisions in personnel matters, and any individual employee could represent himself on an equal basis with bargaining agents.¹⁹

Benefits from the relationship were experienced soon after it was initiated. The jurisdictions' workforces became more stable: there was less turnover, and it was easier to recruit new employees. Employee-management relations were standardized in memoranda of agreement. Personnel policy prevailed where political influence had been present.

Study Sample and Procedure

In 1976, the Virginia governor directed a court challenge at the bargaining relationship, and within months it was declared null and void. To determine the attitudes of officials toward the nullified relationship 18 months after it had been terminated, 74 Northern Virginia officials—28 public managers and 46 local union officials—were interviewed using an extensive semistructured interview format. Among the management officials interviewed were high ranking political leaders and appointed officials, including city (county) managers, personnel directors, fire and police chiefs, and public works directors. The union officials included the president, vice president, and two other officers of 11 of the jurisdictions' locals.

Additional information about the bargaining relationship was obtained from examining all of the labor agreements that had been established during the bargaining years and the local governments' legislation and regulations which governed the bargaining procedures. The agreements achieved in ten of the eleven bargaining units were similar to private-sector labor agreements. Grievance procedures leading to arbitration (binding in two jurisdictions, advisory in the third) had been negotiated for the ten employee groups. Agreements for the police in Alexandria dealt only with wages.

The most important study data came from the interviews. All of the interviewees had served either in an elected, appointed, or employed position during the period bargaining had been taking place and had

¹⁸ Information obtained from interviews with 28 local government officials in the three jurisdictions.

¹⁹ Virginia State Attorney General Andrew P. Miller, "Address to Conference on Labor-Management Relations in the Public Sector," Charlottesville, Va., October 16, 1975 (Mimeo text).

definite perceptions of the changed status since the bargaining had been nullified.

Findings

In the course of each interview, the respondent was asked how the bargaining relationships had been initiated. Management respondents who occupied their same positions when the bargaining was initiated stated that the political body (mayor and council or county board of supervisors) had deliberated on the recruitment and retention problems and had allowed the local government administrators to formulate administrative regulations which brought about the collective bargaining process.²⁰ The management respondents who opposed unionization of the public employees complained of the "liberal democrats" in the governing bodies who had brought collective bargaining to Northern Virginia.

Most of the labor officials responded to the query of how the bargaining relationship was initiated by describing how their bargaining organizations had been certified and the first agreement had been created. An exception to this pattern was found in the four officials of the Alexandria Police Association and the four officials of the Arlington County Professional Fire Fighter Association who said the collective bargaining was forced onto their organizations by the jurisdiction's government. All eight interviewees in these associations stated that they had not asked for bargaining rights, but they had accepted them when offered to preclude the incursion of an outside labor organization.

All interviewees were asked if the jurisdiction's management had benefited from the bargaining relationships. Eighteen of the 27 management responses were in the affirmative. Of the nine respondents who said that management had not benefited, five stated that the bargaining relationship was a constraint upon management's actions. Interestingly, six of the nine who saw no benefit to management were not in managerial positions when the bargaining had been initiated.

Of 41 responses from labor officials concerning benefits to management from bargaining, 37 perceived that management had benefited. The labor respondents believed that the collective bargaining agreements created personnel rules where none had previously existed and made management's dealings with the labor force more acceptable to the employees.

²⁰ Alexandria's implementing authority was a City Council resolution, September 8, 1970. The Arlington County Board issued a written employee Representation Policy in September 1971. Fairfax County's Board of Supervisors and School Board appointed a joint committee which wrote a new chapter for the County Personnel Rules, published September 1970.

Out of 68 combined management and labor responses to the question, 55, comprising 81 percent of the respondents, perceived benefit to management.

Similarly, in response to a question of satisfaction with the bargaining relationship, a majority of both labor and management respondents replied in the affirmative. Only in Arlington County (the court case jurisdiction) was there a category of respondents whose affirmative replies to the question of satisfaction was a plurality rather than a majority. In that jurisdiction, the management response was 45 percent affirmative, 22 percent negative, and 33 percent undecided. The total response from the query "Were you satisfied with the pre-1977 bargaining relationship?" showed 71 percent of the respondents were satisfied.

Conclusion

From this study it appears that collective bargaining by public employees in the Northern Virginia jurisdictions was an assist to management. Collective bargaining brought employees' pay up to levels that made the Northern Virginia jurisdictions competitive with the District of Columbia in the job market. At the time the bargaining was initiated, the labor market was very competitive. Since 1975, however, high rates of unemployment have removed the impetus for collective bargaining, but if qualified labor again becomes in short supply and elected officials continue to dodge responsibility for pay increases, there may again be a need for a collective bargaining type of solution to allow these jurisdictions to remain competitive.

While the bargaining relationship was in effect, the nonrational influences of politics such as patronage, cronyism, and nepotism were not as prevalent in personnel policies as before. Collective bargaining created personnel policies where none had previously existed, assisted in maintaining discipline, and gave employees another channel of communication with management. A large number of managers and union officials were satisfied with the bargaining relationship.

Few managers had any negative perceptions of the bargaining relationship. Most of them would not resist a return to bargaining with employees. The most frequently encountered reply to the question of preference for a return to public-employee bargaining was: "I am indifferent to whether it returns or not. Give me a management problem and I will deal with it." On this issue, the absence of a negative response seems indicative of some benefit to management from collective bargaining.

Majority Voting Requirements in Public-Employee Bargaining Unit Elections*

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The fear of having unionism “forced” on unwilling public employees is a frequent concern in state legislative debate on the general question of public-sector bargaining rights. This concern is reflected in public labor relations statutes in two major ways. One evidence is the low number of states which permit either union-shop or agency-shop clauses. Only six states provide for the inclusion of union-shop clauses in negotiated public-sector agreements.¹ A more frequent approach is to deny the union-shop and legalize the agency-shop, as provided in nine states.² Thus, the total of both these forms of union security in the public sector is far less than the use of union-shop provisions under the private-sector National Labor-Management Relations (NLMRA), where 30 states permit the union shop.³

The purpose of this paper is to examine a second evidence of the concern over “forced” unionism in public employment. Namely, the fact that some public jurisdictions use union election procedures which are more rigorous than in private employment. The most significant form of this rigor is the requirement for a majority-in-the-unit vote for union certification.

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¹ Alaska Stat. § 23.40.110(b)(1) (1972), Ky. Rev. Stat. § 345.050(1)(c) (1977), Me. Rev. Stat. tit. 26 § 1027.3 (1979), Or. Rev. Stat. § 243.666(1) (1977), Vt. Stat. Ann. tit. 21 § 1726(a)(8) (1977), Wash. Rev. Code § 41.56.122(1) (1978) and Wash. Rev. Code § 2813.16.100(1) (1976).

² Col. Gov't Code § 3540.1(i)(2) (West 1980), Conn. Gen. Stat. Ann. § 5-280(a) (West 1980), Haw. Rev. Stat. § 89-4(a) (1976), Mass. Ann. Laws. ch. 150-E, § 12 (1980), Mich. Comp. Laws Ann. § 423.210(1)(c) (1978), Minn. Stat. Ann. § 179.65(2) (West 1980), Mont. Rev. Codes Ann. § 59-1605(c) (1977), R.I. Gen. Laws § 36-11-2 (1979), Wis. Stat. Ann. § 111.81(6) (West 1974) and Wis. Stat. Ann. § 111.70(2) (West 1974).

³ For a discussion of this issue, see Benjamin A. Taylor and Fred Witney, *Labor Relations Law* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979), pp. 364-365.

The majority-in-the-unit or unit-majority requirement mandates that employee organization must win over half the votes of all employees who are *eligible to vote* in order to be certified as the bargaining agent. This is in some contrast with both elections for public office and private-sector union elections, where the usual requirement is to gain a majority of the *votes cast*. Under a majority-voting approach, a winner is declared even if the vote total does not represent a majority of those eligible to vote. The essence of a unit-majority requirement is to make it impossible for a minority of employees in a bargaining unit to commit all employees to union representation.

The study will briefly review the basic notion of a unit-majority concept in labor law and detail its usage, primarily in state public employment statutes. Data from the first-year election results in a state which required a unit majority for public employees will then be analyzed to evaluate the impact of such an election requirement on union victories and losses.

Private-Sector Labor Legislation

The approach on union voting requirements taken in both federal and state regulations has generally been to use the principle of majority-of-the-votes cast. Under federal law, the validity of a bargaining agent selected by less than a majority of those eligible to vote was first upheld in the *Virginian Railway Company* case under Railway Labor Act in 1936.⁴ The next month the National Labor Relations Board (NLRB) cited *Virginian Railway Company* in holding that a union could be certified under the National Labor Relations Act when the election winner garnered less than a majority of eligible voters.⁵ The NLRB expanded this policy in the same year to provide that a union which won a representation election would be certified even if the total number of employees who cast ballots in the election for any choice was less than a majority of the employees eligible to vote.⁶ Clearly then, private-sector federal legislation has embraced the concept that both public policy and democratic choice in the determination of bargaining agents can be effectuated with a simple voting majority in union elections.

The existing state regulation of private-sector labor relations which is outside the jurisdiction of federal law has generally followed the fed-

⁴ *Virginian Ry. Co. v. System Federation No. 40*, 300 U.S. 515, 559-61 (1937). It should also be noted that the National Mediation Board will not certify an election in which less than a majority vote. *Pan American Airways, Inc.*, NMB Case No. R-1818 (1947).

⁵ *Associated Press*, 1 NLRB 686 (1936).

⁶ *R.C.A. Manufacturing*, 2 NLRB 168 (1936). See also *Northwest Packing Co.*, 65 NLRB 890 (1946) and *Stiefel Construction Corp.*, 65 NLRB 925 (1946).

eral pattern. At present, 22 states have statutes which provide for bargaining rights similar to those of the federal Labor-Management Relations Act.⁷ All but five of these laws use the principle of majority of the votes cast to certify a bargaining representative as the result of an election. Of the five which do not follow the federal lead, three states, Colorado, Idaho, and North Dakota, require that a majority of eligible employees must participate as voters to render any election valid. However, there is nothing which forces a union to be selected by a majority of eligible voters to be declared the certified representative in these three states. Only two states, California and South Dakota, have private-sector laws which mandate that a union representative must receive the votes of a majority of employees in the unit to be certified.

Public-Sector Labor Legislation

Public-employee unions are frequently subjected to more rigorous voting requirements than those established for employees covered by federal or state private-sector bargaining laws. Twelve state laws require a union to garner a majority-in-the-unit vote margin to win certification through an election.⁸ One additional state specifies that elections can produce certification only if a majority of unit employees cast ballots.⁹ By contrast, 35 public-sector statutes, including federal employees and the postal service, use the principle of simple voting majority in union representation elections.¹⁰

⁷ Ariz. Rev. Stat. §§ 23-1301 to 23-1395 (West 1971 and 1979 cum. sup.); Cal. Lab. Code §§ 20100 to 20130 (West); Colo. Rev. Stat. §§ 8-3-101 to 8-3-123 (1973); Conn. Gen. Stat. §§ 31-101 to 31-111, sb (1972); Haw. Rev. Stat. §§ 377-1 to 377-18 (1977); Idaho Code §§ 22-4101 to 22-4113 (1977); Kan. Stat. §§ 44-818 to 44-830 (1973); Mass. Gen. Laws Ann. ch. 150A, §§ 1 to 12 (West) (1976); Mich. Comp. Laws §§ 423.201 to 423.216 (1978); Minn. Stat. §§ 179.01 to 179.17 (West 1966 & 1980, cum. sup.); N.H. Rev. Stat. Ann. § 17; N.Y. Lab. Law (McKinney); N.D. Cent. Code §§ 34-12-01 to 34-12-14 (1979); Or. Rev. Stat. §§ 663.005 to 663.295 (1977); PA. Stat. Ann. tit. 43, §§ 211.1 to 211.13 (Purdon 1964 & 1979, cum. sup.); R.I. Gen. Laws §§ 28-7-1 to 28-7-47 (1979); S.D. Comp. Laws Ann. §§ 3-18-1 to 3-18-17 (1974); Utah Code Ann. §§ 34-20-1 to 34-20-13 (1974); Vt. Stat. Ann. tit. 21, §§ 1501 to 1623 (1978); W.Va. Code §§ 21-1A-1 to 21-1A-8; Wis. Stat. §§ 111.01 to 111.97 (1974).

⁸ Alaska Stat. § 14.20.560(a) (1979); Del. Code tit. 14, § 4005(c) (1978); Ga. Code Ann. § 54-1305 (1979); Idaho Code § 33-1273 (1979); Idaho Code § 44-1803 (1977); Ind. Code § 20-7.5-1-10(b) (1976); Kan. Stat. § 72-5416 (1979); Neb. Rev. Stat. § 79-1291 (1976); N.D. Cent. Code § 15-38.1-10 (1977); R.I. Gen. Laws § 28-9.1-5 (1979); R.I. Gen. Laws § 28-9.2-5 (1979); R.I. Gen. Laws § 28-9.3-5 (1979); S.D. Compiled Laws Ann. § 3-18-3 (1979); S.D. Compiled Laws Ann. § 9-14A-2 (1979); Utah Code Ann. § 34-20a-4 (1979); Wyo. Stat. § 27-10-103 (1977).

⁹ N. Mex. State Personnel Board Rule § 8(b).

¹⁰ Civil Service Reform Act of 1978, Pub. L. No. 95-454 § 7111 (1978); Postal Reorganization Act of 1970, § 1203(a), 39 U.S.C. § 1203(a) (1970); Cal. Gov't

Therefore, it is clear that, although the tendency favors the private-sector practice, a substantial number of states have polling requirements for public-union elections which are designed to maximize assurances that employee choice is well demonstrated. The reasoning typically used in this approach is that a small, active minority cannot produce union certification for all employees if the margin required for an election victory encompasses a unit-majority vote.

The Effect of a Unit-Majority Voting Requirement

The public policy issue which permeates unit-majority voting requirements is the impact on representation. The basic question is whether or not unions lose more elections and employees are less likely to be represented by a bargaining agent when certification requires a majority-in-the-unit selection instead of simply a majority of those casting votes. Some indication of the effect of more rigorous voting requirements can be gleaned from examining the first year of election experience under a state public employment law which used a unit majority, the Iowa Public Employment Relations Act.¹¹

The Iowa results are particularly useful because the statute covers all categories of public employment and also requires that no union can be certified unless an actual election occurs.¹² Thus, every unit produced election results for analysis. Although the statute has recently been amended to remove the unit-majority requirement, the initial year of election activity, the most active organizing period under any new

Code § 3544.7(a) (West 1980); Conn. Gen. Stat. Ann. § 5-275(3) (West 1980); Conn. Gen. Stat. Ann. § 7-468(b) (West 1980); Conn. Gen. Stat. Ann. § 10-153b(d) (West 1980); Fla. Stat. Ann. § 447.307 (West 1976); Haw. Rev. Stat. § 89-7 (1975); Ind. Code § 22-6-4-7(e) (1976); Kan. Stat. § 75-4327 (1976); Ky. Rev. Stat. § 345.060 (1978); Me. Rev. Stat. Tit. 26 § 967 (1980); Me. Rev. Stat. Tit. 26 § 979-F(2)(b) (1974); Me. Rev. Stat. 26 § 1025 (1980); MD. Ann. Code art. 77 § 160(e) (1975); Mass. Gen. Laws Ann. ch. 150E, § 4 (West 1980); Mich. Comp. Laws § 423.214 (1980); Minn. Stat. Ann. § 179.67(7) (West 1980); Mont. Rev. Codes Ann. § 59-1606 (1977); Mont. Rev. Codes Ann. § 41-2205 (1977); Nev. Rev. Stat. § 288.160 (1975); N.H. Rev. Stat. Ann. § 273-A:10 (1975); N.J. Rev. Stat. Ann. § 34:13A-5.3 (West 1977); N.Y. Civ. Serv. Law § 207 (Consol. 1976); Okla. Stat. Ann. tit. 11 § 548.4 (West 1979); Okla. Stat. Ann. tit. 70 § 509.2 (West 1979); Or. Rev. Stat. § 243.666 (1977); PA. Stat. Ann. tit. 43 § 1101.605 (Purdon 1977); R.I. Gen. Laws § 28-9.4-6 (1969); Tex. Civ. Code Ann. tit. 5145c-1 § 6(a) (Vernon 1976); Vt. Stat. Ann. tit. 3 § 9.41 (1979); Vt. Stat. Ann. tit. 21 § 1724(f) (1979); Vt. Stat. Ann. tit. 16 § 1992 (1979); Wash. Rev. Code § 41.56.080 (1979); Wash. Rev. Code § 41.59.090 (1979); Wash. Rev. Code § 28B.52.030 (1979); Wash. Rev. Code § 53.18.050 (1979); Wis. Stat. Ann. § 111.83 (West 1980); Wis. Stat. Ann. § 111.70 (West 1980). As noted at fn. 11, Iowa initially used a majority in the unit requirement but now requires only majority of the votes cast.)

¹¹ Iowa Code annotated, Sec. 20, § 20.15 (1974) and amended (1977).

¹² Iowa Code annotated, Sec. 20, § 20.14 (1974).

public-sector bargaining law, took place under a majority-in-the-unit voting requirement for certification.¹³ The results of the first year of election activity are arrayed in Table 1.

TABLE 1
Election Results Under Iowa PERA
April 1975 to April 1976

	TOTAL	Teachers	Non teachers
Elections held	496	319	177
Elections won	477	310	167
Elections lost	19	9	10
Percentage of employees voting	86.2%	87.4%	85.4%
Percentage voting for a union representative	90.9%	91.2%	90.7%

Source: Compiled from the Information Files of the Iowa Public Employment Relations Board. Other references to Iowa public-sector election figures were computed from the same data source cited here.

Several clear patterns emerge from the election data. First, the voter turn-out was high, with 86.2 percent of the eligible voters participating. However, this figure is no more than reflective of election data for other jurisdictions where union victory is determined by a simple voting majority. Elections held by the NLRB in the private sector during 1975 and 1976 showed a voter participation rate of 87.3% and 88.1%, respectively.¹⁴ As evidence from a similar public-sector situation, data from the Indiana Education Employment Relations Board (IEERB) reveal an even higher figure. Participation rates for the first three years of the Indiana experience were 92 percent in 1974, 88 percent in 1975, and 93 percent in 1976.¹⁵ Consequently, the suggested increased pressure for voter turn-out contained in majority-in-the-unit requirement is not evident in Iowa. The Iowa turn-out figure is, in fact, slightly less than the majority-of-votes-cast jurisdictions cited.

Second, the favorable union vote among Iowa public employees was substantial and produced a very high rate of union representation. A union was not certified to represent employees in only 3.8 percent of the 496 elections held in the first year in Iowa. It is not possible to make comparisons with NLRB and IEERB figures on the percentage of wins and losses because both of these jurisdictions permit voluntary recognition, in addition to using elections to establish bargaining relation-

¹³ Iowa Code annotated, Sec. 20, § 20.15(2) and (3) as amended (1977).

¹⁴ Calculated from data reported in National Labor Relations Board, *Fortieth Annual Report of the NLRB*, 1975 and *Forty-First Annual Report of the NLRB*, 1976.

¹⁵ Calculated from data reported in Indiana Education Employment Relations Board, *IEERB Annual Report 1974-1975*, *IEERB Annual Report 1975-1976*, and *IEERB Annual Report 1976-1977*.

ships. However, comparisons can be noted in terms of favorable union vote across the Iowa, NLRB, and Indiana data. The rate for affirmative union voting was 85.6 percent for 1974 through 1976 in Indiana;¹⁶ 48.6 percent for 1975 and 1976 under the National Labor Relations Act;¹⁷ and in Iowa, the portion of the vote for union representation was 94.3 percent during the first year of election activity.

Consequently, there is no evidence in the Iowa election figures to suggest that a negative effect on union election success has been produced by requiring unions to win by a unit majority, rather than a simple voting majority. In fact, it could be argued that a stronger demonstration of union interest than what might have appeared was generated by the more urgent election participation effort.

As a final comment on the Iowa election data, attention can be focused on the pattern of election losses during the initial twelve months. The number of elections which resulted in no representation was 19. While this is a small number to evaluate, two characteristics concerning the losses deserve mention. First, the rate of loss was higher for nonteacher units, 5.6 percent as opposed to 2.8 percent for teacher elections. Second, the losses across all types of units tended to occur in smaller bargaining units. The average size of all units in the data was 95 employees. For the units in which no representation resulted, the average size was 50 employees.

The strongest explanation of election losses is perhaps found in the law itself, rather than in the unit characteristics. The Iowa election procedure involved a two-question ballot. The first question was whether or not the employee voter wanted union representation. If a unit majority voted affirmatively on question one, the ballots were then counted on the second question which identified the union or unions seeking to be named the bargaining agent.¹⁸ Twelve of the 19 losses were produced by the absence of a unit majority on the first question. Although 12 losses in 496 elections is not a resounding negative figure, it could be argued that some portion of these 12 elections might have ended in representation on a single-question ballot. This would even further reduce any negative consequences which might be attributed to the unit majority election requirement.

Conclusion

The concept of using a simple majority of votes cast to determine

¹⁶ *Ibid.*

¹⁷ NLRB.

¹⁸ This feature was also changed to incorporate the majority-of-votes-cast principle by the 1977 amendments, and later dropped completely.

bargaining representatives is standard practice in private-sector employment, both at the federal and state levels of legislation. However in public employment, this principle is not consistently followed. A number of public-sector statutes require a union to win certification by securing the votes of a majority of bargaining unit members. This may appear to make it more difficult for a union to win representation rights. The data from the first year of the Iowa Public Employment Relations Act show that an increased difficulty is not in evidence in the public sector. This result suggests that policy-makers who favor or oppose a unit majority voting requirement in public labor legislation will find more comfort in their philosophical orientations on the issue than in any real differences in the level of union representation which might be expected to develop under variations in election procedures.

A Replication of the Burton-Krider Model of Public-Employee Strike Activity*

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Since the mid-1960s, there has been increasing interest among state legislators, public employers and citizens in preventing public-employee strikes. Many states even passed strike prohibition laws.¹ Public-sector strikes nonetheless became more commonplace during the 1970s. Little is known about the determinants of these strikes, however, beyond anecdotal reports and journalistic conjecture.

One intuitively plausible model of public-employee strike activity has been developed and tested by Burton and Krider.² This model was derived from a careful consideration of current thinking on the determinants of private-sector strikes and constituted the first quantitative work reported in the literature of this topic. Using multiple measures of strikes which captured the frequency, breadth, and duration of strikes between 1968 and 1971, Burton and Krider found the performance of the coefficients on their variables to be inconsistent and disappointing. "Most of the variation among states in strike activity in a particular year," they reported, "cannot be explained by our variables, and those variables that appear important in one year often are unimportant or have an opposite effect in other years."³ The explanatory power of the multiple regressions was also low, considering the number of predictors which were entered. Coefficients were also unstable, with inconsistent directions in signs across all four years of their analysis.

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¹ Benjamin Aaron, "Procedures for Settling Public Interest Disputes in the Essential and Public Sectors: A Comparative View," in *Collective Bargaining in the Essential and Public Service Sectors*, ed. Morley Gunderson (Toronto: University of Toronto Press, 1975).

² John F. Burton and Charles E. Krider, "The Incidence of Strikes in Public Employment," in *Labor in the Public and Nonprofit Sectors*, ed. Daniel S. Hamermesh (Princeton, N.J.: Princeton University Press, 1975), pp. 135-177.

³ Burton and Krider, p. 170.

Recently issued publications from the Commerce Department and the Bureau of Labor Statistics on public-employee labor relations afford an opportunity to reexamine whether this model can predict differences in strike activity across states.⁴ The purpose of this study is to replicate the Burton and Krider model of public-employee strike activity by examining such activity during 1974 and 1975, respectively. The results from this analysis will be compared with Burton and Krider's earlier findings for the 1968-1971 period.

The Burton-Krider Strike Model

Burton and Krider argue that two general conditions should be associated with public-employee strikes. These are (a) divergent expectations which can result from incorrect assessments of economic events by at least one of the parties, and (b) the strength of union bargaining power relative to the bargaining power of the employer.

Expectations for an acceptable settlement on behalf of both parties are based on interpretations of current as well as predicted economic events. A change in economic conditions can affect relative bargaining position as follows: "Any change in the environment that increases the expectations of union leaders or members about a reasonable settlement, or decreases management expectations, would be positively associated with strikes."⁵ Divergent expectations reduce the probability of reaching an agreement and thus should be positively associated with strike activity.

Bargaining power is tied to the concept of "market wage." This is the wage which would have been set by the employer in the absence of the influence of organized labor. Strong unions, it is suggested, should be able to obtain wages "considerably in excess of the market wage" without striking. Unions with low levels of "relative bargaining power" will have little incentive to strike.⁶ Strikes should therefore be most frequent when relative bargaining power is balanced.

⁴ U.S. Department of Commerce and U.S. Department of Labor, *Labor Management Relations in State and Local Government, Special Studies 75 & 81* (Washington: U.S. Government Printing Office, 1976 and 1977).

⁵ Burton and Krider, p. 150.

⁶ Burton and Krider, pp. 151-153. The authors also suggest that "a very weak union would not even be able to force the employer to pay what the market would dictate." Under the latter condition, "the employer presumably voluntarily grants the market wage if only to reduce the quit rate among his employees" (p. 151). The logical, albeit unintentional, implication of this line of reasoning is that members of weak unions should be able to enhance their bargaining power through disassociation. However, decertifications in the public sector are not common. Either the membership is not cognizant of the disutility of being a member of a weak union, or perhaps the authors' discussion of the behavior of weak unions above needs to be reevaluated.

Accordingly, increases in the relative bargaining power of the parties are not associated necessarily with an increase in strike activity. This poses methodological problems which are not overlooked by Burton and Krider: "In the local government sector, however, we believe the problem is not severe. Specifically, we believe that, during the period of our empirical examination, most local government unions were weak or only moderately strong. . . ." ⁷

It has been suggested more recently that local government unions during the late 1960s and early 1970s were far stronger than is acknowledged by Burton and Krider: "During the 1960's and 1970's, it was politically expedient and sometimes necessary for elected officials to agree to wage and fringe benefit improvements without regard for the funding consequences of these agreements."⁸ To the extent that public-sector unionism during this period can be characterized by active and effective union bargaining strategies, one cannot summarily dismiss the possibility that high levels of bargaining power on behalf of unions may have existed. From a theoretical perspective, the disappointing results obtained by Burton and Krider may thus not be that surprising.

The authors considered 15 variables which, based on their general hypotheses, were expected theoretically to be associated with strikes. The means and standard deviations for the measures selected to represent these variables in the 1974-1975 replication are presented in Table 1.

The expected signs on the regression coefficients of these variables apply to all four of the dependent strike measures selected for examination. Burton and Krider acknowledge, however, that a more comprehensive model would have taken into consideration expected differences across their dependent measures.⁹

A Comparison of the Results Across the Two Studies

The identification of variables across the two studies which performed similarly with respect to sign consisted of a two-stage procedure. First, the pooled regression results for 1974-1975, as shown in Table 2, were compared to the pooled regression results reported in the original study. All variables with the same sign, irrespective of the initial prediction, were identified for each of the strike measures, respectively. The second stage of this procedure consisted of counting the number of coefficients in the single-year regressions in both studies which had

⁷ Burton and Krider, p. 153.

⁸ David Lewin, Peter Feuille, and Thomas Kochan, *Public Sector Labor Relations* (Glen Ridge, N.J.: Thomas Horton and Daughters, 1977), p. 7.

⁹ Burton and Krider, p. 149.

TABLE 1
Variable Descriptions^a

	Expected Sign	1974	1975
<i>Dependent Variable</i>			
Number of strikes		111.42 (318.31)	107.27 (301.64)
Employees involved		108.44 (380.68)	76.82 (109.64)
Days idle		496.45 (919.26)	599.94 (969.61)
<i>Independent Variable</i>			
Private unionization	(+)	22.23 (8.86)	Same
Public unionization ^b	(+)	38.78 (24.90)	35.49 (26.48)
Change in earnings ratio	(-)	-.02 (.05)	.01 (.05)
Earnings ratio	(-)	1.10 (.16)	1.10 (.15)
Unemployment rate	(-)	5.51 (1.58)	8.47 (2.16)
Tax percentage	(+)	18.46 (2.70)	18.88 (2.64)
Size of work group	(+)	194.20 (196.67)	204.71 (187.24)
Employment in sanitation	(+)	.77 (.83)	.71 (.75)
Right-to-Work law	(-)	.41 (.50)	Same
Good-Faith law	(?)	.43 (.50)	.45 (.50)
Permissive law	(?)	.14 (.35)	Same
Meet-and-Confer law	(?)	.06 (.24)	Same
Bargaining illegal	(-)	.47 (.50)	.45 (.50)
Third-party procedure law	(-)	.55 (.50)	.57 (.50)
Strikes prohibited or penalized	(-)	.49 (.51)	.51 (.51)

^a The operational definitions and sources for these variables are available from the author on request.

^b The 1975 value was adjusted by the number of local employees covered by collective agreements.

the same sign as was found in the pooled regression comparisons.¹⁰

Four out of eleven variables listed in Table 3 have signs which were not predicted by the model. These variables are Work Group Size, Tax Percentage, the Unemployment Rate, and the Earnings Ratio. The con-

¹⁰ Results for the single-year regressions for 1974 and 1975 are available from the author on request.

TABLE 2

A Comparison of the Pooled Regressions for 1974-1975 with Burton — Krider's 1968-1971 Pooled Regressions

Variable Name	Prediction	"Number of Strikes"		"Employees Involved"		"Days Idle"	
		1974 to 1975 (n = 98)	1968 to 1971 (n = 200)	1974 to 1975 (n = 98)	1968 to 1971 (n = 200)	1974 to 1975 (n = 98)	1968 to 1971 (n = 200)
Private unionization	(+)	-12.13 ^a (2.55)	2.80 ^b (3.2)	-1.09 (0.21)	0.53 (1.6)	18.67 (1.11)	4.64 (1.5)
Public unionization	(+)	.63 (0.31)	-0.14 (0.4)	-1.84 (0.84)	0.23 (1.9)	-2.78 (0.39)	1.69 (1.5)
Earnings ratio	(-)	236.30 (1.04)	-27.29 (0.7)	740.01 ^b (2.99)	11.94 (0.8)	472.99 (0.59)	-62.83 (0.5)
Change in earnings ratio	(-)	-2189.80 ^b (3.91)	-1.90 ^a (2.2)	-498.13 (0.82)	-1.00 ^b (3.1)	3549.45 (1.79)	-5.77 (1.9)
Unemployment rate	(-)	32.68 ^a (2.59)	4.33 (1.3)	-1.11 (0.08)	2.50 ^a (2.0)	28.16 (0.63)	10.72 (0.9)
Tax percentage	(+)	6.70 (0.55)	-13.28 ^b (3.3)	-14.61 (1.11)	-2.39 (1.6)	-33.99 (0.80)	-16.01 (1.1)
Size of work group	(+)	-.19 (1.19)	-0.32 (1.1)	-0.40 ^a (2.30)	-.04 (0.4)	-1.03 (1.83)	-0.31 (0.3)
Percent employment in sanitation	(+)	69.72 (1.73)	8.41 ^b (2.8)	-16.23 (0.63)	3.27 ^b (3.0)	6.10 (0.64)	28.22 ^b (2.7)
Right-to-Work law	(-)	108.17 (1.31)	-33.91 ^a (2.3)	56.20 (0.63)	-3.10 (0.6)	-231.49 (0.80)	61.95 (1.2)
Permissive law	(?)	27.23 (0.28)	-28.83 (1.2)	42.96 (0.40)	-1.16 (0.1)	-30.54 (0.09)	-36.51 (0.4)
Meet-and-Confer law	(?)	341.79 ^a (2.25)	-21.26 (1.1)	33.69 (0.20)	-2.86 (0.4)	-480.85 (0.90)	30.95 (0.5)

TABLE 2—Continued

Variable Name	Prediction	"Number of Strikes"		"Employees Involved"		"Days Idle"	
		1974 to 1975 (n = 98)	1968 to 1971 (n = 200)	1974 to 1975 (n = 98)	1968 to 1971 (n = 200)	1974 to 1975 (n = 98)	1968 to 1971 (n = 200)
Good-Faith law	(?)	243.41 (1.94)	-36.60 (1.8)	80.20 (0.59)	-4.69 (0.6)	-414.68 (0.94)	-9.80 (0.1)
Bargaining illegal	(-)	-311.31 ^b (2.72)	-4.89 (0.3)	-181.91 (1.46)	4.80 (0.7)	-986.67 ^a (2.44)	-54.40 (0.8)
Third-party procedure law	(--)	-623.54 ^b (6.15)	33.51 ^a (2.0)	-263.64 ^a (2.39)	4.15 (0.7)	-1151.96 ^b (3.22)	23.05 (0.4)
Strikes prohibited or penalized	(-)	38.17 (0.49)	-1.21 (0.1)	-99.28 (1.17)	-5.45 (1.3)	-221.81 (0.81)	-33.56 (0.8)
F		4.72 ^b	N. A.	1.58	N. A.	2.14 ^a	N. A.
R ²		.46	.34	.22	.20	.28	.10
\bar{R}^2		.36	N. A.	.08	N. A.	.15	N. A.

Notes: N. A. denotes not available. ^a denotes significance at the .05 level. ^b denotes significance at the .01 level. *t*-statistics are in parentheses below each coefficient. Data sources are available from the author on request.

sistency of the performance of the Work Group Size variable, the only variable in Table 3 listed for all three strike measures, will be considered first.

Burton and Krider predicted a positive coefficient on this variable in light of increased expectations and the enhanced bargaining power of labor. Alternatively, larger bargaining units might have reduced bargaining power because a greater share of total costs are consumed by the labor costs of the bargaining unit.¹¹ The ability of employers to offer acceptable concessions in these instances would be limited. Assuming that labor recognizes financial constraints on the ability of employers to make more generous offers, expectations of both of the parties should converge.

The prediction of a positive coefficient on the Tax Percentage variable was also apparently misspecified. As also seen in Table 3, five out of six single-year regression coefficients had negative signs using the "Employees Involved" strike measure, and four coefficients had negative signs using "Days Idle." Burton and Krider expected divergent expectations of the parties which, on balance, were believed to dominate the countervailing effect of the reduced bargaining power of the union. If, on the other hand, the effect of reduced bargaining power dominates the effect of divergent expectations, a negative coefficient would be predicted. In a critique by Jack Stieber of Burton and Krider's initial prediction for this variable, an expectation (and the finding) of a negative coefficient is also supported by "the greater ability of cities with a higher tax rate to pay higher wages, thus contributing to the negative influence on strikes."¹²

Thus, the unexpected, albeit relatively consistent, performance of the Work Group Size and the Tax Percentage variables can be largely explained by misspecified predictions. A positive performance for the coefficients on the Earnings Ratio variable using the "Employees Involved" strike measure and the Unemployment variable using the "Number of Strikes" and the "Days Idle" strike measures cannot, however, be similarly rationalized. Why, then, were and are there positive signs for these coefficients?

Public employers have reason to encourage labor conflict. The disruption of services which results from a strike does not lead to a subsequent reduction in revenues. Citizens and industry are taxed, regardless of the continuity of services delivered. In view of the limited

¹¹ Alfred Marshall, *Principles of Economics* 8th ed. (New York: Macmillan, 1949), pp. 383-387. See also Albert Rees, *The Economics of Trade Unions* (Chicago: University of Chicago Press, 1960), pp. 70-73.

¹² Jack Stieber, "Comments," in the Hamermesh book cited in fn. 2.

TABLE 3
Variables in the Pooled Regressions Having Coefficients with the Same Sign, by Strike Measure

Strike Measure								
"Number of Strikes"			"Employees Involved"			"Days Idle"		
Variable	Sign	Coefficients*	Variable	Sign	Coefficients*	Variable	Sign	Coefficients*
						Private Unionization	(+)	5
			Earnings Ratio	(+)	4			
Change in the Earnings Ratio	(-)	4	Change in the Earnings Ratio	(-)	5			
Unemployment Rate	(+)	3				Unemployment Rate	(+)	4
			Tax Percentage	(-)	5	Tax Percentage	(-)	4
Work Group Size	(-)	6	Work Group Size	(-)	4	Work Group Size	(-)	5
Percent Employment in Sanitation	(+)	6				Percent Employment in Sanitation	(+)	4
						Permissive Law	(-)	3
						Good Faith Law	(-)	3
Bargaining Illegal	(-)	5				Bargaining Illegal	(-)	5
			Strike Prohibited	(-)	5	Strike Prohibited	(-)	4

* Number of coefficients in the single-year regressions having the same sign. Because there were a total of six years of analysis, a maximum of six coefficients can have the same sign.

alternatives available to public employers to raise revenues, strikes may actually be a viable means for reducing public expenditures.¹³

If high levels of unemployment place demands for additional government services which are difficult to support, even with federal subsidies, public employers may actually tend to support (or even encourage) strikes because they are an indirect mechanism for increasing surplus reserve funds. Were this to be true, one would not be surprised to find evidence of positive coefficients on the Unemployment variable. Further, it is through the duration of strikes that public employers should be able to benefit most from strikes. Longer strikes, especially by less essential employees, save employers more money. It is interesting that the largest number of positive coefficients on the Unemployment variable were associated with the "Days Idle" strike measure.

Still further, the positive and relatively consistent coefficients on the Earnings Ratio variable were found only when using the "Employees Involved" strike measure. Public employers who are required to negotiate with larger bargaining units would be expected to obtain costs savings from strikes especially in situations where they are paying high labor costs relative to the private sector. Thus, when one takes into consideration the interest of the employer in taking strikes, the finding of a positive coefficient on this variable for "Employees Involved" would not be unexpected.

Differences Across Strike Measures

Burton and Krider suggested that as a model of the "propensity to strike," one should find more predictable results for the "Number of Strikes" and the "Employees Involved" strike measures than for "Days Idle."¹⁴ Their 1968-1971 results partly confirmed this expectation. Among all coefficients reported, 66.7 percent had signs in the direction predicted for the "Employees Involved" measure. A similar, but less successful, performance of 54.2 percent was demonstrated for both "Number of Strikes" and "Days Idle."

The explanatory power of the pooled regressions across the two studies also lends support to their contention. The mean R^2 in the two pooled regressions for the "Number of Strikes" measure was .40, for "Employees Involved" .21, and for "Days Idle" .19.

If, on the other hand, one evaluates the ability to predict across strike measures by considering the stability of the performance of the

¹³ This possibility was discussed recently by David Lewin in "Public Sector Collective Bargaining and the Right to Strike," in Lewin, Feuille, and Kochan, pp. 237-252.

¹⁴ Burton and Krider, p. 149.

coefficients, a different conclusion is suggested. As seen in Table 3, nine variables were identified as exhibiting relatively stable signs for "Days Idle." Only five variables could be identified for the other strike measures. This evidence calls into question the extent to which the duration of public employee strikes is random.

The greater success at being able to explain differences in strike activity across states using "Number of Strikes," as seen in the coefficients of determination, may simply reflect the greater impact that wage comparisons and recent wages concessions have on the propensity to initiate a strike. When entering the Change in Earnings Ratio variable in a stepwise regression using "Number of Strikes," it contributed most to the increase in the coefficient of determination. As a general rule, public employees apparently take into consideration recent wage gains in their decision to strike. Once this decision has been made, other considerations may be more important determinants of the strike's duration.

Note further that in Table 3, four legal variables (permissive law, good-faith law, bargaining-illegal law, and the strike-prohibition law) were found to have relatively consistent signs when using "Days Idle." The construction of these four dummy variables has unfortunately ignored any court decisions which have subsequently challenged the constitutionality of these provisions. State executive orders and the influence of local collective bargaining ordinances have also been overlooked. Any interpretation of the performance of these variables is thus open to considerable qualification.¹⁵

The legal variables in this analysis are probably more representative of a state's overall acceptance (or rejection) of collective bargaining among public employees. To the extent that this is true, states which have passed some type of labor relations policy do not necessarily encourage, according to these results, longer strikes. This same conclusion is not as readily apparent when using "Number of Strikes" and "Employees Involved."

Conclusions

These results, coupled with Burton and Krider's findings, suggest that Burton and Krider's strike model can be used to generate relatively stable findings across a number of variables selected for examination. It has been suggested, however, that some of the original predictions were probably misspecified and that the basic model could be meaningfully extended to take into account the behavior of employers in the

¹⁵ The direction of causality is also problematic. It may well be that the passage of state laws has been influenced by strike activity. This would suggest the importance of considering the possibility of dual causality.

determination of strike behavior by public employees. Further analyses of public-sector employee strike activity may thus be enhanced by a recognition of the influence exerted by both labor and management on the decision to take or influence a strike.

DISCUSSION

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The good news is that—unlike most contributed paper sessions—there are some common themes among these papers, in particular the focus by McCollum and Pegnetter on the establishment of the bargaining relationship, and the focus by Farber and Rodgers on the resolution of negotiating disputes. The bad news is that the significance of these commonalities has not yet become apparent, and as a result I will accord with past practice and discuss these four papers in isolation from each other.

The Managerial Sponsorship of Bargaining

Professor McCollum analyzes a phenomenon that is peculiar to public-sector bargaining; namely, that under selected circumstances management can obtain more benefit from bargaining than can employees or their unions. In the case of three local governments in Northern Virginia, collective bargaining enabled management to respond to labor market pressures, create more rational (i.e., nonpolitical) personnel systems, and blame the unions if the taxpayers objected to the costs of these changes. In other words, McCollum's analysis confirms at least part of Wellington and Winter's and Gerhart's assessments that public officials and public unions can agree to mutually beneficial arrangements in which the costs are borne by others, usually the taxpayers.¹

A close inspection of McCollum's findings, however, suggests some limits to the generalizability of his results. First, it is difficult to imagine that the management of a local government located in a labor surplus area and with a smoothly functioning personnel system would perceive any benefits in collective bargaining. Second, the managerial responses in this study consist of answers to global questions rather than situation-

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¹ Harry H. Wellington and Ralph K. Winter, Jr., *The Unions and the Cities* (Washington: Brookings, 1971); Paul F. Gerhart, *Political Activity by Public Employee Organizations at the Local Level: Threat or Promise*, Public Employee Relations Library No. 44 (Chicago: International Personnel Management Association, 1974).

specific ones, and the observer wonders if these same managers would have responded so positively to specific questions designed to assess the degree to which the unions had negotiated constraints upon managerial discretion. Third, it appears that the managerial benefits McCollum describes are macro benefits which would accrue primarily to top-level officials, especially the elected ones. In contrast, the appointed administrators, particularly at the departmental level, might perceive a high level of micro costs resulting from collective bargaining, for it is at the departmental or workplace level that the contractual constraints upon managerial discretion are most keenly felt.² Because these administrators are usually not the public officials to whom the macro benefits will accrue, it would be instructive to see these same participants' responses to situation-specific questions disaggregated by managerial level or function. Fourth, the observer must wonder if the disestablishment of bargaining prior to the researcher's investigation had resulted in a "mellowing" of managerial attitudes and a concomitant willingness to respond positively.

Finally, McCollum leaves us in a state of suspense by not informing us how managers and employees in these three jurisdictions, having had a taste of collective bargaining, have handled employer-employee relations matters since the 1977 Virginia Supreme Court decision outlawing bargaining. We must hope that in his next paper Professor McCollum addresses the question: Once the parties have tasted the pleasures of bilateral interaction, can they ever be satisfied with unilateral fulfillment?

What Is a Majority?

Professor Pegnetter's paper consists of a survey of those state laws which require unit majority voting for bargaining-agent certification and a case study of one year's worth of Iowa public-sector representation elections held under such a voting requirement. Most unions strongly oppose this requirement, arguing that apathetic employees perform the functional equivalent of casting a "no union" vote by simply not voting. As a result, it is said to be unfair to require union supporters to overcome both the overt opposition of those who vote "no" and the functional opposition of those who do not vote at all.

If the Iowa first-year election results are generalizable to other juris-

² For instance, see David T. Stanley with Carole L. Cooper, *Managing Local Government Under Union Pressure* (Washington: Brookings, 1972); Hervey A. Juris and Peter Feuille, *Police Unionism* (Lexington, Mass.: D. C. Heath, 1973); Charles R. Perry, "Teacher Bargaining: The Experience in Nine Systems," *Industrial and Labor Relations Review* 33 (October 1979), pp. 3-17.

dictions, they clearly suggest that the unit-majority voting requirement has almost no impact upon the unions' ability to win representation elections. (I hope that in a future paper Pegnetter attempts to explain a 96 percent union win rate in a predominantly agricultural and politically conservative state with a labor relations environment characterized by a private-sector right-to-work law and only a moderate degree of private-sector union penetration.) These results imply that legislators can publicly express their opposition to "forced" unionism by legislatively requiring unit-majority voting for certification while privately taking comfort in the fact that such a requirement has very little practical effect. Similarly, these results suggest that unions lobbying for the enactment or modification of bargaining legislation should not waste their scarce lobbying chips to prevent a unit-majority voting requirement and instead should use their political resources to obtain statutory provisions which have tangible impacts.

Arbitration and Risk

Professor Farber presents a persuasive theoretical argument against the assumed riskiness of final-offer arbitration (FOA). As he notes, the superior riskiness of FOA over conventional arbitration (ARB) depends upon some key assumptions, the most important being the requirement that the parties' final positions be the same under the two procedures. He argues that this is an unrealistic assumption, as is the assumption that FOA final offers are equally likely to be chosen by the arbitrator. Instead, he argues that the parties are differentially risk averse, and the more risk averse party will increase the probability of a favorable selection decision by submitting a more reasonable offer. Because these two assumptions are unlikely to exist in practice, Farber concludes that FOA may not create more risk than ARB and thus may not be superior to ARB in its ability to encourage negotiated settlements.

There are some data which suggest that Farber is correct in his assessments of these two assumptions.³ There are also some data which show higher proportions of negotiated settlements under FOA than under ARB procedures,⁴ which is inconsistent with Farber's conclusion. This theoretical-empirical inconsistency may be partly explained by two

³ Daniel G. Gallagher, Peter Feuille, Manmohan Chaubey, "Who Wins at Fact-finding: Union, Management, or Factfinder?" *IRRA Proceedings* (1979), pp. 273-281; and Thomas A. Kochan, Mordehai Mironi, Ronald G. Ehrenberg, Jean Baderschneider, Todd Jick, *Dispute Resolution under Fact-Finding and Arbitration: An Empirical Analysis* (New York: American Arbitration Association, 1979), chap. 4.

⁴ David B. Lipsky and Thomas A. Barocci, "Final-Offer Arbitration and Public Safety Employees: The Massachusetts Experience," *IRRA Proceedings* (1977), pp. 65-76.

factors. First, "pure" FOA rarely exists in most actual arbitration statutes, and the parties' negotiating behaviors are sensitive to procedural differences.⁵ Second, arbitration analyses are inextricably intertwined with normative preferences.⁶ Farber has chosen to conclude that FOA has no inherent settlement-inducing superiority over ARB, but other observers will conclude that his analysis shows that FOA functions as it was designed to function. The observed fact that the parties actually seek to reduce their degree of risk by moderating their FOA positions supports the claim that FOA induces more convergent movement than ARB does, and in turn this convergent movement is a necessary condition to the achievement of negotiated settlements.

Farber's analysis implies that the rational FOA party will not participate in a negotiated settlement but will simply moderate its position enough to reduce the risk of an adverse selection decision. No doubt such behavior has occurred and will continue to occur, but the comparatively high negotiated settlement rates under FOA suggest that both sides in many bargaining relationships are sufficiently risk averse to "seek security in agreement." Perhaps FOA is a theoretically lousy idea whose time has come.

"Who Strikes?" "Who Knows?"

Once upon a time Burton and Krider (BK) tried to isolate, in a rigorous analytical manner, the 1968–1971 incidence of noneducation strikes by local government employees. Professor Rodgers has replicated and updated their study using 1974–1975 data. While many of Rodgers's coefficient-specific findings differ from BK's, both papers support the conclusions that: (a) strike explanations are very sensitive to the particular strike indicator being used; (b) strike frequency is somewhat easier to explain than is strike breadth or strike duration; (c) most of the strike variance cannot be explained with the variables used in these two studies; and (d) strikes will continue to be idiosyncratic events which in turn will resist being accurately and fully explained in summary statistical fashion. In addition, both studies excluded teacher (and other education) strikes, and such an exclusion is somewhat puzzling given that teachers consistently account for one-fourth to one-half of all public employee strikes each year.⁷ No comprehensive analysis of

⁵ James L. Stern, Charles M. Rehmus, J. Joseph Loewenberg, Hirschel Kasper, Barbara D. Dennis, *Final-Offer Arbitration* (Lexington, Mass.: D. C. Heath, 1975), chaps. 2, 3, 4.

⁶ Peter Feuille, "Selected Benefits and Costs of Compulsory Arbitration," *Industrial and Labor Relations Review* 33 (October 1979), pp. 64–76.

⁷ U.S. Bureau of Labor Statistics, *Work Stoppages in Government, 1978*, Report 582 (1980).

public employee strike activity can possibly be performed by excluding the key occupational group.

Perhaps the most noteworthy difference between the two studies is Rodgers's emphasis upon a phenomenon which has received substantial attention subsequent to BK's research; namely, the discovery by many public employers that strikes may be effective employer weapons. Some of Rodgers's results are consistent with employer incentives to take strikes, and future strike research should test hypotheses which examine both union and employer strike behavior (i.e., strike research should not be based on the assumption that strikes are determined solely by union bargaining strategies). In short, Rodgers's results suggest some useful avenues to pursue in future investigations and are a helpful reminder that we should be humble about our knowledge of strike activity.

XI. STRESS IN THE WORKPLACE: AN EMERGING INDUSTRIAL RELATIONS ISSUE

Work, Stress, and Health

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In this short paper I propose to address three questions: (1) the relevance of stress research for organizational life; (2) the state of present knowledge about stress and health; and (3) the persistent lag between discovery and application in these matters.

Stress Research and Organizational Life

Research and theory about organizational life have been dominated by the criterion of organizational effectiveness. Productivity and profit, absence and turnover, strikes and grievances, and other such measures are the outcomes that most organizational research attempts to predict or explain. In combination they indicate the effectiveness or well-being of the organization as a living system.

But the individual is also a living system, with criteria of well-being quite separate from those of the organization. Agreement on those criteria is far from perfect, but there is some convergence around the ability to work, love, and play; to regard oneself and one's life with positive feelings; to perceive people and events without major distortion; and to be free from distressing physical symptoms. These and other measures of individual health, physical and mental, we regard as complex outcomes determined in part by properties of the organizations within which people work and the roles they perform in those organizations.

The enactment of an organizational role by an individual can thus

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be thought of as an intersection and partial overlap of two ongoing systems, the person-system and the organization-system. The overlap consists of certain cycles of behavior that are identical for both; these behaviors are part of the ongoing life of both the individual and the organization. We are accustomed to examining the extent to which these overlapping cycles contribute to efficiency, productivity, and other measures of organizational effectiveness. It is equally appropriate, however, to ask the complementary questions: Does the enactment of the organizational role enhance or reduce the well-being of the individual? Does it enlarge or diminish the person's valued skills and abilities? Does it increase or restrict the individual's opportunity and capacity to perform other valued social roles?

Stress and Health

Research on the full triad of work, stress, and health is still relatively uncommon. More research has been done on the latter elements, stress and health, or more specifically, on the physiological and behavioral effects of certain stressors (stimuli) on laboratory animals and on human beings. As a result, much has been learned about the psychobiology of stress, about the effects of stress on the central nervous system, on neuroregulators in the brain, and on the immune system. Something is known also about the relationship of stress to physical and psychiatric illness. Without pretending even to summarize these large bodies of work, I want to suggest in each of these areas the kinds of findings that are accumulating, especially those in which the experimental stressor is strongly suggestive of conditions imposed by many jobs.

Psychobiology of Stress

The earliest research on biological aspects of stress concentrated on the adrenocorticotrophic hormone (ACTH) and the pituitary-adrenal system. In more recent years, other hormones have been identified as stress-responsive. These include the catecholamines (epinephrine and norepinephrine), growth hormone, and testosterone. Many stressors evoke these hormonal responses, but the common element appears to be emotional arousal to threatening and unpleasant aspects of life situations (Mason, 1975; Levine, 1980).

Moreover, some of these hormonal changes occur not only in response to classical aversive stimuli like pain or noise, but also in response to unfavorable changes in environmental contingencies and expectations. For example, when animals trained to work for food by pressing a lever were presented with a condition in which pressing the lever did

not produce food, they showed elevations in plasma corticoids as high as those evoked by noxious stimuli (Coover, Goldman, and Levine, 1971). Levine (1980) concludes that changes from predictable to unpredictable events, which thus increase ambiguity, are a sufficient condition to cause increases in pituitary-adrenal activity. Consistent with this interpretation was the finding that if the animals' work response was prevented by removal of the lever, there was an opposite effect; the level of circulating corticoids was suppressed (Davis, Memmott, MacFadden, and Levine, 1976).

Other research also emphasizes the importance of predictability in facilitating coping and in minimizing hormonal stress responses. Animals subjected to unpredictable shocks showed greater somatic change (corticosterone elevation, stomach ulceration, and weight loss) than animals that received shocks of the same magnitude on a predictable basis (Weiss, 1970). Given a choice, rats will choose predictable over unpredictable shocks, even when the predictable shock is two to three times more intense and four to nine times longer (Badia, Culbertson, and Harsh, 1973; Harsh and Badia, 1975; Levine, 1980).

Experiments with escapable and inescapable shock show similar results. Animals exposed to inescapable shock showed more fear than those exposed to escapable shock (Osborn et al., 1975). Moreover, animals so exposed learned the lesson of helplessness and showed a severely reduced ability to escape in subsequent situations in which escape was possible. These results, originally observed with dogs (Maier, Seligman, and Solomon, 1969), have since been replicated with cats, rats, and human beings (Seligman, 1975).

Levine (1980) summarizes these and other laboratory studies by stating that there are two basic stimulus patterns that elevate hormonal responses for significant lengths of time: instability, which creates an unpredictable and "ununderstandable" environment, and uncontrollability, which makes coping efforts futile.

Stress and Immunity

A recent review of research on the immune system (Institute of Medicine, 1980) finds that certain psychosocial processes affect the central nervous system (CNS) and thereby bring about changes in the immune function, which in turn alter the risk of onset and subsequent course of many diseases. Frightening and distressing stimuli, overcrowding, exposure to loud noise and bright light have all been found to have effects of this kind in animals.

For example, the stress of avoidance learning (performance to avoid

punishment) and confinement in mice produced adrenal hypertrophy and increased susceptibility to viral infection (March and Rasmussen, 1960). Stress effects on the immune systems have also been noted in studies with human beings. For example, Bartrop (1977) reported decreased immune responses among bereaved spouses after a period of seven to ten weeks. These findings are also consistent with epidemiological data showing increased morbidity and mortality during the two-year period following the death of a spouse (Parkes, 1969, 1972; Jacobs and Ostfeld, 1977).

Studies of infectious diseases, both with animals and human beings, bear out the effects of psychosocial stress in reducing resistance, increasing susceptibility, and lengthening the process of recovery. For example, stressful life events of many kinds decrease resistance to tuberculosis (Hawkins et al., 1957) and influence the course of the disease adversely (Day, 1951). The stress of performance-or-punishment (avoidance learning) is more explicit in some animal experiments. Rasmussen and his colleagues utilized a procedure in which mice were required to jump a barrier when a signal was given in order to avoid an electric shock. Mice that performed this "work" on a daily basis showed increased susceptibility to Herpes simplex virus (Rasmussen et al., 1957), poliomyelitis virus (Johnson and Rasmussen, 1965), Coxsackie B virus (Johnson et al., 1965), vesicular stomatitis virus (Yamada et al., 1964), and polyoma virus infection (Rasmussen, 1969).

Stressful life events also are involved in the precipitation of allergic disorders. For example, asthmatics who had recently experienced stressful life events and who had little social support required higher amounts of steroid medication in order to get relief of their symptoms than did asthma patients in comparison groups (de Araujo et al., 1973). And stressful life events again appear in the onset or exacerbation of the autoimmune diseases, in which immune responses develop against an individual's own cells. For example, separation experiences appear frequently to trigger the onset of rheumatoid arthritis (Cobb and Kasl, 1977; Weiner, 1977), and the failure of previously successful modes of adaptation was found to be related to the course of the illness (Moos and Soloman, 1964).

Alterations in the immune system are involved in the development of cancer, and studies in this domain have become numerous. Recent summaries (Fox, 1977; Institute of Medicine, 1980) emphasize the probable involvement of social and psychological factors, but also the complexity of the problem and the unresolved inconsistencies in research results.

Stress and Physical Illness

A current review by Shapiro (1980) summarized research on stress as a causal factor in a wide array of physical illness. I have selected examples for their apparent relevance to conditions encountered by men and women at work. Gastric ulcer is a case in point. Many factors are involved in ulcer susceptibility, among them the secretion of acid. Anger and hostility increase acid. The treatment now considered most useful for peptic ulcer (cimetidine) acts by blocking the release of hydrochloric acid in response to emotional stimuli and other stressors. Less studied, but all showing relationships to emotional distress, is an array of medical problems ranging from the oral pharynx through the esophagus and on down to the anal sphincter.

There is some evidence for the involvement of stress factors—including recent significant loss, job instability, and lack of plans for the future—in the precipitation of cancer. Such factors have been identified among the predictors of lung cancer (Horne and Picard, 1979), leukemia and lymphoma (Greene, 1954), and cervical carcinoma (Schmale and Iker, 1966). The theme of helplessness and hopelessness following recent loss has been emphasized in this research (Schmale, 1980).

The effects of stress in illness have perhaps been demonstrated most clearly with respect to cardiovascular disease. Laboratory studies of stressful stimuli produce changes in stroke volume, heart rate, and blood pressure. Consistent with these is the clinical identification of emotional disturbance as a major cause of anginal pain, and as a cause of heart failure in persons with heart disease otherwise under control (Shapiro, 1980).

Meanwhile, research on what Friedman and Rosenman (1959) called the Type A personality has demonstrated that people so identified have an increased risk of angina and of myocardial infarction. But many of the Type A behaviors—the drive for achievement, competitiveness, the tendency to overwork, and the like—are precisely the behaviors urged and rewarded on many jobs. It remains to be seen to what extent Type A behavior is a trait expression of personality and to what extent a complex response to situational rewards and penalties.

Laboratory studies show that acute stress increases blood pressure and that chronic stress, such as avoidance conditioning or social crowding, produces chronic elevations in blood pressure (Shapiro, 1980). The varieties of behavioral approaches to reducing blood pressure, which have had some success, seem to have in common the relief of stress and anxiety.

Stress and Psychiatric Illness

Recent research implicates stress as a factor in depression, anxiety states, alcoholism, drug abuse, and sleep disorders (Elliott, 1980). For example, depressed men and women experienced many more stressful life events just prior to their depression than did comparable groups in the general population (Paykel et al., 1969; Brown et al., 1973). Furthermore, the occurrence of such events during the preceding three months increased the likelihood of relapse (Paykel and Tanner, 1976). The intensity and timing of stressful events is also associated with increased likelihood of suicide and attempts at suicide (Paykel, 1976).

Anxiety as a temporary feeling associated with some actual or threatened event is an experience that everyone has had. It seems to arise when we feel that the demands made on us (or soon to be made) exceed our abilities or resources to meet them successfully (Johnson, 1975; Sarason, 1980). When such feelings of anxiety are chronic, disabling, or seemingly unrelated to external realities, they are classified as signs of psychiatric disorder. Since the work role is for the majority of adults one of the most important sources of recurring demands for performance within specified limits of time, quality, and resources, we can expect it also to be a common source of anxiety. Whatever the source, complaints of anxiety are commonplace. The benzodiazepines, which were discovered only in the 1960s and have a specific anxiety-reducing effect, are the most widely prescribed drugs in the United States (Institute of Medicine, 1979).

Alcoholism and drug abuse almost certainly have many causes that do not lie in the immediate environment of the person. Environmental stressors seem to be implicated in both disorders, nevertheless. For example, the use of alcohol was found to increase during the first year after the death of a spouse (Clayton, 1979), and the use of opiates and marijuana was higher among Americans in Vietnam than would have been predicted from comparison groups in the United States (Robins et al., 1979). The building of the Alaska pipeline confronted the Inupiat Eskimos simultaneously with great social stress and easy access to alcohol. The estimated incidence of alcoholism in the tribe, which had not previously known alcohol, is now 70 percent (Klausner et al., 1979).

The intuitive opinion that acute life stresses cause sleep disturbances has been well documented (Lester et al., 1967; Goodyear, 1973). Furthermore, chronic insomniacs, as compared to controls, reported more stressful life events during the year in which their insomnia began (Cohen, 1975). There is some evidence that chronic lack of sleep is more than unpleasant. Even short periods of sleep during periods of

prolonged physical stress reversed stress-related changes in growth hormone, prolactin, and testosterone (Askvaag et al., 1978). And in a long prospective study, Kripke and his colleagues (1979) found that otherwise healthy individuals who initially reported abnormal sleep patterns (substantially less or more than the average) were more likely than members of the control group to have died by the time of the six-year follow-up.

Implications for the Design of Jobs and Organizations

Now let us bring work back into the discussion of stress and health, first by proposing a few implications of stress research for the improvement of work life and then by considering the reluctance of organizational leaders to act on these findings and implications. There have been several recent reviews of research on work-generated stresses and their effects (Katz and Kahn, 1978; Kasl, 1978; Cooper and Payne, 1978, 1980). It would be exaggeration to say that these field studies provide point-by-point confirmation of the laboratory research I have described, but the convergence of the two lines of research is impressive. With both the field and the laboratory findings in mind, let us go beyond the research and propose a few decision rules for the design of less stressful jobs and organizations:

1. *Minimize unpredictability and ambiguity at work.* Make the work situation as predictable as possible, in terms of job stability and certainty about the future. (Change can be predictable, too.)

2. *Minimize uncontrollable events at the individual level.* That is, maximize the decisions that can be made autonomously by the individual, then the decisions that can be made directly by the primary group in which the individual works, and only then those decisions in which control must be by more distant representative arrangements. (Take into account differences in individual preferences.)

3. *Eliminate avoidance learning,* that is, performance-or-punishment. Instead, recognize and reward successful performance, at both the group and the individual level.

4. *Minimize physical stressors*—excessive noise, extremes of temperature and light intensity, spatial and postural confinement, crowding and isolation.

5. *Avoid recurring (daily) stresses.* They are more damaging than the occasional peaks of demand.

6. *Watch for negative affect* (emotional response). Feelings of boredom and apathy, anger and hostility, and other kinds of emotional dis-

tress often precede more severe somatic and behavioral reactions to stress.

You may be now murmuring to yourselves, "Well, everybody knows that." Everybody knows it, perhaps, but almost nobody does much about it. There is some innovation—some drift toward job enlargement and employee involvement in decisions perhaps, some experimentation in related matters. But the spread is slow and the successful experiments are not copied, even in the companies where they were done. Compared with the adoption rate of flared trousers and color television, not to mention computers, stress-reducing improvements in the quality of work life are adopted slowly.

Why should this be so? Many reasons come to mind and many have been offered. It is argued that not enough is known about work stress to permit intelligent action. (True, much is yet to be learned, but as our recitation of research findings suggests, enough is known to support action, and the leaders of organizations are necessarily accustomed to acting on partial evidence.)

It is argued that technology dictates the nature of many jobs and prevents much that is advocated as stress-reduction and work-life improvement. (True, in a sense, but technology is an industry, producing for a market, and necessarily responsive to the demands of buyers. The physiological limitations of human beings are inevitably taken into account in the design of machines; other human requirements can be similarly acknowledged. Moreover, as sociotechnical research reminds us, much can be done within existing technologies.)

It has been argued that efforts to change organizations in response to research findings don't work, that the results of social and medical research aren't yet "packaged" for use, and that efforts to improve the quality of working life have merely increased the costs of production. (This is a combination of criticisms. Evaluation data show that, by and large, experiments in improving the quality of working life are successful; they do "work" in those terms. True, the research findings that might guide such experiments are not yet integrated into reliable and accessible standard procedures for job and organization design. There are many "packaged" programs; the problem is with their quality and applicability to widely varying organizational circumstances. The issue of production costs is still more complicated. Every society is engaged in a continuous process of decision-making about the kind of effort and stress that will be endured for the sake of consumption and every society puts its own limits on that exchange. It is certain, however, that

much in the way of stress-reduction can be done without increasing the costs of production.)

Let me conclude by proposing a reason that is not so often given for the slow spread of stress-reducing, work-enhancing organizational changes—their special demands on organizational leadership. Buying a new technology is a decision usually made by people at the top of an organization that creates change-demands on others. But redesigning an organization to increase autonomy and control of each person and group creates change-demands that begin with the leaders themselves, in labor unions and government as well as industry. This task, its admitted difficulty, and its implications for the reduction of managerial power and privilege, account for the slow, resistant, over-skeptical response of management to the findings of stress research—a response that has been slower in the United States than in some other technically advanced countries. That, however, may change, and the prospects for such change are a uniquely appropriate concern for the Industrial Relations Research Association.

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Stress Research and its Implications: Sweden

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1. In the Scandinavian countries the organization and conditions of work have been central issues of research, debate, and change for the last 10–15 years. Attention has been called to human conditions in the highly rationalized working life and to the impact of these conditions for work satisfaction, health, and life outside work.

The problems have been brought down to two different, but highly interrelated, sociopolitical issues—that of working environment and that of industrial democracy. The fact that these issues have carried high trade union and political priority has in Sweden led to a new legal base for the industrial relations system, giving rights and means to the workers to influence the organization of work in a very broad sense. The most important acts are the Act of Co-determination, made effective January 1, 1977, and the Work Environment Act, put in effect July 1, 1978.

Through these acts new regulations have been introduced not only in relation to physical and chemical risk-factors but also in relation to mental strain and mental health. In the preparatory notes to the Work Environment Act adverse effects of functional specialization and mechanization are discussed at length. Among other things attention is brought to various stress-aspects of mass-production technology such as monotony, mental strain, fatigue, social isolation, and job dissatisfaction. The same is true also for the Norwegian Act on Work Environment.

2. To understand the relevance of human stress for the organization of work in industrialized societies, one must analyze the stress concept and evaluate the results of stress research from the point of view of several different value areas. At least four such value areas may be defined and separated in a meaningful way (even if there quite naturally are unclear border lines between them), namely

- Humanistic/idealistic values related to ideas about “the good society.”

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- Health.
- Democratic values related to activity and participation on the level of the individual.
- Economic values related to the survival and competitiveness of business organizations and of the economic system.

The impact of stress research on society and on work processes depends to a large extent on the political priorities given to these different value areas.

Unfortunately, much stress research tends to avoid the basic conflict that is involved between the health and safety perspective and the technical efficiency of our production system—as that latter concept is understood and measured today. Much research and practical application is organized only with the individual in focus. Explaining and treating stress problems with reference only to the level of the individual tends to convert problems in the work environment to private problems. Also, the pressure to adapt is directed toward the individual and not toward the organization and the production processes.

To be able to place stress research clearly within a health-and-safety frame of reference, I think it is necessary to anchor research not in economic but in social values, where health, well-being, and use of creative resources are fundamental goals by their own rights. This means that research has to be formulated and used by the parties who work for the interests of workers. It also means that basic prevention must turn from individual means to collective means in order to cope effectively with stress problems at the workplace.

From this perspective it is important that research is formulated in such a way that it gives generalized knowledge, possible to use either for legislative purposes, for trade union policies, and through these collective means for changes in technology and the organization of work.

3. In the last few decades behavioral science research has been undertaken with the explicit aim to study human conditions at work looked at from the point of view of health and satisfaction. In Scandinavia there has been substantial work on adverse effects on workers of mass-production technology, especially in industry, but recently also in regard to administrative work and public services such as the general hospital and public transportation. Special problems that have been brought to attention are the relation between remuneration systems and risk-taking and the consequence of shift-work and other forms of irregular working hours for health, family life, and leisure.

In summary, investigations show that feelings of monotony, coercion, mental strain, and social isolation are substantially more widespread and

intense among workers whose jobs are severely circumscribed as to autonomy, variety, skill, and social interaction. These workers also have a more pronounced instrumental attitude to work, i.e., they feel the only reward given by work is the financial reward. Similar results are found in a variety of industrial societies irrespective of differences in the larger social and economic system.

These results are valid also after control is made for age, sex, education, income, quality of supervision, and pay satisfaction. A breakdown of results by age reveals that boredom and mental strain in relation to machine-paced and low-skilled jobs is more pronounced among young and better educated workers.

A breakdown by income shows that various income groups do not differ from one another along the satisfaction scales. This is not to suggest that income is immaterial to the evaluation of a job, but rather that differences of income cannot explain differences in monotony, powerlessness, mental strain, and social isolation.

As to piece-rates, research findings lead to the conclusion that piece-rates have several negative aspects from the point of view of health and safety. Above all piece-rates seem to induce an intensified working rhythm, a strong taking of risks, and competition between individuals or teams. Obviously piece-rates also may lead to increased productivity but at a cost carried by the worker and the larger society.

As a general comment to these results I would like to say that they are not at all remarkable; on the contrary they show what might be expected and is already known by most working people. What is remarkable is rather the difficulties—even with the support of organized labor—to gain acceptance for these results by the employers, meaning a sincere interest in changing technology and work organization according to these results.

I think that we have to admit that from an action point of view these studies have been rather weak. This fact seems to have little to do with shortcomings in theory or methodology. Rather I think the weak action potentiality of this research tradition has to do with the fact that most studies, by and large, fall back on humanistic values alone—values which I regret to say are soft currency in political and economic life. It is true that in some countries, notably perhaps in the Scandinavian countries, there has been some response from the general public and from the trade unions. Movements on “work humanization” are appearing also in countries like West Germany, France, and Poland with some backing from government and/or trade unions. In most instances, however, it is only when research results have been combined with data on labor turnover,

recruitment difficulties, and sick-leaves that management has found it necessary to attend to the problems. As a consequence, most management programs for job reforms have been rather superficial, looking to narrow productivity goals rather than to the larger social problems that might be involved.

The much-heard-of Scandinavian experiments of semi-autonomous groups, getting rid of the assembly line at Volvo and Saab, etc. are no exceptions. From a stress point of view, several of these changes leave us with serious doubts about what has been accomplished.

In order to create a scientific foundation for more basic changes, it seems necessary to take up other lines of research and look at what consequences for the worker and for society might flow from constrained, monotonous, and socially isolating jobs. Today we can identify two main lines of research: one related to health and the other related to activity level and political efficacy. I will briefly touch upon these research efforts.

4. In research on health-consequences of job- and systems-design, special importance is attached to the early detection of long-term risks for (a) mental ill-health such as depression and fatigue, and for (b) psychosomatic illnesses such as cardiovascular disease and ulcer. In these studies a variety of methods are used and often combined such as reported worker feelings, neuro-endocrine stress-reactions and medical signs and symptoms. In formulating research problems the action perspective must play a decisive role. The idea is to use psychological and medical data to locate critical aspects of job- and systems-design from the point of view of acute stress-reactions and long-term health risks in order to get necessary changes under way.

Evidence is not as clear cut as that regarding job dissatisfaction but seems to demonstrate that the following properties of system design and job content are critical also from a health point of view:

(1) *Quantitative overload*, i.e., too much to do, time pressure, repetitious work-flow in combination with one-sided job demands and superficial attention. This is to a great extent the typical features of mass-production technology and routinized office work. Pace and pressure for effective use of time seem to increase with the use of advanced technology, creating increased tension throughout the entire organization.

(2) *Qualitative underload*, i.e., too narrow and one-sided job content, lack of stimulus variation, no demands on creativity, problem-solving, or social interaction. These jobs seem to be more common with automation and increased use of computers in both offices and manufacturing, even if opposite results may be found.

(3) *Lack of control*, especially in relation to planning, pace, and working methods. Also, mention must be made of severe restriction of physical freedom.

(4) *Lack of social support* from significant others.

Very often several of these aspects of job content appear together and have a joint effect on health and well-being.

It seems highly important to analyze the impact of various job demands and worker control, jointly as well as independent of each other. On a representative sample of the male Swedish labor force such an analysis has been made with respect to symptoms of depression, excessive fatigue, cardiovascular disease, and mortality. The workers having jobs characterized by heavy loads together with low control over the work situation were by many times overrepresented on all these variables. Least probability for illness and death were found among groups with moderate loads and high control over the work situation.

The same basic model has also been applied to single urban bus drivers, comparing city drivers with suburb drivers. The city drivers who experience greater pressure from a traffic situation which they cannot control and which interfered with their timetable and who experience more threat and aggressiveness from the passengers show signs of psychological and physiological stress to a greater extent than the suburb drivers. In a Danish survey city drivers have been compared with age-matched workers in other occupations and found to be significantly more hit by cardiovascular disease and death.

Worker influence and control seems to be one of the main dimensions that must be applied to the organization of working life and to job- and systems-design. It takes collective efforts, such as legislation and collective bargaining. But from a health point of view it is also clear that control must be applied to the level of the individual, giving each worker greater latitude and greater say in his daily round. Collective influence must be used to help create such working conditions.

Another important aspect of work organization that affects health, recovery time, and leisure activities of people is shift-work or other forms of irregular working hours. Various health problems have been found—especially among rotating shift-workers—such as sleeping problems, nervous disorders, and gastro-intestinal disturbances. Both workers on a continuous shift-system and two-shift workers have been found to participate less than daytime workers in political, trade union, social, and cultural activities. On the basis of this research, the Swedish Metal Workers Union is now asking for reduced working hours also for two-shift workers.

Concluding under this section one can say the following:

Certain types of work-loads and low worker control are related to increased risk for mental and psychosomatic ill health. To a great extent these risks are tied to heavily rationalized and mechanized jobs and the economic pressure to run capital-intensive equipment more than during the regular daytime shift. Payment by results seem to increase mental loads and risk-taking. Worker influence and control seem to be *the* strategic variable in counteracting these risks for ill health by creating greater latitude for personal freedom in relation to work pressure. The importance of social support as a "buffer" between loads and ill health should also be observed. These problems are very important to take into consideration with increased automation and increased use of computers in work—not least with respect to the safety aspect.

From an action point of view the impact of health-related studies on authorities, trade unions, and management seem to be fairly great simply because it is much more difficult in our culture to argue against health risks. On the basis of this research it has been possible in the Scandinavian countries to include a section on psychosocial risk-factors in the legislation on work environment, especially health risks being tied to fragmented, machine-controlled, and solitary jobs. It is also recommended that piece-rates should be avoided in dangerous work. Shorter hours for shift-workers have been demanded from various trade unions.

5. A second line of important research that is emerging today is the possible impact of job content and work organization on the *activity level* of the worker. Activity level is usually regarded as a dimension which is important for the integration of people in the larger society, for family life and cultural participation. In the context of stress-research, activity level may also be seen as part of the worker resources necessary to rely on in order to deal effectively with health and safety issues at the work places.

The assumptions tested in this type of research are mainly two: First, there is a possibility that recovery time needed in stressful jobs is very long and that several hours may be spent in merely "unwinding" or recovering in a neuro-endocrine sense. There is some evidence to support this notion: a greater proportion in monotonous and strenuous work need to rest after work and before using leisure for other activities compared to workers in less stressful jobs.

The second assumption under scrutiny is whether narrow and socially isolated jobs create passivity or social helplessness. One set of studies show that when the exercise of discretion in work is curtailed by spatial, temporal, or technical restrictions built into the work process, the in-

dividual's ability to develop active relations during his spare time will diminish. Persons whose jobs entail serious constraints with respect to autonomy and social interaction at work take far less part in organized goal-oriented activities outside work that require planning and cooperation with others.

A representative survey of the Swedish male labor force carried out in 1968 has shown that workers doing psychologically heavy work take much less part in various organized leisure activities than persons who do not have such jobs. Their leisure activities center around the nuclear family, sports, and outdoor life and the TV.

This study was repeated six years later, in 1974. The same general tendencies for the job-leisure relationship were found in 1974 as in 1968. *But*, those whose jobs had changed during the period in the direction of a richer job content and greater say on the job showed an increased participation in 1974 outside the job in voluntary associations, study work, trade union, and political activities. Those whose jobs during the period had become more narrow and confined through computers or other forms of rationalization were less part of such activities outside the job in 1974 than they were in 1968.

From an action perspective, these studies are very important because they identify mechanisms which may hinder or stimulate people to deal with their own problems. To be able to cope effectively with health and safety issues, you need both a formal organization based on public resources and an understanding on the part of the ordinary worker of how to use these resources. Toward this background it is encouraging to note that in practical experiments encompassing at the same time increased worker say on management decisions and autonomy at the shop-floor level, the workers after a number of years do take an increased interest in work-place problems—including safety work—and participate more in trade union and political activities on and off the job. It goes without saying that they also enjoy their work more and show various signs of increased mental health.

6. In summary, this paper shows that work stress may be problematic in two different ways: first, since there may be a direct relation between certain objective conditions in work, physiological and psychological stress and ill health; and second, since certain stress-conditions may create fatigue and/or passivity in the individual and thus make it more difficult for him to actively involve himself in changing those working conditions—including physical and chemical risk factors—that may be detrimental to his health. This latter aspect is especially relevant from the point of view of ill-health prevention on the systems level.

However, prevention on the systems level is difficult and controversial. Present experience tells us that there is a need for both a creation of public resources and a development of strategies on the level of the enterprise. Legislation may give statutory authority to employees to act in certain areas and in certain directions, thus legitimizing workers' definition of problems and remedies. Creation of public resources may also mean that money and knowledge are made available to be used for changes at the plant level on certain conditions and for research purposes, information, and training activities.

On the level of the enterprise the main issue seems to be how to organize and vitalize worker resources. Most countries rely upon trade unions and collective bargaining to deal with health hazards in the workplace. Worker representatives may be endowed with certain rights and means regulated by the legislation, such as rights to have a say in organizational and technological design, in decisions on equipment, work-methods, and materials, on personnel policy, and so on. Workers may also be given the right to stop dangerous work, to call in experts to help make assessments or to perform research on their behalf, at costs paid by production or by government funds created for such purposes.

To organize worker resources in a formal way, such as indicated above, is very important and necessary but not enough. Collective influence must be combined with a trade union interest in new forms of work in a multilevel approach to worker influence and support in order to create a more active participation from rank and file. But to do so the trade unions must be convinced that it is part of their role to decide on production methods and the organization of work, i.e., to participate in areas which traditionally belong to management's responsibilities. Is it possible in the long run for the trade unions to avoid that role?

DISCUSSION

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I would like to focus my comments on three issues: (1) the general implication of most research on occupational stress, (2) the broader view of the issue, and (3) the application of quality of work life principles and processes as one means by which many of the causes of occupational stress might be eliminated or minimized.

First, the general implication of occupational stress research. While it may not be their intention, many researchers place much of the burden on the worker for alleviating work-induced stress. People, they say, must learn how to cope with feelings of stress more effectively. Books and articles tell how we can adapt to stress-producing situations through a variety of personal growth experiences from rest to jogging or from flight to self-actualization.

It is not my intention to demean any of these potentially helpful "coping mechanisms." Rather, it is my intention to suggest that more can and should be done about reducing the *conditions in the workplace* that serve to cause or aggravate the ways that people tend to deal psychologically and physiologically with perceived stressful situations.

A second point that needs mentioning is the larger perspective from which the area of occupational stress should be examined. While most research models on occupational stress give consideration to the individual's overall lifespace and include such variables as attitudes, personality, and family background, it seems that we all too frequently look upon the worker as something less than a totally integrated, dynamic human being. As totally integrated human beings, we bring to the workplace our values, hopes, fears, aspirations, and dreams. Regrettably, some research in this area leads one to conclude that as workers we are expected to check our value systems and all our other ideational qualities at the plant gate or office door. This characteristic of much of society is probably one of the more fundamental causes of occupational stress and, hence, should not be a thesis implicitly or explicitly promulgated by researchers and/or practitioners in the field of organizational behavior.

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In Dr. Kahn's remarks he spoke of two of the more critical factors associated with occupational stress—the predictability and controllability of events in the workplace. Herein lies one of the fundamental objectives of workplace design or quality of work life (QWL). An essential ingredient in any QWL strategy is the empowering of people to interact more fully and freely in organizational decision-making processes. As increasingly larger numbers of workers have a greater say in what decisions get made and become implemented, their level of controllability, and hence predictability, will increase proportional to the influence they exercise in the decision-making arena.

I am not suggesting that quality of work life efforts are the ultimate nor sole solution to any and all mental and physical health problems associated with work and the workplace. I am suggesting, however, that much can and must be done to reduce the negative forces in organizations that preclude people from full partnerships in the shaping of decisions which bear heavily upon their roles in the organizations. As the lives of people in the workplace are enriched, not only will this be reflected in their mental and physical health, but both our institutions of work and our society at large will be co-beneficiaries.

XII. THE CLIMATE FOR LOCAL GOVERNMENT COLLECTIVE BARGAINING IN THE 1980s

Taxpayer and Other Third-Party Intervention in Local Government Collective Bargaining

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Virtually each year in the decade of the 1970s gave birth to new or substantially broadened public-sector bargaining statutes. And in states where bargaining between public employees and public agencies had been on-going for a number of years—in Wisconsin, Massachusetts, New York, and Pennsylvania, for example—relations predictably matured. Professionals replaced amateurs at the bargaining table (some amateurs became seasoned professionals). Public-sector bargaining dealt with an enlarged number of issues as unions probed the limits of the scope of negotiations. Strikes increased in number but diminished in newsworthiness as they became more commonplace. Grievance arbitration took root in surprisingly fertile, hospitable soil. “Associations” became comfortable with the name “union.” Public managers abandoned civil service paternalism and began to practice a tough new brand of management within the context of bilateralism. Particularly at the local government level, public-sector labor relations began to settle down, to mature.¹

The very elements of local government bargaining that labor relations observers pointed to as evidence of its growing maturity and professionalism—such as mutual awareness of each other’s legitimate organizational problems, the diminution of the level of interorganizational and interpersonal hostility, the ability to solve highly sensitive prob-

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¹ See T. Bornstein, “Legacies of Local Government Collective Bargaining in the 1970s,” 31 *Labor L.J.* 165 (1980).

lems in quiet, little noticed ways, a shared sense of the long-term nature of their relationships—became the symbols of fear and anxiety in some elements of the community, especially taxpayers' organizations and parents' organizations. They asserted that the bilateral structure of bargaining was exclusive and elitist. Their allegations were not always subtle. Some charged that elected public officials "sold out" the public interest in order "to buy support" from powerful labor organizations in forthcoming elections or to "pay off" debts from past elections. They complained that bilateralism encouraged "collusion" in which the "public interest" (defined by each complainant to suit itself and its self-interests) was sacrificed by venal or inept management negotiators.² Taxpayers groups complained loudest about alleged collusion. Parents groups complained less about political shenanigans. Instead, organizations of parents complained that the interests of children were subordinated in collective bargaining to the selfish interests of teachers in improving their well-being and by school boards which lacked the will or skill to resist union threats and maneuvers. But both taxpayers' and parents' organizations joined in complaining that agreements reached behind closed doors and then imposed on the community as *faits accomplis* were inherently suspect and unacceptable. Why does one act secretly, behind closed doors, if one has nothing to hide?

The rising anxiety of taxpayers' and parents' associations coincided with national mood of mistrust of government and other institutions of public trust. The 1970s began as a decade in which the informed public reacted with disgust to deliberate, calculated government lying about the conduct of the war in Vietnam and Cambodia. That mistrust of government was reinforced by painful revelations of presidential untruthfulness and deception during the Watergate years. Among the consequences of this mood in the 1970s was renewed interest in open-meeting and public-information laws. "Openness," "public access," "accountability," "citizen participation" became the slogans of reformers, public-interest groups and politicians.

Against this tapestry of mistrust of government and its agents, the critics of bilateralism demanded "access," "participation," and—although unarticulated, it was quite clearly implied—some *control* over the outcome of bargaining. They demanded, in effect, a third-party presence in bargaining between local government and public-employee unions, trilateralism.

The responses of the parties and of legislative bodies to these pleas for access and trilateralism have been interesting. Unions have con-

² See, e.g., R. D. Horton, "Municipal Labor Relations in New York City: Lessons of the Lindsay-Wagner Years" (1972).

sistently opposed trilateralism on a number of grounds, including their perception that citizens' groups want access precisely in order to inhibit the gains that they might achieve in the traditional bilateral setting. Public management groups have been ambivalent: On the one hand, they sense that third-party intervention in the bargaining process might, indeed, inhibit union bargaining gains; but, on the other hand, they also sense that such intervention might inhibit contract settlements and polarize the parties both at the bargaining table and away from the table. Although usually not stated openly, of course, in opposing third-party intervention, public managers are fearful that they might lose control of decision-making to aggressive, publicity-minded citizens groups.

Legislatures have been diffident. Florida, amidst much publicity, enacted a "sunshine" bargaining law in 1974. Despite widespread interest in the Florida experience, rather little is known about its *real* impact on local government bargaining, although I suspect it has been inconsequential.³ Tennessee copied the Florida "sunshine" bargaining law in 1978. California requires that proposals be publicly disclosed before school boards may begin negotiations. Most other legislatures have simply put the issue aside, mainly for lack of unified support by public management groups and in the face of unified opposition by unions of public employees. But several states have interpreted their open-meeting laws to require that much bargaining be conducted openly, but more have interpreted their open-meeting laws to be inapplicable to collective bargaining negotiations. The proponents of trilateralism have, therefore, few solid legislative victories to their credit as of 1980. But theirs is a relatively new cause.

Another model, which might best be described as bilateralism-and-a-half, has been devised imaginatively by the Rochester, N.Y., board of education which in 1976 adopted a "Parent Involvement Policy" with far-reaching implications. Among other things, this policy invites parent participation in collective bargaining in two ways: involving parent representatives in working with the board as it prepares its bargaining positions before the opening of negotiations, and appointing one carefully selected parent to serve on the board's bargaining team. Like the Florida experiment, Rochester's is still new and unstudied. But, on its face, it meets most objections to trilateral bargaining and serves several of the needs of parent groups to participate directly in the bargaining process.⁴ New York City has undertaken a somewhat similar experiment

³ R. E. Doherty, ed., *Public Access: Citizens and Collective Bargaining in the Public Schools*, 39-53 (1979).

⁴ *Id.*, 54-62.

by involving members of its decentralized community school boards in the bargaining process with members of the central board.⁵

The driving spirit of trilateralism is also the driving spirit of Proposition 13 and other tax-cap legislation. Both rest on a mistrust of elected officials and the political process at the local level. Although advocates of trilateralism and tax-cap laws sometimes choose more felicitous ways of arguing their case, at bottom their position challenges the representativeness of local government. And it is that premise which gives rise to a number of questions about the integrity, let alone the workability, of proposals for trilateralism.

If elected government officials and the managers and agents whom they appoint cannot be relied on to represent the public interest at the negotiating table, who can? Elected officials can be turned out of office. They must answer to the voters at the ballot box. Their motives and actions are usually subject to press scrutiny. That has been the essence of our public philosophy for 200 years. Still it can hardly be denied that there are venal public officials who manage to avoid the wrath of voters year after year. Granting that the electoral process may function imperfectly in local government, elected officials have certified credentials that leaders of taxpayers' and parents' organizations lack: *Elected officials have been chosen by secret ballot to represent the entire community.* Leaders of special-issue and special-interest groups, however well intentioned and however well informed, simply cannot claim authoritatively to represent the community. In their zeal to achieve their goals, leaders of such groups sometimes give the impression that when *their* interests are involved the rules of representative government are temporarily suspended.

If special-interest groups have no persuasive legal or moral claim to participate directly in the bargaining process, they, nonetheless, may have a strong and legitimate interest in the outcome of bargaining: Their children will be educated under a system of employment relations established by a collective agreement for teachers. They must pay taxes to provide the revenue for wage increases and fringe benefits. Their garbage will be collected according to schedules agreed upon in bargaining. Even citizens who do not categorize themselves primarily as "parents" or "taxpayers" may—and, indeed, should—have an interest as conscientious, responsible members of the community in the conduct of collective bargaining. Difficult questions arise in defining the dimensions of the citizen's interest in bargaining and giving practical meaning to that interest.

⁵ *Id.*, 32.

But that is hardly a new problem. It is, on the contrary, an old but vital problem in the administrative state. Following the proliferation of new agencies created during the New Deal era, Congress enacted the Administrative Procedure Act (APA) in 1946 in large part to guarantee citizen access to agencies entrusted by Congress with regulatory authority. In my view, the APA's procedures for citizen participation in rule-making are a useful model for citizen participation in local government collective bargaining.⁶ They constitute a balanced formula that avoids mischievous, direct intervention in the bargaining process by citizen groups but that simultaneously assures such groups that they may inform themselves about bargaining and express their views directly to local government negotiators.

The essence of the Federal APA's rule-making procedures is as follows: 1. An agency must publish proposed rules in the Federal Register, with an invitation to any interested person to comment on the proposed rule. (A local governmental body might publish in local newspapers or other sources of public information its intention to negotiate a first or successor contract, making available any predecessor contract for public inspection.) 2. Any interested person may submit written comments on the proposed rule within a fixed period. The agency may also, in its discretion, hold public hearings to hear the views of interested persons. (Local government bodies might do the same. Would it be difficult for a school board, for example, to schedule a special meeting to hear citizens' views at the outset of bargaining?) 3. After the agency has considered the views of citizens, it makes up its mind whether to adopt the proposed rule. In this decision-making process, the agency is free to consult with private citizens who have specialized knowledge. (A local government body might choose to follow the Rochester model or some variation of it by informally consulting with parents' or taxpayers' groups during the course of bargaining.) 4. If the agency decides to adopt the proposed rule, it must then publish the rule that has been thus adopted. (A local government body might similarly disclose fully the results of bargaining, holding a public meeting to review its terms.)

Kenneth Culp Davis has described the APA rule-making procedures as "one of the greatest inventions of modern government."⁷ While I do not suggest that the APA answers all questions about the role of third parties, its major tenets—full disclosure of relevant information as early as possible and an invitation to the public to be heard—are applicable and strike a fair balance.

⁶ 5 U.S.C. § 553.

⁷ K. C. Davis, "Discretionary Justice: A Preliminary Inquiry," 5 (1969).

In conclusion, I must add that I find Arvid Anderson's eloquent defense of trilateralism, as applied to the public sector, unpersuasive.⁸ Those considerations that logically support a triangular partnership between labor, management, and government in the private sector are not similarly applicable to the public sector. When government acts as the "third party" at the bargaining table in the private sector, it acts in the public interest pursuant to its certification through the electoral process. When government is itself the employer in the public sector, the mantle of representative of the public does not pass to "watch-dog" citizens' groups. Government, whatever its role, must remain accountable to the entire electorate. Efforts to institutionalize trilateralism in public-sector bargaining by placing a third seat at the table are likely to erode the representative character and responsibility of local government and, at the same time, undermine the efficacy of the bargaining process.

⁸ A. Anderson, "The Trilateral Shape of the Eighties," 31 *Labor L.J.* 453 (1980).

The Climate for Collective Bargaining in Public Education in the 1980s

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A good friend once instructed me that collective bargaining is the weather and labor relations the climate of labor-management relations in both the private and public sectors. If this analogy be true, then the education weather will be choppy in the 1980s since the climate appears certain to be buffeted by a number of predictable environmental factors. This paper represents an attempt to catalog those factors and to suggest some of their effects on the collective bargaining process.

The statutory framework is obviously one climatic factor which will impact collective bargaining weather in this decade. As is well known, 38 states have statutes affording public employees collective bargaining capability, and in 31 states this capability accrues to educators. Certainly, efforts to pass federal collective bargaining legislation will continue. Although slowed by the Supreme Court's decision in *National League of Cities vs. Usery*, NEA legal counsel believes that such a statute can be drafted which would pass constitutional muster. This could be a major issue in congressional and presidential elections in the first half of this decade as labor across the board attempts to recapture the vitality and successes of the 1930s and 1940s in the private sector and the 1960s and early 1970s in the public sector.

Concurrently, there will be continuing efforts to pass legislation in the dozen states not now having such statutes. These states will be hard to crack since many of them are in the South, are right-to-work states, and have little history of collective bargaining or unionism in the private sector. Statutes will be particularly difficult to come by since many of these states are experiencing an influx of industry from the North enamored with lower taxes, wages, and the lack of collective bargaining and a high degree of unionism. Although these industries are in the private sector, public policy-makers will be slow to develop public policy which is distasteful to these welcome additions to the local economy.

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Efforts to amend existing legislation so as to enhance employee and retard employer influence will not abate. We no doubt will see amendments designed to broaden scope, facilitate organization and certification, broaden the bargaining unit, increase employee rights and union security, reduce strike penalties, and most ominously to allow last-best-offer binding interest arbitration. Since educational management is certain to oppose these initiatives, the legislative climate will be turbulent in the 1980s as regards these issues.

In light of inevitable management opposition to initial and amending collective bargaining legislation, teacher organizations will attempt to gain piecemeal those employment conditions and benefits historically achieved through bargaining. Thus specific legislation dealing with such issues as class size, teacher evaluation, and reduction in force will be introduced when collective bargaining legislation cannot be passed or existing statute amended appropriately. In Arkansas, for example, the Arkansas Education Association has been successful in introducing and passing legislation dealing with teacher evaluation and personnel policy development in school districts in lieu of bargaining legislation. More creatively, the AEA utilized the initiative in an attempt to get its Equal Education Opportunity Act on the November general election ballot. Described as quality education legislation, the initiated act in reality addresses job security through reduced class size, through requiring advanced science and math courses in all of the state's high schools, and through establishment of an Equal Opportunity Panel composed primarily of teachers to oversee implementation of the act's provisions. There will no doubt be more such "legislative piecemealing" in the 1980s which will impact significantly on employment relations in the nation's school districts.

Another climatic factor will affect collective bargaining weather in education in the decade ahead is the effort of teacher unions to organize noninstructional professionals and support staff who previously have not been organized. This activity will not only complicate the issue of bargaining unit composition, but will inevitably result in management negotiating with an increasing number of bargaining units. Thus the cost of the process will rise and the likelihood of whipsawing within educational jurisdictions will increase. Beyond these conditions, there will be competition between the NEA and the AFT for these new constituents, leading to increased militancy and greater demands. Given the inflation rate coupled with the prevailing Proposition 13 mindset, this development suggests "stormy weather" as the song suggests.

The economy and the public's resistance to higher taxes will be

major weather fronts in educational collective bargaining in this decade, and these fronts will impact in strange and wondrous ways.

On the one hand, because of inflation teacher organizations will demand more in the traditional areas of salaries and welfare benefits. They will shy away from multiyear agreements or attempts to negotiate wage reopeners tied to the consumer price index or the inflation rate. Given the inflation rate forecast, agreements of this kind can break the public bank and no doubt will be resisted. This portends a great deal of conflict. Of course, benefits such as dental, eyeglass, and improved health insurance can be most attractive in a time of high inflation, and we are likely to see more of these demands laid on the bargaining tables of the nation's school districts.

Interestingly, although higher salaries and take-home pay are attractive in inflationary times, taxes will take an increasingly larger bite, and there will be attempts to minimize this bite at the table through tax-sheltered and deferred compensations of various kinds. As in the case of wage reopeners, such provisions can break the public bank, although generally in the long as opposed to the short run. Many local governments have hocked their fiscal futures in this way, and there are serious questions as to their solvency some years ahead. School districts must be particularly aware of this eventuality in light of the declining enrollment phenomenon and the resultant increased consideration of consolidation measures.

Thus the forecast is for great stress and strain in the compensation aspects of bargaining in the next few years. Due to inflation, teacher organizations will want more which the public will be reluctant to provide through increased taxes. But additionally, unions will have to establish bargaining priorities which balance present vs. deferred and taxed vs. untaxed types of compensation.

Complicating this economic picture will be the shift toward full state funding in the 1980s in response to two factors: the continuance of court-stimulated movement toward fiscal equalization, and a higher percentage of state funding as a result of the Proposition 13 mindset. This development could serve to shift the locus of collective bargaining from the local district to regions or the state, suggesting a shakedown period characterized by unstable weather. Perhaps simultaneously teachers will take a harder line locally since increasing state dollars will be pumped into local district budgets. In either case the prognosis is unsettled.

An interesting variable in this weather picture is a development in the private sector which may or may not have applicability in public

education. In the automobile industry, beset by financial hard times, labor and management are cooperating so as to save both their skins. Labor is toning down its demands and management, in the case of the Chrysler Corporation, is including the President of the United Auto Workers on its board of directors. Discovering whether or not this mutual cooperation stance can or should work in a nonprofit institutional setting characterized by limited resources and declining enrollments may be the major finding of the decade in educational collective bargaining. Experience with teacher-backed candidates elected to local school boards suggests that we not hold our breath in this regard.

Which leads me to the squall of declining enrollment. A number of teacher demands will surface in response to this phenomenon, ranging from class size to transfers to reduction in force. Any good union must protect members' jobs, and we will see "educational featherbedding" galore in this decade under the guise of class-size and weighted-pupil provisions. Certainly reducing class size will create more teaching jobs, but those fortunate enough to be employed in a time of oversupply will have to recall fiscal constraints and balance more jobs against higher salaries for those already working. My experience is that teachers will opt for higher salaries every time.

Teachers will also attempt to gain control of transfer and staff reduction provisions in response to declining enrollments. Their preference relative to the latter issue will continue to be a seniority system, while management would prefer to retain the "best people." Recalling that teacher organizations are wielding more influence on personnel evaluation systems, the strain between competence and seniority will produce showers throughout the decade. As to transfers, there will be continuing attempts to control both voluntary and involuntary transfers in the interest of job security.

Declining enrollment is not unrelated to another environmental factor which will influence the climate for bargaining in the 1980s: accountability and competency testing. Although accountability has assumed many forms since it burst upon the education scene some ten years ago, in some 30 plus states it is at least partially defined as student competency testing with test data tied in some cases to grade placement, promotion, and graduation. This approach to accountability is in reality a cop-out since the only accountable party is the student while school professionals are let off the hook. Teacher organizations promote reduced class size in the name of instructional improvement but do not want members to be responsible for student achievement, citing "other factors" over which teachers have no control. My pre-

diction is that this will become a major bargaining issue in the 1980s as educational management, armed with better data about the performance of students in individual classes, programs, and schools, begins to tie teacher evaluation, compensation, and assignment at least partially to student achievement. Of course organized teachers will resist this initiative, thus ensuring turbulent opposing fronts in the educational collective bargaining weather scene.

A similar situation obtains with the issue of student discipline. Long a major concern in polls of public attitudes toward education, teacher organizations are now verbalizing concern about teacher stress and burnout which they see as a function of undisciplined student behavior. One result at bargaining tables around the nation has been the introduction of demands dealing with mental health days, the expansion of health insurance programs to include mental health coverage, and various kinds of in-service programs. More directly related to student discipline, recent teacher demands have either attempted to gain more teacher power and autonomy to deal with disruptive students or to "kick student discipline problems upstairs" for the administration to handle. The issue of who is primarily responsible for student discipline will generate a great deal of heat at school district collective bargaining tables throughout the decade.

Prior to closing, let me elucidate two relatively new atmospheric phenomena which will greatly affect the educational labor relations climate in the years ahead. I refer to sunshine bargaining and trilateral bargaining. We will likely see more of both, and both will tend to modify the traditional behavior of the parties in a closed, bilateral setting. Experience in Florida with sunshine bargaining suggests that teachers are more reasoned with their demands, but that both sides tend to play to the audience and that there is more use of the sidebar to reach agreement away from the glare of the media and the public.

Trilateral bargaining is a fascinating emergent phenomenon in educational collective bargaining whose structure and implications are very difficult to predict. The intent, of course, is to afford public input since agreements reached by teachers and school boards must be implemented with public funds. The Rochester, N.Y., school district utilizes a representative of the public at the bargaining to provide taxpayer and parent input to the two parties during negotiations. Other proposed procedures include public input in the development of demands, publication of demands prior to the onset of bargaining, public input in the terms of the final agreement, and a public role in the approval of agreements and/or impasse resolution.

My own assessment is that both sunshine and trilateral bargaining will strengthen management's hand in negotiations with teachers. This reversal of the way things were in the 1960s and 1970s, coupled with the Proposition 13 mindset, hard-to-come-by tax resources, more reliance on state funding, a continuing press for quality control, and better prepared management personnel will make bargaining difficult for teachers in the 1980s. If the inflation rate continues high, the traditional evolutionary pattern of teacher demands from compensation to job security to educational policy will revert to an emphasis on the first two and we can anticipate a very volatile climate in the decade ahead.

The Climate for Collective Bargaining in General Purpose Local Government in the 1980s

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Seldom does a day go by when the term "collective bargaining" is not discussed by public officials, union officials, and the general public. It may be mentioned in its relationship to police officers demanding more money or firefighters who want a shorter workweek or garbage collectors who want better trucks. Regardless of how the term is used or what is meant by the term, collective bargaining as we know it today is here to stay.

In regard to the evolvement of the public-sector segment of collective bargaining, it has been generally accepted that those employed in the public sector had a great deal more job security and fringe benefits than did those employed in the private sector. It was also generally accepted that those employed in the public sector possessed this added job security in lieu of higher wages paid by private industry. In addition, it was common in the 1950s to find that any dispute which happened to arise over any one of a number of issues, be it wages or working conditions, would be resolved by the elected officials in the community. In so doing, unions seemingly were not needed in the public sector. As a result, collective bargaining grew slowly in terms of units of police officers, firefighters, and public works employees, among others. While growth has been continuing during the past decade, whether collective bargaining will continue to accelerate or whether it will decelerate will be dependent upon how unions and employers are able to deal with the environment within which bargaining will have to take place in the 1980s. Consequently, the purpose of this paper is to examine the climate for collective bargaining in general purpose government in the decade of the 1980s.

Major Factors of the 1980s

Some of the major factors which will exist in the 1980s and with which both members of unions and members of administrations will

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have to deal are inflation, political conservatism, and the structure of government.

Without a doubt, probably the most important factor which will affect the climate for collective bargaining in general purpose government in the 1980s is inflation. Inflation directly affects union, management, and the general public and, consequently, is foremost in the minds of all three groups. While it is true that the period of inflation which has been in existence for some time and which apparently will continue into the future will affect both the private and public sector, many feel that employees in the public sector will be affected more than employees in the private sector.

By the decade of the 1960s, the process of collective bargaining in the private sector had matured to the point where substantial benefits, both monetary and nonmonetary, were part of the employment compensation package. These benefits included paid vacations and holidays, increased insurance and pension plans, as well as job-security protection afforded by seniority systems, due process protection, and binding grievance arbitration. During this same period of time, employee benefits in the public sector, for various reasons, did not keep pace with those in the private sector. Consequently, during the period of the 1970s, the pressures of rapidly increasing inflation began to increase the traditionally wide gap between wages of similarly employed workers in the public and private sectors. In the past, government workers were satisfied as long as wages tended to remain relatively high. But as this gap between the public and private sector began to increase and as public-sector management was unable to add monetary and nonmonetary benefits, public-sector employees took a new attitude toward union organization. The obvious reason why public-sector managements have not been able and continue to be unable to add benefits to various packages is due to the adverse effect inflation is having on the general public. While the consumer has a choice in the private sector as to whether or not to purchase a product, the consumer in the public sector does not have that choice. Rather the consumer or taxpayer is required to pay his/her taxes in order that public services be performed, and these individuals have little or no choice in the matter.

Unfortunately, the increasing cost of living is being felt in all segments of our society, and property owners are becoming more vocal in their call for tax relief. Elected officials wishing to respond to voters' demands are seeking to cut taxes, but this will come at the expense of a harmonious collective bargaining relationship between labor and management.

Because the public-sector employee is falling farther and farther behind in his/her wages due to inflation, he/she obviously desires bigger and better increases. However, because the taxpayer is being squeezed also by inflation, he/she wants to pay less and less, especially in property taxes, which results in public-sector management having less money with which to operate the municipality. The obvious responses to this situation are strikes and various other job actions. However, while there could be a phenomenal number of job actions, it does not appear that there will be as many as there could be. The reason for this is that within many fire departments, police departments, nursing groups, etc., there are older persons who have witnessed the tremendous gains which have been made in the last 20 years and who have committed themselves to public safety. While it is true that the workforce is becoming younger and younger, the older individuals still outnumber the newer employees who began their employment when the normal workweek was 42 hours for a firefighter or police officer and want more and more from that point. This does not mean that there will not be any strikes of major significance in the 1980s. For example, in the first eight months of 1980, there have been major strikes in the public sector in Chicago, Kansas City, and Detroit. This is indicative that something is wrong and something must be done. There is no doubt that taxpayers feel that they have been taxed out and reevaluated enough.

In conjunction with this problem of inflation is a second factor that will affect the climate for collective bargaining in general purpose government in the 1980s and which the author believes is a factor which is a direct result of inflation. Because of the current economic situation, the period of the 1980s will be one of political conservatism. Many of the political candidates running for national and local offices are campaigning as conservatives. One of the reasons for this movement is that the general public has become vocal in expressing its displeasure with the amount of money being spent by governments on various projects or groups and with the numbers of employees on the payroll in the communities. In regard to the expenses incurred by the state and local governments, it is evident that the taxpayers are not bemoaning the spending that goes to the public-safety area nearly as much as the spending that goes to welfare payments or public works projects. This is shown by the results of the votes taken on the various propositions in California last June. Consequently, the fire, police, nursing, and in some communities, garbage collection activities are looked upon with slightly more favor than other groups. Despite the more favorable atti-

tude toward firefighters, for example, attempts will be made to have cutbacks in the amount of fire apparatus in service, in the manning of the apparatus, and the number of firefighters assigned to each tour of duty. In addition, similar reductions will be attempted in police departments, public works departments, and in the health-care field.

What this means is that there are definitely going to be layoffs within the public sector and questions in determining who will be laid off will have to be resolved. While many if not most of the collective bargaining agreements have reduction-in-force clauses, these clauses, for example, do not make any mention of whether or not racial quotas must be included. This circumstance might have a lesser effect in some smaller communities. However, it is of major importance in larger cities and will have to be dealt with in a serious and meaningful fashion by both employees and employers.

A third factor which will affect the climate for collective bargaining in general purpose government in the 1980s is the structure of government. Municipalities are now being required and will continue to be required to become more efficient in their operations. In the 1980s the municipalities will have to examine systematically the number of staff positions within each community. Political patronage positions, while still prevalent in many cities and towns, have to be eliminated or at least reduced, for these positions are extremely expensive. On the one hand, the person placed in these types of positions is not usually equipped to handle the required duties, and yet, on the other hand, such individuals are highly paid for the work which they do not perform in some cases or minimally perform in most cases. While the elimination of political patronage positions is the ideal, the author is aware that this end is not realistic. What is realistic is that these individuals should be trained or retrained, as the case may be, in order that the persons may attain some form of efficiency.

Cities and towns must examine the ways in which to obtain more efficiently and effectively operated fire departments, police departments, and public works departments. One possible solution to this situation might be the "metropolitanization" of the police and fire departments, much like the city of Los Angeles has done. In this situation not every city and town has its own fire and police department—rather, broader and larger geographic areas are covered by fire companies and police departments. Because of this approach not only is equal coverage maintained between communities, but costs are reduced. For example, instead of every city and town having its own chief, its own maintenance division, its own communications division, and possibly its own pur-

chasing department, "metropolitanization" allows a reduction in the number of persons to perform these tasks in each city or town.

Reducing Conflict Between the Parties

There is no doubt that the decade of the 1980s will be one of possible serious conflict. Clearly, inflation will have an adverse effect on all the participants to the collective bargaining process. Money will not be readily available for monetary benefits in the various agreements. In addition, the conservative period of the 1980s will result in reductions in the numbers of employees and equipment utilized by these employees. As a consequence, labor-management relations will tend to exist in a conflict state. While the positions of both parties may be valid, neither side will be able to compromise to a point which is acceptable to the other side. Hence, conflict will result.

Probably the most effective method to reduce the conflict and to insure labor peace and a continuation of the complete range of public service is for states, cities, and towns to enact legislation which requires that any and all contract disputes be resolved by compulsory arbitration. While there are many forms of compulsory arbitration, this author is of the opinion that issue-by-issue arbitration is the most effective. This process allows the parties to present their evidence and the arbitrator the latitude to shape a contract which will benefit the union, the employer, and the taxpayer. When last-best-offer by package or last-best-offer issue-by-issue is implemented, this latitude for the arbitrator to fashion a contract is virtually eliminated.

While there is a growing number of states, cities, and towns which have enacted legislation providing for compulsory arbitration and while the evidence indicates that strikes have been reduced, if not eliminated, there are still problems which exist in those communities. For example, the first major problem regarding compulsory arbitration is that once arbitration is required, both parties revert to their original bargaining positions. Even if the two parties have agreed on many, if not most, of the issues, they both may return to their initial position. As a result, an expensive, time-consuming process begins as all of the issues are again discussed and decided. Apparently, both parties anticipate that an arbitrator will give them a better net bargaining position when he/she issues the award. However, both parties frequently are dissatisfied with some of the terms that they had initially agreed upon because these have been modified by the arbitrator.

A second problem is that compulsory arbitration permits both parties to escape responsibility for the final terms of the agreement. If the

award is unpopular, leaders on either side may blame the arbitrator in an attempt to escape the wrath of their constituents.

Conclusion

Despite these problems, there is no doubt that compulsory arbitration is a major viable solution to resolve labor problems in the public sector. Without a doubt, compulsory arbitration does provide a final answer to the negotiation process. As a result, job actions will be virtually eliminated in the areas of public health and public safety which the public feels are critically needed at all times. Consequently, police, fire, utilities, and hospitals may very well become areas in which compulsory arbitration is utilized concurrently with the prohibition of strikes.

In those instances where compulsory arbitration is in existence, it seems to be doing the job. Despite the fact that many government officials oppose it and will continue to oppose it because it diminishes their control of wages, hours, and working conditions, personnel directors, labor relations directors, and union leaders feel that compulsory arbitration does assist in providing labor peace in the public sector. The positive experience of the past few years will stimulate implementation of arbitration in many states and municipalities.

DISCUSSION

ROGER E. DAHL

U.S. Conference of Mayors

Messrs. Bornstein, Sarthory, and Overton have given us a great deal to chew. Indeed, from my public management perspective, they have addressed almost all the areas of concern, even if I disagree with some of their conclusions.

Tim Bornstein offers us sharp, perceptive insights into the *raison d'être* for the advent of sunshine bargaining, public intervention or access to the bargaining table or as he calls it, with regard to school negotiations in Rochester, N.Y., "bi-lateralism and one-half." His implied suggestion that an expanded use of these procedures may bring some unanticipated negative results is one I endorse. Results including further disruptions of our already overburdened local government political power structure and decision-making process are probable. It seems to me that we cannot reasonably expect government to work well if we elect mayors, school board members, and councils to run these important institutions one day and then, on the next, pass laws that require them to give extraordinary access and/or power to certain special groups (e.g., a taxpayers association or parent group) by allowing them a presence at the bargaining table.

While many of our political leaders, mayors and school board members, for example, seem to favor modifications such as sunshine bargaining, I am somewhat more hesitant. My proposed solution, first articulated about five years ago, would require a post audit of bargaining agreements, done perhaps by a General-Accounting-Office-type organization. It seems to me that this type of procedure would provide an incentive for the parties to keep things on the up and up and as a result, in time, the public's fears about labor agreements, negotiated behind closed doors, would diminish. In such a situation, a mayor or school superintendent might well determine that public debate is appropriate on a given issue and a public hearing might be held.

Bornstein's proposed solution, use of the Administrative Procedures Act model to gain public input on collective bargaining issues, may

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indeed be a sound way to go. He may be correct when he suggests the strong medicine implied by the APA approach, but as one who likes to tinker before making major repairs, I would urge caution, especially when the dollar costs may be high.

While Joe Sarthory addressed "The Climate for Collective Bargaining in Public Education in the 1980s," most of his comments would apply and are of concern to general purpose local government as well. Federal collective bargaining legislation may well receive increased attention in the early 1980s as he suggests, but given our present conservative political environment, I suspect passage of such legislation is unlikely. With respect to bargaining laws in those states without them, I agree that legislation is also unlikely. I, too, worry about the increased propensity of teachers' and other unions to seek and gain at the state legislatures what they cannot get at the bargaining table. One bite of the apple is enough.

Teacher accountability, government performance, and productivity should and will receive increasing attention in the 1980s. These are not new matters of concern. In fact, the decade of the seventies began with Mayor John Lindsay's attempts to improve, in a formal way, the performance and productivity of New York City government. We should keep in mind that we are not dealing with a new panacea for the general perception of the public that government doesn't work too well. Sarthory and I would agree that government has productivity and performance problems, but that it also does many things rather well. As I see it, we have a credibility problem. One answer is to work harder and smarter and simply do a better job. Another answer, not often discussed, is to focus some attention on what I believe are often inaccurate public perceptions about the performance of government. Without being defensive, we may have to toot our own horn a bit and engage in a public relations effort to let taxpayers and citizens alike know when we do a good job.

Another focus of attention in the public sector is labor-management cooperation. While Sarthory's less than sanguine predictions are difficult to refute, it seems to me that in these difficult times there are sufficient incentives for stepping out of our adversary roles on occasion in order to cooperate on things like productivity, quality of working life, and other work place problems; just as we cooperate when it comes to seeking legislation which benefits urban America.

I second Sarthory's concern over the increased political impact of public sector unions, especially teachers. Around 350 delegates to the recent Democratic National Convention were teachers. And the NEA

is given credit for the creation of the new Federal Department of Education.

Frankly, I'm not as concerned by their influence at the national level as I am about their strong role in local politics where, in effect, they may have a disproportionate influence by electing the very bosses they will be sitting across from at the bargaining table. With respect to this dilemma, as a former federal employee who resented the Hatch Act, I see no easy solution.

My main concern with respect to the Craig Overton paper was its strong endorsement for compulsory interest arbitration. He rules out the strike for the public sector even though there is absolutely no evidence that the cost of strikes exceed those of compulsory interest arbitration. While I do not endorse a right-to-strike for all public workers, if given the forced choice between strikes and interest arbitration, I would argue strikes are preferable in almost all cases. Admittedly, the evidence for this argument is anecdotal. Mayors and school boards who have used and have been abused by interest arbitration are becoming increasingly dissatisfied. In their view, the arbitration process improperly removes much of the authority that should come with being an elected official. The cost then is to the taxpayers who, while electing people to conduct the affairs of government, must tolerate severe limitations on the discretion our public officials need to conduct government effectively and efficiently.

Additionally, we in public management continue to hold that compulsory interest arbitration (1) inhibits the parties' ability to reach voluntary agreement, (2) is addictive, and (3) is no absolute guarantee for preventing job actions.

DISCUSSION

RALPH J. FLYNN

California Teachers Association

I have been asked to comment on the papers presented by Tim L. Bornstein, Joseph A. Sarthory, and Craig E. Overton. These papers address probable developments in public-sector collective bargaining in the 1980s. I will comment on the following issues which have been raised in the papers:

1. Trilevel bargaining.
2. Taxpayers' revolt.
3. The impact of declining enrollment in the public schools.
4. The probability of a federal collective bargaining law.
5. Compulsory arbitration as an alternative to the strike.

My comments on the probable developments in collective bargaining in the public sector in the 1980s are based almost totally on my experience in California since 1975. While this obviously provides an extremely narrow window on the world, it is the only one that I have. More importantly, however, based upon some 18 years in public-sector labor relations, I believe that the experience of the period 1975-1980 in California is as relevant as any base available upon which to predict the development of collective bargaining relations in the United States as a whole during the next ten years.

A major point raised is the anticipated impact of inflation on bargaining in the 1980s. I would disagree that this is a major issue, not because inflation and the financial condition of the country are not important to effective bargaining, but, rather, because the subject of finance is a constant which will not substantively impact the process of the collective bargaining process, for all that it may affect the outcome in given negotiations.

An issue not raised but which may be critical to collective bargaining in public education in the 1980s is "Contracting Out"; in its educational mode, "Vouchering." Comment will be made on this issue at the conclusion of my observations on the five issues cited.

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Trilevel Bargaining

I do not believe trilevel bargaining will be a significant factor in the evolution of public employee collective bargaining in the 1980s. This assumption stems from an experience that trilevel bargaining may be defined as "Bilateral Bargaining Delayed"; that is, ultimately, the third party either becomes co-opted by or dominates one of the parties in the process and, thus, ultimately we are confronted with a bilateral situation made complex.

This observation in no way is meant either to denigrate or underestimate the critical importance of community involvement in both the collective bargaining process and the acceptance of its outcome; but, rather, that there are far more appropriate forums of this involvement than through the formalized collective bargaining process. The reports received from colleagues representing teachers in the state of Florida, which has a sunshine act, is that the provisions have had no significant impact on the process except perhaps to increase the amount of sidebar bargaining and to legitimize public deception.

California, in enacting its teacher collective bargaining law, the Rodda Act in 1975,¹ provided a modified sunshine provision which mandated that, prior to negotiations, initial proposals must be posted publicly and opportunity provided for community response to the positions of the parties. This provision has been in effect for five years. As spokesman of an organization representing 190,000 teachers in collective bargaining agreements under this provision, I can state categorically that this requirement has not had substantive impact on either the quality of the demands or the pace of the bargaining.

The statute enacted in California giving collective bargaining rights for faculty at the State University and Colleges System provides for student representation on the bargaining team.²

To date, since no unit determination has been made under this law and no bargaining has taken place, the impact of student representation has not been assessed; however, CTA supported the bill as enacted and the expectation, at least among the representatives of labor at the State University and Colleges System, is that the presence of the student at the bargaining table should have no significant impact on the bargaining.

In any event, there is no reason to believe that continued experimentation with third-party efforts in public employee collective bargaining will cause any dramatic impact during the next decade.

¹ Chapter 10.7, Div. 4 of Title 1 of the California Government Code.

² Chapter 12, Div. 4 of Title 1 of the California Government Code.

Taxpayers' Revolt

Reference is made in all three papers to the impact on bargaining during the next decade of the widening ripple of the spirit of Proposition 13: the taxpayer revolt. The California Teachers Association played a major role in the campaign to defeat Proposition 13 in 1978 and again in the campaign to defeat Proposition 9, "Jaws II," in 1980. On reflection, these initiatives, which have come to symbolize the taxpayers' revolt, have been overstated.

Proposition 13, which called for a significant roll-back in local property taxes, represented a response to a specific aggravation and not, as has been characterized, a response to a general malaise within the society toward government. The fact is that individual homeowner property taxes in California were getting to be outrageous. Even more, the almost total dependency which local government, in particular, schools, had developed on this single source of income had been a continuing matter of concern to those of us dependent upon public support, precisely because we all wondered what would happen when the elastic was stretched to the point where it broke. In addition to this, while local property owners were saddled with a heavy property tax, the State of California was sitting on an expanding surplus of over \$6 billion. Proposition 13 may have succeeded even without the encouragement of a Howard Jarvis. The proof of this observation lies in the rejection by the people of the State of California in 1980 of Proposition 9, "Jaws II," Jarvis's second effort to cut taxes. Proposition 9 would have cut personal income taxes in the State of California by one-half. After the enormous sweep of Proposition 13 in 1978, it was assumed that Proposition 9 would be even more popular. The fact that it did not carry was, in part, attributable to the fact that demand for public services, both in quality and quantity, did not diminish after Proposition 13 passed in the State of California, but their availability did. It is hard to conclude that the taxpayer revolt will exercise a marked impact on the quality or direction of public employee collective bargaining in the 1980s.

Declining Enrollment

Declining enrollment was raised by Dr. Sarthory as a major factor which will affect bargaining. The National Center for Education Statistics³ projects that there should be a significant increase in pupil population at the primary grades beginning in 1982 and increasing thereafter for the next six years. In any event, the phenomenon of de-

³ U.S. Department of Education, National Center for Education Statistics to 1988, published in National Education Association Research Memo, "Population Trends and Their Implications for Association Planning, 1980."

clining enrollment has been present in teacher bargaining throughout most of the United States since the mid-1970s. The effect on the collective bargaining process of the reality of declining enrollment has already been experienced and appropriate adjustments made so that, at least at the K-12 level of bargaining in the public sector, there should be a diminishing consequence of this factor in bargaining in the 1980s. At the university level, however, the reality of declining enrollment will become much more significant in the eighties because the trough in the population wave which swept through K-12 in the 1970s will reach the universities in the mid-80s.

Federal Collective Bargaining Law

There has been speculation that the public-employee unions, particularly the National Education Association, will continue to strive for a federal collective bargaining law despite *National League of Cities v. Usery*. This contention is based on the assumption that, if President Carter is reelected, he will actively support such a law and that the National Education Association has drafted a bill believed by Bob Chanin, General Counsel of the NEA, to be able to survive the constitutional challenges growing out of *National League of Cities v. Usery*. Unfortunately, legal issues aside, the conservative climate of the Congress makes the likelihood of passage of such a federal collective bargaining bill for public employees a long shot. In view of this, there will be a very strong attempt by NEA during the 1980s for an alternative approach; viz., to attach riders to all educational funding bills which will require that collective bargaining with defined minimal standards be available to employees in any school district or state which seeks to receive federal aid.

Compulsory Arbitration as an Alternative to the Strike

The prospect of compulsory arbitration as an alternative to the strike is potentially a major development in the 1980s. While compulsory arbitration for police and firefighters is fairly commonplace across the United States, it is exceptional among other public employees at present. Among teachers, Iowa and Connecticut are the only two states which mandate compulsory arbitration in lieu of the strike, although a number of jurisdictions with public employee bargaining laws allow for the option of binding arbitration, should both parties agree to it. While public management is opposed to both the strike and to binding arbitration, the consensus appears to be (as noted in the papers) that confronted with a hard option between the two, public management would opt for the strike. Increasingly, however, public-employee unions prefer

compulsory arbitration, particularly the final-offer variations. No one can forecast whether there will be any significant shift in the public sector to compulsory arbitration during the 1980s, for all that there will be a large body of data available on the subject. Tim Bornstein mentions that a major study by Robert Doherty of Cornell University on interest arbitration is about to be published, and its findings may provide guidance.

Finally, there is the issue of "Contracting Out" or "Vouchering." "Contracting Out" has become a fact of life as an alternative form of providing public services. As public management seeks one panacea after another to try to avoid the cost of providing public services, contracting out is usually one of the first options considered.

In the area of public education, vouchers (a form of "script" provided to parents to be credited to the school they would like their child to attend) is a form of "contracting out" in that the script could be credited to either a private school or a public school. Such a plan is under consideration as a ballot initiative in 1982 in the State of California. Should such an initiative be adopted, it will, in addition to the social and legal problems which will arise, result in a major impact on the collective bargaining process during the eighties.

In the proposal drafted by Sugarman and Coons of the University of California, Berkeley, "Independent Public Schools" as well as private schools would be eligible to qualify to accept vouchers. These entities would be self-governing. Bargaining rights for independent public schools would be controlled by public employee bargaining laws. Private schools that are church-related would presumably invoke Separation of Church and State to avoid Taft-Hartley coverage while asserting their independence in order to qualify for state funding.

Precisely how all of this will change teacher bargaining is difficult to assess, but that "vouchers" will generate an impact is a safe bet.

DISCUSSION

CHRIS HANNA

Bureau of National Affairs, Inc.

May I first say that I agree with virtually everything that has been discussed by either the presenters of the three major papers or the other discussants responding to them, for each speaker and commenter has fairly and accurately outlined the prevailing views of those he represents. Obviously, since we are here dealing with an advocacy situation—public employers generally control the pay levels and employment conditions of their employees that public employee unions want to improve—perceptions differ, but a substantial amount of agreement also exists.

This became particularly clear to me a year or so ago when, in connection with the Bureau of National Affairs's 50th anniversary, editors of various BNA publications were asked to prognosticate about the futures of their reporting fields. I approached this project by devising a list of the dozen or so most vocal and/or high profile individuals active in state and local public employment labor relations and interviewing them. The result was a substantial degree of unanimity among these union and employer representatives, negotiators, mediators, arbitrators, and labor attorneys, and I think it may be helpful to share with you some of their predictions:

First, even though organization of the private-sector workforce in the country is declining, the number of state, county, city, and school board employees joining unions and public employee organizations will continue its upward growth.

Second, more groups will be vying for these employees, thus creating interunion conflicts.

Third, unions will continue to push for comprehensive bargaining laws in states that have none and for "fine tuning" the ones already on the books.

Fourth, however, as the public grows increasingly aware of unrest in the public-sector workforce, and/or as public-sector unions gain more power in Congress, a federal bargaining law may be enacted either setting minimum standards for public-sector bargaining or including

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public employees under the National Labor Relations Act, with public-safety bargaining disputes subject to binding arbitration.

Fifth, strikes by teachers and other public employees will not dramatically increase and are generally agreed to be lessening, at least in number, although the less frequent strikes are predicted to be more severe.

Sixth, the use of binding arbitration to settle public-employee bargaining impasses will increase with a variety of effects, ranging from squeezing already financially pressed employers to fund awards they cannot afford, to raising taxpayers' consciousness for greater accountability of taxes and services, and eventually even to reversing the trend of awards that tend to favor unions to awards that cut back benefits.

Seventh, the use of grievance arbitration also will increase and replace the disciplinary review functions of old civil service agencies.

Eighth, public employees will continue to press for higher wages and better fringe benefits and working conditions such as improved welfare funds and reduced class size, but employers also may increase their "give back" bargaining pressures in such areas as residency requirements, combining or eliminating services, and work-jurisdiction boundaries.

Ninth, union security provisions will proliferate in the public sector as public managers increasingly look for bargaining tradeoffs with maximum impact for unions but minimal impact on budgets. This is likely to give public unions greater financial resources for both organizing and political activities.

Tenth, confrontation will continue to characterize the adversary relationship of public employers and public employee organizations. But practitioners report an optimism that while "halcyon days" for public employees are over, the bargaining relationship will continue to mature and be marked by greater sophistication and even cooperation in non-bargaining areas such as productivity and labor-management committees.

Finally, employers and employees in the public sector alike detect a growing, significant attitude that their future relationships cannot and will not be sustained in a vacuum but will be indivisibly linked to technological, political, military, economic, and international developments.

I would like to say a few words about the role of the media—and especially the broadcast media—in covering public-sector labor relations developments. A television or even radio reporter is aware of the citizens' concerns about the quality and quantity of public services, tax rates, and public spending. They also are schooled in the prevailing

attitude that a spot on the six o'clock news will not be aired unless it contains or covers something controversial, say, a strike, picketing, or exercised negotiators trading allegations.

I think it is especially important for responsible spokespersons for both public employers and unions not to let the media use them, not to let them alter a report on a bargaining situation to be more polarized than it really is. Of course, I am in favor of union and employer spokespersons being honest, open, and fairminded with the press, but in the midst of a potentially inflammatory, say a prestrike, situation, I also see nothing wrong with negotiators—who may have been meeting nonstop for days—to politely but firmly refuse to tell reporters what bargaining positions are or where a city or school board is keeping a copy of its strike contingency plans.

Also, it seems to me, union and employer representatives should be aware of having to take responsibility for explaining terms of art and nuances about the bargaining process in the public sector with which general assignment reporters are not familiar. They are most used to covering general topics and usually are reassigned periodically to other fields. They may not have the vaguest notion how grievance arbitration differs from impasse arbitration, how teachers are paid, what a "fair share" agreement is, or what percentage of his working hours a firefighter actually spends fighting fires.

Indeed, public employer and union representatives can perform a valuable public service—as some of the previous speakers already have pointed out—by not just explaining what governments do well for taxpayers that support them and what unions do well for improving the pay, benefits, and working conditions of their members, but also by elucidating the steps in the process from recognizing a unit of employees through the completion of a bargaining agreement. If inflation is the major factor affecting public-sector bargaining in coming years, communicating about it must be a close second.

XIII. CONTRIBUTED PAPERS: LABOR MARKETS AND OTHER IR TOPICS

Reform of the Tax System to Stimulate Labor Supply: Efficiency and Distributional Effects

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I. Introduction

Over the course of the last decade, the political debate surrounding tax and transfer policy has increasingly tended to focus on the work disincentive effects of high marginal tax rates. It has been argued by some supporters of the Kemp/Roth tax cut that it is possible to cut tax rates and not reduce tax revenue. Restoring incentives and reducing distortions, it is argued, will generate such large increases in the tax base that tax revenues will not fall or will fall only moderately. There are many ways in which reduced marginal tax rates increase the size of the tax base: international capital flows, reductions in tax cheating and the use of tax shelters, improvements in international competitiveness and economic efficiency, increases in savings, hours worked, and work intensity. No single paper can hope to assess and measure all of the possible responses of the tax base to an across-the-board cut in marginal tax rates or any other major change in the tax system. Since nearly 80 percent of taxable personal income is earnings, an improvement in incentives must increase labor supply if it is to cause significant increases in output and the tax base.

In this paper we will apply the findings of the econometric literature on labor supply to the task of simulating the behavioral response to a variety of tax reforms intended to stimulate labor supply. These simula-

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tions were performed with the use of a large microeconomic model of the U.S. tax transfer system.

These simulations demonstrate that general reductions in tax rates à la Kemp/Roth will produce increases in earnings. But these increases in labor supply which result in at most a 4 percent increase in earnings are not sufficiently large for the tax cuts to pay for themselves. Under the most optimistic assumptions, 79 percent of the budget deficit generated by the Kemp/Roth tax cut would remain after labor supply responses were accounted for.

In the next section of this paper we describe the three types of tax reforms that we simulate, and in the third we report and examine the results of the simulations. We offer our conclusions in the final section.

II. Description of Programs Simulated

Of the tax reform proposals that we simulated, the one that has received significant political attention is the Kemp/Roth tax proposal which would lower taxes by reducing the marginal tax rates in all tax brackets by 30 percent. While every taxpayer would have his taxes cut by a third, this proposal would raise after-tax wage rates of taxpayers in the lowest tax brackets by 5 percent and raise after-tax wage rates of top-bracket taxpayers by 30 percent. The more wealthy taxpayers would, hence, receive a larger proportion of the total tax cut.

In order to shift a larger proportion of the tax reduction to middle-income taxpayers, we designed two programs that offer a standardized deduction for many of the expenses of working—clothes, meals at work, housekeeper and child care—that currently are not fully deductible. The presumption is that these costs are proportional to the number of hours worked. The first of these plans, the hourly tax exemption, offers each wage and salary worker the option of electing a \$1.00 per hour tax exemption instead of his/her personal exemption. Such a reform benefits wage and salary workers who choose to work more than their personal deduction expressed in hours.

The second of these plans, the hourly tax deduction, allows the family the option of electing a \$1.25 per hour tax deduction instead of its standardized or itemized deductions. A family benefits if \$1.25 times the number of hours worked in wage and salary employment by adult family members is larger than the standard deduction or the sum of all itemized deductions. The after-tax wage rates of taxpayers electing these options are raised by 14 or 17.9 cents if they are in the lowest tax brackets and by 50 or 62.5 cents if they are in the highest bracket.

Workers who previously had no tax liability would, of course, not

benefit from any of these tax reduction programs. But workers who do not pay federal income taxes also face high marginal tax rates imposed by the welfare system. The third program simulated is designed to increase net wage rates of individuals who would not be significantly helped by the first two plans. The program substitutes a wage rate subsidy (WRS) paid directly to workers for the earned income tax credit. The WRS pays a worker an hourly supplement equal to 50 percent of the difference between his gross wage and a target wage. The target wage is conditioned on family size: \$3.10 + 60¢ per dependent child. Where the wage rate is below the legal minimum wage, \$2.10 per hour in 1975, the subsidy is a flat percentage of earnings.

Workers whose average wage rate is between the target wage and the legal minimum wage are paid a subsidy of

$$(1) \quad .5(TW \cdot \text{Hours} - \text{Earnings}) \quad \text{for } \$2.10 < W < TW$$

Below the legal minimum, the subsidy is

$$(2) \quad [.5(TW - \$2.10)] / \$2.10 \cdot \text{Earnings for } W < \$2.10$$

The WRS would be treated as taxable earned income by the positive tax system and by transfer programs such as AFDC, SSI, and Food Stamps.

III. Results

What are our predictions of the cost, efficiency, and distributional impacts of these three tax reforms? A description of the large microeconomic simulation model used to generate these predictions appears in Betson, Greenberg, and Kasten (1980).¹

The net cost of each of the simulated reforms under the static assumption of no labor supply response is tabulated in column 1 of Table 1. With a cost of \$40 billion, Kemp/Roth is by far the most expensive of the alternatives. Assuming no labor supply response, costs of the other programs are \$16 billion for the WRS, \$21.1 billion for the hourly tax exemption, and \$12.9 billion for the hourly tax deduction. The net impact of tax reform on the federal deficit depends upon the extent to which the tax law change produces changes in labor supply. If a tax cut induces an increase (decrease) in hours worked, tax revenues will decline less (more) than is predicted by the static model used to generate the costs tabulated in column 1.

In reporting the simulation results, we have used two alternative sets

¹ These simulations assume that the demand for labor is perfectly elastic and hence that no adjustments occur in the wage rates firms pay. To the extent that this assumption is contradicted, our estimates of the labor supply effects are overstated. Building a demand side into the model would not, however, be likely to alter the rankings of alternative tax transfer reforms.

TABLE 1
Impact of Various Tax Reform Options on Labor Supply, Earnings, and the Federal Budget

	Net Cost ^a Before Labor Supply Adjustment (Billion \$)	Net Cost ^a Post Labor Supply Adjustments (Billion \$)	Percentage Change in Labor Supply			Percentage Change in Earnings			Efficiency ^b Ratio
			Heads	Spouses	Total	Heads	Spouses	Total	
Keeley et al. labor supply assumptions:									
Kemp/Roth	40.4	35.6	.6	-5.7	-.7	2.7	-2.5	2.0	1.31
Hourly Tax exemption	21.1	20.8	.5	-1.9	+.0	.6	-2.2	.2	1.08
Hourly Tax deduction	12.9	11.4	1.0	-.1	.7	.9	-.1	.7	1.51
WRS	16.0	16.8	-.0	-1.1	-.3	-.1	-1.0	-.2	.86
Robins and West labor supply assumptions:									
Kemp/Roth	40.4	31.4	1.2	.5	.6	3.9	4.6	4.1	1.75
Hourly Tax exemption	21.1	18.9	.7	.6	.7	.9	.7	.9	1.38
Hourly Tax deduction	12.9	9.8	1.1	2.4	1.4	1.1	2.9	1.4	2.11
WRS	16.0	16.6	+.0	1.1	.2	+.0	.5	+.0	1.00

^a Net change in the federal deficit taking into account program substitutions and taxation of WRS by welfare programs. Implementation is assumed to occur in 1975 and dollar figures are in 1975 dollars.

^b Defined as the ratio of the change in disposable income to net cost.

of labor supply specifications. The first of the labor supply parameters came from the Seattle-Denver Income Maintenance Experiments which were estimated by Keeley et al. (1978). The second set, from the same source, were estimated by Robins and West (1980), and, in our opinion, represent an improvement in the methodology and sample employed in the earlier study. After comparing these results with the rest of the labor supply literature, we decided that the estimates in these two studies would bracket the likely labor supply response. We would suggest that the Keeley et al. estimates would represent the lower bound, while the Robins-West estimates are decidedly pro supply-side assumptions.

Just as important as the parameters selected is the functional form assumed. Our assumption that wage rate and income have a linear relationship with hours assumes that for individuals with the same initial number of hours worked, an increase in the after-tax wage rate from \$20.00 to \$21.00 an hour changes work effort by the same amount as an increase from \$2.00 to \$3.00. Since the labor supply curve for males is forward bending, this implies that the wage elasticity of labor supply rises with the wage rate. Since most of the benefits of Kemp/Roth go to high wage rate/income families and individuals, this is a decidedly pro-Kemp/Roth assumption.²

In column 2 of Table 1 we present estimates of net costs after labor supply response. Taking account of the taxes generated by the increase in labor supply induced by the tax cut does lower the net cost of the Kemp/Roth tax cut by 12 percent under Keeley et al. labor supply parameters and by 22 percent under Robins-West estimated labor supply parameters. The labor supply response to the hourly tax deduction also generates significant revenues—12 percent of original cost under Keeley et al. parameters and 24 percent under Robins-West parameters. While significant, these cost reductions are nowhere near large enough to warrant the claim that Kemp/Roth or the hourly tax deduction would be self-financing. The hourly tax exemption does less well—a zero revenue response with Keeley et al. parameters and 10 percent of original cost with Robins-West estimates. Accounting for labor supply response increases the cost of the WRS. It should come as no surprise that none of these supply-side-oriented tax reforms is self-financing. A 30 percent cut in tax rates would require the tax base, measured in constant dollars, to increase by approximately 30 percent. While the responses not simulated in this paper will contribute to an expansion of the tax base, it would indeed be remarkable if the improvements in incentives produced by

² An Appendix that includes a detailed discussion of our labor supply assumptions is available from the authors upon request.

Kemp/Roth (a 5–30 percent increase in net wage rates, 0–12 percent on after-tax long-term capital gains, and 5–94 percent on dividend and interest income) could increase the tax base by the required amount.

The predicted response of hours worked and earnings to the four tax reform proposals are presented in columns 3–8 of Table 1. When the labor supply response is measured by the percentage change in earnings, it is Kemp/Roth, the largest of the tax cut proposals, that is predicted to generate the largest response. When labor supply response is measured by hours worked, however, the smallest of the tax cuts, the hourly tax deduction, produces under both sets of assumptions the largest labor supply response. Because its beneficiaries are typically high-wage workers, Kemp/Roth produces a larger percentage change in aggregate earnings than in hours. The beneficiaries of the hourly tax deduction have average wage rates, so percentage changes in hours and earnings are equal. The beneficiaries of the WRS are low-wage workers, so it produces a smaller percentage change in aggregate earnings than it does in hours worked. Simulations using Keeley et al. labor supply assumptions predict smaller or negative increases in labor supply; the Keeley et al. labor supply parameters predict that income effects of the WRS will cause the labor supply of spouses to decline.

In the last column of Table 1 we summarize the program's impact on earnings (total output) and disposable income by tabulating its "efficiency ratio." The efficiency ratio is defined as the ratio of the change in disposable income to the net cost of the program. Subtracting one from the ratio gives the per dollar effect of the program on output in the economy if there is no change in the level of saving. By this criterion, the hourly tax deduction offset by loss of other deductions comes out most favorably: increasing income by 51 percent more than net cost under Keeley et al. parameters and by 111 percent more than net cost under Robins-West parameters. Kemp/Roth comes out next best: increasing income 31 and 75 percent of the net tax cut under the alternate sets of labor supply parameters. The Keeley et al. labor supply parameters predict that a wage rate subsidy will reduce the earnings of beneficiaries by roughly 14 cents for each dollar of net transfer. The Robins-West parameters predict no earnings response. The hourly tax exemption increases earnings by 8 or 38 percent of the tax cut depending on the labor supply assumption.

To assess the distributional impacts of these reforms, we must rank individuals and families of different size and life-cycle circumstances by some welfare or deservingness criterion. The welfare criterion in most common use is the ratio of a family's disposable income to the poverty

line for families of that size. Current pretransfer income, however, is a poor measure of a family's level of welfare. Families facing identical budget constraints (i.e., wage rates and nonemployment income) often have dramatically different incomes. In some families the wife works and the husband has two jobs; in others no one is working. An index number that ranks the budget constraint faced by the family—that systematically accounts for involuntary unemployment and child-care responsibilities—is, we feel, a preferable proxy for deservingness.³

Table 2 presents tabulations of the proportion of the net benefits of each reform going to families at either the bottom or the top of the income or earnings capacity distribution. Because people with income or earnings capacity below 1.5 times the poverty line pay little in taxes, they receive no appreciable benefits from Kemp/Roth or the hourly deduction. The 22 percent of the population whose earnings capacity is below 1.5 times the poverty line receive 5 percent of the benefits of the hourly tax deduction. This same group receives 41 percent of the benefits of the wage rate subsidy.

TABLE 2
Proportion of Net Benefits Going to the Needy and the Rich

	Proportion of Benefits Received by Those Below 1.5 of Poverty Line		Proportion of Benefits Received by Those Above 5 Times of Poverty Line	
	By Current Income	By Earnings Capacity	By Current Income	By Earnings Capacity
Robins and West labor supply assumptions				
Kemp/Roth	.01	.02	.29	.44
Hourly tax exemption	.04	.05	.18	.34
Hourly tax deduction	.00	.01	.28	.37
WRS	.39	.41	.01	.03
Proportion of total population	.29	.22	.06	.19
Groups share of total disposable income	.11	.09	.17	.36
Groups share of all income taxes	.01	.02	.29	.44

Strong contrasts also exist in the proportion of benefits that are received by the wealthy. The 6 percent of the population with current incomes above the poverty line receives 29 percent of the Kemp/Roth tax cut, 28 percent of the hourly deduction, 18 percent of the hourly tax exemption, and 1 percent of the WRS's benefits. The 19 percent of the population whose earnings capacity is above five times the poverty

³ The construction of this index is described in an Appendix that is available from the authors upon request.

line receive 44 percent of the Kemp/Roth tax cut, 37 percent of the benefits of the hourly tax deduction, and 34 percent of the benefits of the hourly tax exemption.

IV. Conclusions

Our analysis of the simulated programs yielded the following conclusions:

- Because they pay most of the taxes, upper-income groups receive a major share of the benefits of tax reduction schemes like the hourly tax deduction and Kemp/Roth. The WRS scheme, on the other hand, primarily benefits people with low earnings capacity and income.

- A slightly higher proportion of the Kemp/Roth tax cut than of the hourly tax deduction goes to families with incomes and earnings capacity above five times the poverty line. The major distributional difference between these two proposals is the tax cut they offer the most wealthy 1 percent of the taxpayers.

- None of the tax reduction schemes is self-financing even under the most optimistic assumptions about the responsiveness of labor supply.

- The three tax reduction schemes significantly increase labor supply. The hourly tax deduction has the largest impact per dollar; depending on labor supply assumptions, earnings can increase by 51 to 111 percent of its net cost. Kemp/Roth comes in second, raising earnings by 31 to 75 percent of its net cost.

The hourly tax deduction scheme is targeted on improving the incentive to increase hours of work. It leaves current incentives for saving, investment, and taking higher paying jobs untouched. Kemp/Roth, in contrast, simultaneously improves incentives to work longer hours, take a better job, save, and invest. Since improving these other incentives would almost certainly stimulate output in ways not captured by our analysis and raise additional revenues in the process, an efficiency ratio that accounted for these effects would almost certainly be larger than the one we have tabulated above and might very well exceed the ratios we have calculated for the hourly tax deduction. There are, however, methods of stimulating investment—tax credits and liberalized depreciation—that may have extremely high efficiency ratios. Thus, a package of investment incentives and the hourly tax deduction may very well have a higher efficiency ratio than Kemp/Roth.

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Impact of Experience Rating and UI Benefits on Unemployment: The Neglected Firm Side*

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Perhaps the most noticeable change in the 1979 1040 tax forms has been the inclusion for the first time of unemployment insurance benefits as taxable income. This offers the glimmer of hope for those applied economists (at least for those who remain employed) addressing policy questions that their collective research efforts may have some role in helping shape public labor policy. The shift in policy, however, may be rather strong medicine in the fact of what may still be a very imperfect diagnosis.¹ Among other things, the studies in this area fail to account for selectivity bias due to censoring on covered employees, often employ interstate data on the UI program in their comparisons so that excluded correlates with the UI parameters may be biasing their estimates, and employ cross-section data that make it difficult to capture the impact of the business cycle on the rate of unemployment. Also, virtually all of the theoretical models are based on the workers' decisions (i.e., the supply side) and ignore or fail to account explicitly for changes in employers' incentives to lay off workers with respect to changes in the benefit structure. Perhaps this is one reason no formal attempt has been made to integrate experience rating into the empirical analysis. An important article by Brechling (1977) is an exception in that both theoretical and empirical investigations on the demand side consequences of changing the UI benefits are examined and found to be very significant, although again no empirical tests on the direct impact of experience rating was made.

This paper represents the first attempt to integrate both supply and

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¹ For a good analysis of some of the gaps in the research, see Welch (1977).

demand conditions with some empirical results on industrial unemployment in South Carolina. In the next section, we model, respectively, the supply and demand side relationships between unemployment and UI benefits. We find that the total impact of an increase in UI benefits is ambiguous in the model developed here. In the third section we test these implications on time-series cross-section industrial data and find (1) that experience rating significantly impacts on the unemployment rate, and (2) that increases in benefits (both *ex post* and *ex ante* measures) *decrease* unemployment. The latter finding suggests that for industries investigated here at least, the employer response to changes in benefits dominates the employee response.

Unemployment and UI Benefits—Some Simple Models

Supply

Throughout, in order to capture the effects of UI benefits on unemployment, we construct a very simple model in which workers are attached to specific firms. Hence we follow the spirit of the Feldstein (1976) model in that we focus on temporary layoffs, although we differ from it by modeling both employer and worker behavior while abstracting from changes in the hours of work (all “employment” decreases come in the form of laid-off workers rather than a cut-back in hours worked per employee). On the supply side, we further assume that the “representative” worker attempts to maximize his utility, and hence prefers to be laid off when his utility in that state exceeds his utility when employed. Writing the indirect utility function as $V^i(I^i, W^i, Z^i, \epsilon^i)$ where i indices the two states (i.e., $i = e$ when the worker is employed, and $i = u$ when the worker has been laid off), I^i and W^i are the state-specific incomes and “wages” respectively, and Z^i and ϵ^i are observed and unobserved differences in firm and personal characteristics. Then taking a first order Taylor Series approximation to V , we write

$$(1) \quad V^i = \alpha_0^i + \alpha_1^i I^i + \alpha_2^i W^i + \alpha_3^i Z^i + \alpha_4^i \epsilon^i \quad i = e, u$$

where the unemployment “wage” is the UI benefits ($B = W^u$). The crucial assumption here is that α_2^e and $\alpha_2^u > 0$. Assuming $\alpha_j^e = \alpha_j^u$, and that there are not fixed costs in moving between employment and unemployment (so $I^e = I^u$), then a worker prefers not to work if $V^u - V^e > 0$ or equivalently, if

$$(2) \quad \alpha_2(B - W) + \alpha_3(Z^u - Z^e) > \alpha_4(\epsilon^e - \epsilon^u).$$

Analysts investigating the effect of benefits relative to wages on the

probability or duration of being unemployed seem to have had this sort of model in mind. Since $\alpha_2 > 0$, the greater the benefits the more likely an individual will be unemployed. If we neglect employers' incentives (the "demand" side), then we could simply estimate (2) with probit, logit, or a linear probability technique, depending on what assumptions we make about $\epsilon^c - \epsilon^u$. When the model is couched solely in these supply side considerations, clearly benefits (B) will have a positive impact on the probability of being temporarily unemployed. In general, however, the firm will not have a negligible interest in the cost it faces when laying off employees, as we now show.

Demand

Recall that we have assumed that there are a fixed number of employees (L) attached to the firm, and at any given point in time L_1 will be employed and L_2 unemployed (so that $L = L_1 + L_2$).² The firm's problem is to choose the proportion who are employed (or unequivalently, unemployed) in such a way as to maximize the firm's profits given by

$$(3) \quad PF(L_1) - WL_1 - C(L_2, \tau, B)$$

where W represents wages paid to employed workers, $F(\cdot)$ is the production function, P is product price, and C is the cost of laying off L_2 employees. The cost function, C , depends in general on a vector of UI parameters, captured here by benefits paid (B) and the degree of experience rating (τ). Most states (including South Carolina) use the reserve ratio method of experience rating, and equilibrium when the rating is effective implies that the cost function be equal to total benefits paid out, BL_2 .³ Substituting into (5), and letting $P = 1$, we have

$$(4) \quad F(L - L_2) - W(L - L_2) - BL_2$$

The first-order conditions for a maximum become

$$(5) \quad F'(L - L_2) = W - B$$

² Our simplifying assumption of firm-specific attachment is given some credence by the theoretical work of Brechling who shows how labor turnover increases the UI tax base for firms.

³ Let Ω_t be the balance in the UI account at the end of the year, t . Then the change in the balance over the course of the year depends on the difference between inflows and outflows: $\Omega_t - \Omega_{t-1} = \tau\bar{W} - BL_2$. Here \bar{W} is the taxable payroll so that $\tau\bar{W}$ represents UI taxes paid by the employer and BL_2 are UI benefits paid out. Dividing through the above expression by \bar{W} yields $R_t - R_{t-1} = \tau - (BL_2/\bar{W})$, where R represents the ratio of the reserve balance to taxable wages. Stability of the rating implies $R_t - R_{t-1} = 0$ so that $\tau^* = (BL_2/\bar{W})$. Then $\tau^*\bar{W}$, the employer costs, equals $(BL_2/\bar{W})(\bar{W}) = BL_2$. Note this implies perfect experience rating, an assumption implicitly maintained in the derivation of equation (6) but dropped in equation (7).

Inverting F' and solving for L_2 (recall L is assumed fixed) yields

$$(6) \quad L_2 = g(W - B)$$

where $g' > 0$. A comparison of (6) with (2) clearly shows that relative changes in benefits induce opposing incentives among firms and workers—higher benefits making it more probable that employees will want to separate from the firm, but less likely that the firms would allow this. Indeed, if insurance costs were fully rated (or there was costless bargaining between firms), and firms and individuals were strict income maximizers with low transaction costs between them, then it is difficult to see why changes in benefits have any impact on the unemployment rate. In the real world such differences between employees and employers (the informational, moral hazard, and nonpecuniary aspects) do exist so that the net impact is an empirical question. To develop the more appropriate estimation model, we expand the firm's derived demand for L_2 by including product demand shifters (*TIME* and *CYCLE*), as well as parameters from the experience rating distribution. Equation (6) then becomes

$$(7) \quad L_2 = h(W - B, TIME, CYCLE, \tau, \phi)$$

where ϕ is an unobservable firm specific effect. Again, a first order Taylor Series expansion of h yields

$$(8) \quad L_2 = \gamma_0 + \gamma_1(W - B) + \gamma_2 TIME + \gamma_3 CYCLE + \gamma_4 \tau + \gamma_5 \phi$$

where $\gamma_1 > 0$ and $\gamma_4 < 0$. The higher the unemployment insurance premium, τ , the more incentive firms have to not lay off employees up to the maximum premium, after which the marginal cost is zero (neglecting the potentially important impact that turnover has on a firm's taxable payroll, see Brechling (1977)). To capture this effect in our empirical work we include *PMAXR*, the proportion of firms at the maximum rating, to pick up this effect and anticipate this variable will have a positive impact on unemployment. Also, for many years of our sample, firms that are newer or too small to be rated individually are assigned a premium of 2.7 percent, which is sometimes lower than *PMAXR*. This variable *PERNR* (firms not rated individually) was included, as was the standard deviation of the experience ratings (*STDR*) which picked up the spread in the distribution of experience rating. For the moment we suppress these other variables, and let τ pick up the experience rating effect. This implies that the firm decides to lay off individuals when $L_2 > 0$ or

$$(9) \quad \gamma_0 + \gamma_1(W - B) + \gamma_2 TIME + \gamma_3 CYCLE + \gamma_4 \tau > \gamma_5 \phi$$

Clearly, if we turn the table and neglect (2), then estimates based on *firm incentives* would lead to a negative a priori expectation of the benefit variable on the probability of being laid off. We remain agnostic as to net outcome of these effects, supposing that firms and employees maximize the sum of their utility (and letting the γ 's be scaled through by the appropriate factor that put the demand-side parameters in equivalent supply-side utility terms). This implies that the proportion unemployed increase as

$$(10) \quad \gamma_0 + (\gamma_1 - \alpha_2) (W - B) + \alpha_3 (Z^u + Z^e) + \gamma_2 \text{TIME} + \gamma_3 \text{CYCLE} + \gamma_4 \tau > \mu$$

where $\mu = \gamma_5 \phi + \alpha_1 (\epsilon^e - \epsilon^u)$.

While the discussion above of the estimation equation (10) frames the ambiguity surrounding the benefit/wage variables, it also serves to highlight the stronger a priori predictions connected with the distribution of experience rating and unemployment.⁴ As tax rates are lowered, or the linkage between taxes and unemployment experience diminishes, then unemployment should rise on average. If neglecting firms' incentives in the UI program is appropriate, then we anticipate finding that γ_1 and γ_4 would on average be statistically unimportant in an analysis of unemployment increases. However, tests in the next section provide the evidence that both effects operate very strongly suggesting that future research must take account of employers' as well as employees' incentives.

Data and Estimation

The UI data used in estimating equation (10) come from various annual reports of the South Carolina Employment Security Commission, supplemented by unpublished information kindly provided us by the Commission. These data are aggregated at the industry level and were matched with industrial data gathered from the annual reports

⁴This abstracts from potential simultaneity between experience rating and unemployment over time. Even legislated changes in the experience rating may be mandated by (continually?) high levels of unemployment—in order to keep the system solvent. This appears not to be the case as South Carolina's UI reserves as a percentage of wages remained well above the national average throughout the sample period. In fact, there was only one change in the experience rating categories and benefit levels and that took place in 1962. Tests for structural change in the full set of regressors before and after 1962 were marginally significant. A careful examination of partitioned regression results revealed the 1942-61 pattern of coefficients were virtually identical to those reported in Table 1, while the coefficients for the 1962-67 partition were more ambiguous. Our best guess is that there be nonlinearities in the system such that at low levels of benefits (as in the 1942-61 period) the employer incentives dominate, while at higher levels employee incentives play an increasingly important role. This may also explain why our results are at variance with those of other researchers using more recent data.

of the South Carolina Department of Labor.⁵ Hence, the observations consist of the pooled time series (1942–1967) of several representative manufacturing industries. While there may be things peculiar to South Carolina that mitigate generalizing the results to other regions of the country, we feel the advantages of focusing the analysis within the industrial sector of a single state is important because it avoids potentially important omitted variable biases arising from the difficulty of quantifying some aspects of the UI program in interstate comparisons. The variables used in our analysis include:

Dependent Variable: The unemployment rate (of covered employees), measured here as the number of weeks of covered unemployment divided by the number of covered employees times fifty.

DAYS: The average number of days that plants in the industry were in operation. This is our measure of the business-cycle effect, and hence we expect it to be negative. An additional cyclical proxy, the deviation of real gross sales from the trend line (of each industry separately) was originally included, but found to be statistically insignificant. Its exclusion does not alter any of the results reported here. A time trend variable was also initially included, but as it was never significant, results using it are not reported here. Including it had virtually no impact on the experience rating variables, although it did lower the statistical significance and occasionally reverse the sign of the wage variable.

SEX: The proportion of females in the industry.

WAGE: The predicted after-tax real weekly wage of the “representative” male in each industry. This was constructed by taking the average weekly wage of male production workers and then subtracting off federal, state, and the employee proportion of the Social Security taxes (assumed no non-wage income and production workers were the only working heads of four-member families). To avoid simultaneity between wages and unemployment, these after-tax wages were regressed on the other variables listed here supplemented by

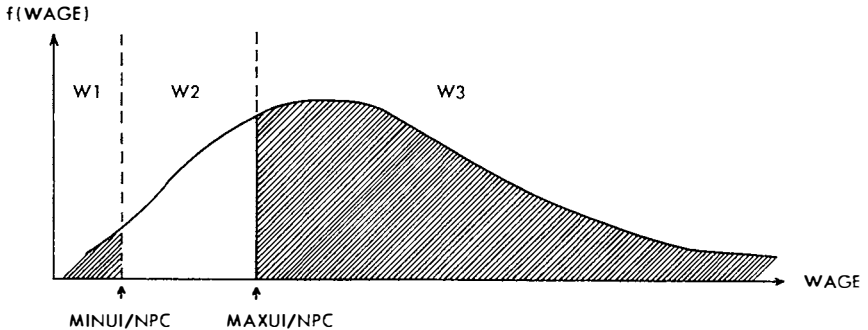
⁵ The industries include Mining, Food, Textiles, Apparel, Lumber, Furniture, Paper, Chemicals, Stone and Glass, Fabricated Metals, Nonelectrical Machinery, and Electrical Machinery. For earlier years, some UI data on the latter five industries were missing, which precluded the possibility of making the usual time-series causality tests between experience rating and unemployment (see fn. 4). Hopefully this important topic will be taken up in future research. Note also that while the actual benefits and unemployment rate are based on a January to December calendar year, the industrial data and the experience ratings distribution are for data given on a July to June fiscal year, which means, for example, that we effectively impose a six-month lag on the *MEANR* variable in the unemployment rate regression.

$TIME$, $TIME^2$, and the additional cyclical variable discussed above, and then the instrumented wage variable included in the regression (using 2SLS). Results using wages not adjusted for taxes were virtually identical.

BEN: These are actual real average weekly benefits paid to unemployed workers. In addition, the expected benefits based on the distribution of wages was also constructed as discussed below. This variable's coefficient may be positive or negative depending on whether the employer or employee effect dominates.

W_1 , W_2 , and W_3 : These are ex ante measures of benefits for low, medium, and high wage employees, respectively. Consider the standard wage distribution in Figure 1. South Carolina has a minimum weekly benefit ($MINUI$), a maxi-

Figure 1



imum weekly benefit ($MAXUI$), and a nominal percentage compensation (NPC) for those whose wages lie between $MINUI/NPC$ and $MAXUI/NPC$. By using average weekly wages and a "standard" wage distribution, we are able to allow for a differential impact of a change in benefits separately for workers receiving $MINUI$ (W_1), $MAXUI$ (W_3), and $NPC \times WAGE$ (W_2). Empirically, W_1 (and W_3) are measured as proportion of employees with wages less than $MINUI/NPC$ (greater than $MAXUI/NPC$) multiplied by $MINUI$ ($MAXUI$). W_2 is simply the proportion of workers whose wages fall between $MINUI/NPC$ and $MAXUI/NPC$ times the average wage in that interval times NPC .

MEANR: This is the average (over all firms in the industry) experience rating. We expect it to have a negative impact on unemployment.

PERNR: The proportion of "unrated" firms.

PMAXR: The proportion of firms with the maximum rating. Along with *PERNR*, this is expected to increase unemployment.

The results in Table 1 clearly show that firms are responsive to changes in the underlying parameters of an unemployment insurance program, both in terms of experience rating as well as unemployment (both ex post and ex ante) benefits.⁶ While the other variables (*SEX* and *DAYS*) do have the expected sign in all the regressions, the most interesting results have to do with the inverse correlation between benefits and the unemployment rate and the significant role that experience rating apparently plays in impacting joblessness. The experience rating variables generally exhibit the expected sign, although layoffs were most sensitive to variations in the experience rating. The elasticities for *MEANR*, evaluated at the sample means, range from $-.6$ to -1.5 . This is surprisingly elastic and it translates a 10 percent increase in experience rating (from the sample mean of 1.8 to about 2.0 percent) into a 10 percent drop in unemployment. It implies that this neglected (at least in any systematic, empirical analysis) aspect of the UI system may in fact be an important tool in efforts to curb unemployment. The pattern of *PERNR* and *PMAXR* provide confirmatory evidence on the importance of UI taxes, an increase in the number of firms not rated or receiving the maximum rate both generally increase unemployment. The average proportion of firms not rated individually or rated at the maximum is .17 and .27, respectively—a substantial group, but perhaps not as large as anecdotal evidence has led us to believe. Elasticities for both variables are low, generally bracketed in the .2 to .1 interval.

The pattern of coefficients on the benefit variables are also consistent with a dominant firm response. The coefficients on the wage and benefit variables are opposite in sign (although not quite equal in magnitude as the simple theory suggests) and imply that *firms* react to the higher layoff costs associated with higher benefits by curtailing turnover, an effect that dominates the *employee's* incentive to seek layoffs as benefits become relatively more attractive. Interestingly, the implied elasticity for *BEN* is -1 , while the elasticities of the W_2 and W_3 variables are $-.5$ and -1.5 , respectively (i.e., the disaggregated ex ante measures bracket the average ex post estimate). Consistent also with the firm side explanation is the pattern of the W_1 , W_2 , and W_3 estimates, elasticities are progressively higher as wages (and hence costs) increase.⁷

⁶ Equation (10) gives the probability that the representative individual from a given firm will be laid off. Suppose μ is such that a linear probability model is the appropriate statistical model; then the fact that we have industry data averaged over several firms yields an estimating form with the unemployment rate on the left-hand side and an asymptotically normal error term (under the assumption that the μ 's are independent).

⁷ Equations (6)–(10) of Table 1 suggest that benefits have a nonlinear impact

TABLE 1
 Determinants of the Unemployment Rate: Experience Rating and Benefits
 (absolute *t*-statistics)

	CONST	WAGE	BEN	W1	W2	W3	MEANR	PERNR	PMAXR	STDR	SEX	DAY	R ²
1	20.0 (7.5)	.03 (1.9)	-.12 (2.2)	-	-	-	-1.4 (2.6)	-	-	-	-7.9 (2.3)	-.03 (3.7)	.581
2	17.7 (6.4)	.04 (2.6)	-.13 (2.4)	-	-	-	-1.7 (3.2)	3.3 (2.6)	-	-	-7.4 (2.2)	-.02 (2.8)	.593
3	17.0 (6.1)	.04 (2.6)	-.06 (1.0)	-	-	-	-2.0 (3.6)	-	2.8 (3.2)	-	-8.0 (2.3)	-.02 (2.8)	.602
4	16.8 (5.7)	.04 (2.9)	-.08 (1.3)	-	-	-	-2.2 (3.8)	2.0 (1.5)	2.3 (2.4)	-	-7.7 (2.3)	-.02 (2.4)	.605
5	13.9 (4.5)	.03 (1.9)	-.06 (1.1)	-	-	-	-2.0 (3.5)	1.7 (1.2)	2.5 (2.6)	1.8 (1.6)	-7.0 (2.1)	-.02 (2.1)	.616
6	14.5 (4.6)	.10 (3.4)	-	1.2 (.3)	-.13 (2.7)	-.22 (3.7)	-1.1 (1.8)	-	-	-	-7.1 (2.1)	-.02 (4.9)	.604
7	12.1 (3.4)	.12 (4.6)	-	2.5 (.5)	-.13 (2.6)	-.25 (4.1)	-1.6 (2.5)	3.3 (2.4)	-	-	-6.7 (1.9)	-.01 (1.3)	.611
8	14.6 (4.0)	.09 (3.1)	-	1.7 (.5)	-.12 (2.3)	-.20 (2.8)	-1.3 (1.8)	-	0.7 (0.6)	-	-7.1 (2.0)	-.02 (2.1)	.606
9	11.9 (3.5)	.12 (3.7)	-	2.2 (.6)	-.13 (2.6)	-.26 (3.5)	-1.4 (1.9)	3.5 (2.4)	-.49 (.4)	-	-6.7 (1.9)	-.01 (1.2)	.614
10	11.7 (3.3)	.11 (2.8)	-	2.2 (.6)	-.13 (2.5)	-.24 (2.9)	-1.4 (1.9)	3.2 (2.0)	-.20 (.2)	.92 (.7)	-6.3 (1.8)	-.01 (1.2)	.616

Note: All coefficients have been scaled by 10². There were 184 observations in each regression and all regressions include industry dummy variables (whose coefficients are not reported here).

Conclusion

In this brief note we have tried to emphasize that the firm's as well as the worker's calculus needs to be factored into our empirical analyses of unemployment insurance. We find proportional decreases in the unemployment rate for equal percentage increases in either average benefits or the experience rating tax. Given the tremendous attention generated this past decade over rising levels of unemployment, it may be ironic that our concern with increasingly complex *labor supply* models has driven economists to a fetish neglect of firms' incentives under the UI system and drawn attention away from what may be a significant policy weapon in the war on unemployment, the experience rating system. While the usual caveats apply to our empirical results, we believe that they raise important questions about fuller specifications of incentives in the UI program that warrant further exploration.

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on the unemployment rate, at first increasing and then decreasing it. Reestimating equations (1)–(5) confirms this: in every equation the *BEN* coefficient is significantly positive, the coefficient on *BEN* squared is significantly negative, and the overall impact of UI benefits on the unemployment rate becomes negative well below the sample mean level on *BEN*. Further, the quantitative impact of the experience rating variables (*MEANR*, *PERNR*, *PMAXR*, and *STDR*) are unaffected.

Worker Attitudes Toward Unions: A Study Integrating Industrial Relations and Organizational Behavior Perspectives

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Why do individual employees hold pro- or antiunion views? Although this question has been of long standing interest in industrial relations, events of recent years—both within and without the academy—have caused investigators to reconsider the conceptual approaches and conventional wisdom of earlier research.¹ This paper, which presents some results from a study of a large urban public library system, seeks to build on the existing research by considering the effects of aspects of organizational process and work-group attitudes on employees' disposition toward unionization.

Although the existing literature is diverse and defies brief summary, two generalizations are appropriate here. First, behaviorally oriented studies of union-related attitudes have relied primarily (1) on measures of correlation between employee attitudes and various "outcomes" of the employment exchange (e.g., economic rewards, aspects of job satisfaction), and (2) on demographic and personality characteristics which may "predispose" employees to be for or against unions.

Second, researchers have often assumed distinctions among different occupations, focusing on different types of variables when studying the attitudes of various employee groups. For *blue-collar* (and other non-professional) *workers*, the decision to support or oppose unionization has typically been conceptualized as the product of a sort of "cost/benefit" analysis with the focus on aspects of the employment exchange closely related to the worker's economic security (wages, benefits, job security)—thus reflecting the presumed "instrumental" orientation of nonprofessional employees, and the primary attraction of "business"

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¹George Strauss, "Can Social Psychology Contribute to Industrial Relations?" in *Industrial Relations: A Social Psychological Approach*, eds. G. M. Stephenson and C. J. Botherton (London: John Wiley & Sons, 1979); Chester A. Schriesheim, "Job Satisfaction, Attitudes Toward Unions, and Voting in a Union Representation Election," *Journal of Applied Psychology* 53:5 (1978), pp. 548-552.

unionism. In studies of *professional* (and semiprofessional) *employees*, for whom intrinsic satisfactions, participation, autonomy, and other norms of professionalism are assumed to be central, variables which measure the presence of such phenomena have received more attention.²

Each of these aspects of the literature has come under criticism. Recent studies of nonprofessional employees have broadened somewhat the range of satisfaction variables examined.³ And while the findings of these studies have not seriously undercut the conventional wisdom, the range and variety of noneconomic satisfaction measures investigated have been relatively small. Additional studies are needed which provide direct comparisons between professional and nonprofessional workers—particularly in view of continuing assertions that the values and attitudes of both groups are changing.⁴

Similarly, while the results of existing studies of professional employees generally meet the expectation that noneconomic outcomes will be important influences on union-related views, consistent patterns across and within individual professions have proven to be illusive;⁵ replication efforts have sometimes been unsuccessful, and “counter-intuitive” findings are not uncommon.⁶ The diversity of research approaches and the dearth of explicitly comparative studies make it difficult to know how much of this inconsistency is artifactual and how much of it is “real.” Some researchers have gone so far as to construct discrete theories of unionization for individual professions,⁷ but others suggest that greater attention should be paid to underlying organizational and situational variables. Among those which have been suggested are: employee perceptions of their own ability to modify current organizational policies or practices, the emergence of coalitions of dissatisfied employees, the role of organizational context, and the im-

² Strauss.

³ J. G. Getman, S. B. Goldberg, and J. B. Herman, *Union Representation Elections: Law and Reality* (New York: Russell Sage Foundation, 1976); W. C. Hamner and F. J. Smith, “Work Attitudes as Predictors of Unionization Activity,” *Journal of Applied Psychology* 63:4 (1978), pp. 415–421; Schriesheim.

⁴ Daniel Yankelovich, “Work Values and the New Breed,” in *Work in America: The Decade Ahead*, eds. C. Kerr and J. Rosow (New York: Van Nostrand Reinhold, 1979), pp. 3–34.

⁵ Joseph A. Alutto and James A. Belasco, “Determinants of Attitudinal Militancy Among Nurses and Teachers,” *Industrial and Labor Relations Review* 23 (1970), pp. 216–227.

⁶ Archie Kleingartner, “The Organization of White-Collar Workers,” *British Journal of Industrial Relations* 6 (1968), pp. 79–93; Paul Gerhart and Charles Maxey, “College Administrators and Collective Bargaining,” *Industrial Relations* 17:1 (February 1978), pp. 43–52.

⁷ T. L. Guyton, *Unionization: The Viewpoint of Librarians* (Chicago: American Library Association, 1965).

portance of the work group in influencing militant attitudes and behavior.⁸

These criticisms and suggestions serve as points of departure in designing the analysis reported here. Specifically, this study sought to examine the correlates of pro- and antiunion attitudes among employees in a single organization in a way which would:

- permit an explicit comparison of the situational and attitudinal correlates of union attitudes across professional, non-professional, and supervisory employee categories;
- assess the importance of attitudes toward unions held by members of an individual's work group and his own beliefs about unions; and
- supplement the examination of outcome satisfaction and demographic correlates of union attitudes with an investigation of the role that influence deprivation plays in the development of pro- and antiunion attitudes.

The following paragraphs provide a rationale for the last point.

There is considerable existing support for the propositions (1) that people are more likely to favor unionization if they are dissatisfied with outcomes (rewards) of employment than if they are satisfied, and (2) that unionization is a more "natural" response to such dissatisfaction for individuals who are philosophically or demographically "pre-disposed" toward the idea of collective action. However, in any given organizational setting, opportunities to remain fully informed about internal decisions and/or to influence the course of organizational events may provide avenues other than unionization for employees to alter the conditions which underlie these dissatisfactions. Here unionization may be a less likely response. Conversely, conditions in an organization which prevent people from exerting influence internally might foster the expectation that one would benefit from a union. To test these assumptions, we examined four variables which, based on the organization literature, we expected would be related to attitudes toward unionization:

1. *Participation in Decision Making* is one way in which individuals can influence their employing organization. We measured the difference between the extent to which people felt they *did* "have a say" in certain salient decisions, and the extent to which they felt they *should*

⁸ J. M. Brett, "Behavioral Research on Unions and Union-Management Systems," 1978, mimeo; Alutto and Belasco; Charles A. O'Reilly III, J. R. Bloom, and N. Parlette, "Professional Workers and Union Activity: The Impact of Individual and Contextual Factors on the Decision to Strike," 1979, mimeo.

"have a say" in these same decisions.⁹ The deprivation scales constructed referred to employee participation at three levels: (a) the person's job (e.g., deciding what task to do); (b) the department in which the respondent worked (e.g., determining staffing needs in your branch or division); and (c) the library system as a whole (e.g., determining library policies and procedures). (Reliability coefficient alphas ranged from .68 to .81). Decision deprivation was expected to be positively related to a prounion attitude.

2. *Amount of Information.* Within participatory structures, lack of information detracts from the ability to influence outcomes.¹⁰ More generally, lack of information can impede one's ability to promote desired organizational outcomes.¹¹ We measured the extent to which a person felt informed regarding what was going on at senior administrative levels in the library system with a four-item scale ($\alpha = .72$). We expected individuals who felt deprived of such information to have more positive attitudes toward unionization.

3. *Availability of Effective Influence Mechanisms.* Respondents were asked to indicate to what extent they felt that various possible routes to express needs, preferences, and concerns would "get results." The two types of influence routes measured were: (a) *formal mechanisms* (e.g., talking with supervisor); and (b) *informal mechanisms* (e.g., informal contacts with other employees) (Alpha coefficients ranged from .70 to .76). High scores on these scales indicated a greater subjective probability of getting results through existing organization processes, which was expected to correlate negatively with prounion attitudes.

4. *Hierarchical Position* has been found to relate strongly to perceptions of influence.¹² Three levels of employees were examined in this study: (a) clerical and technical workers; (b) professional librarians in nonsupervisory positions; and (c) professional librarians who are supervisors of branch libraries or divisions of the main library. We expected union attitudes to be less positive among those in supervisory positions.

Other Predictors. Because of the collective nature of the unionization process, we also expected that the attitudes of one's co-workers would influence individuals' attitudes toward unionization. For each

⁹ A similar method of measurement was used by Alutto and Belasco.

¹⁰ J. Pfeffer, *Organization Design* (Arlington Heights, Ill.: AHM Publishing Corp., 1978); M. Mulder and H. Wilke, "Participation and Power Equalization," *Organizational Behavior and Human Performance* 5 (1970), pp. 430-448.

¹¹ A. Pettigrew, *The Politics of Organization Decision Making* (London: Tavistock, 1973).

¹² For example, see Arnold S. Tannenbaum, *Control in Organizations* (New York: McGraw-Hill, 1968).

respondent, we computed the average score on the union attitude variable for all other members of the person's work group. (Each work group was composed of a supervisor and both professional and non-professional workers.) A positive relationship between a person's attitude toward unions and the attitudes of co-workers would indicate that daily interaction in the work situation may create a consensual perspective that does not depend solely on demographic or job classification similarities.

Two categories of *outcomes* of the employment exchange were measured using items from the Minnesota Satisfaction Questionnaire.¹³ *Economic* outcomes included satisfaction with benefits, compensation amount, and compensation equity. *Career and development* issues included satisfaction with ability utilization, advancement opportunities, performance appraisal and development opportunities. Past research suggests that the economic outcomes would have a strong relationship to union attitudes among the technical and clerical population. Career and development issues might be expected to be more salient to professional employees.

The *demographical variables* measured were age, education level, and length of service with the library system.

The *dependent variable* in this study, Union Attitude, is a scale composed of two items:

1. A union would be an effective means of influence in this system.
2. Employees in my job classification would benefit from a union.

These items were specifically designed to measure a person's belief in the potential efficacy of a union within the particular organization and the subjective expectation of benefit. Scores on these two items were highly intercorrelated for clerical and technical workers ($r = .91$) and professional employees ($r = .83$), and moderately intercorrelated for supervisors ($r = .63$).

The setting for this research was a nonunionized public library system in the Midwest. The library system was in the process of strengthening its professional orientation. As such, the staff of librarians was composed almost equally of a young group of highly educated librarians with MLS degrees and an older, more experienced group who did not have professional degrees.

¹³ D. J. Weiss, R. V. Davis, R. V. Lofquist, and G. W. England, *Instrumentation for the Theory of Work Adjustment*, Minnesota Studies on Vocational Rehabilitation 21 (Minneapolis: University of Minnesota, Industrial Relations Center, 1966).

To preserve anonymity of responses, the questionnaires were mailed directly to the researchers. The response rate was 70 percent.

Results

Table 1 presents the results of the analysis for the entire sample, and for the major occupational categories. For the sample as a whole, our findings for the outcome satisfaction measures and demographic characteristics are generally consistent with received theory: economic and career dissatisfactions are associated with pronoun views; older and more senior workers are generally more negative in their evaluation of the unionization option. But there is also support for our expectations that influence process, and group variables would be correlated with pro- and antiunion attitudes.

Employees' perceptions that they are well informed about organizational policies and decisions, and that they have some influence over decisions related to their jobs, departments, and the organization are associated with more negative attitudes toward collective action. Similarly, there is a small, but statistically significant, correlation between the union-related attitudes of individual employees and those of other members of their formal work groups. The association between perceived viability of existing organizational influence routes was less strong than expected. However, these results may be artifacts in that the mean values for these influences variables were quite low, suggesting that the correlations may have been distorted through restriction of range.

When the sample is disaggregated to the level of the major occupational groups, some interesting patterns emerge. For nonprofessionals, outcome satisfaction measures are, as expected, significant correlates of attitudes toward unions. But influence deprivation measures are also important, particularly at the level of system (organization) policy.

Professional employees were most favorably disposed toward unionization when they had insufficient information about the activities of the board and senior administrators, when they lacked influence in system-level decision-making, and when they were dissatisfied with the economic outcomes of employment.

Supervisors' attitudes toward unionization were generally unfavorable, but strongly related to outcome satisfaction measures, influence deprivation, and group attitudes. In contrast to the two other occupational groups examined, positive supervisory attitudes toward unions are more strongly related to a lack of influence over one's own department and job than over system-level policy; also, supervisors are most

TABLE 1

Zero-Order Correlation Coefficients Between Employee Attitudes Toward Unionization and Selected Variables, by Occupational Group

Variable/Group	Non-professional (n = 69)	Professional (n = 48)	Supervising Professional (n = 30)	Entire Sample (n = 182)
\bar{x} value, attitude toward unionization:	3.69	3.70	2.82	3.37
<i>Satisfaction with outcomes</i>				
Economic Outcomes	-.28*	-.29*	-.46**	-.33***
Career and Development Opportunities	-.37**	-.19	-.54**	-.31***
<i>Demographics</i>				
Age	-.54***	-.35**	-.05	-.25***
Education	-.10	.14	-.09	-.08
Tenure (length of service)	-.20*	-.37**	.05	-.25***
<i>Influence mechanisms</i>				
Amount of information	-.35**	-.32*	-.09	-.26***
Effectiveness of:				
Formal influence routes	-.11	-.05	-.50**	-.18**
Informal influence routes	-.13	-.02	-.05	-.06
Influence deprivation, regarding:				
Own job	.27*	.04	.59**	.21**
Branch department practices	.18*	.17	.52**	.20**
The library system	.41***	.37**	.32*	.32***
<i>Influence of the working group</i>	.36*	.22	.37*	.28**

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$.

likely to favor unionization if they perceive that established formal influence mechanisms in the organization have failed. For this group, demographic characteristics had no predictive power.

Discussion and Conclusions

There is little in our findings which directly contradicts the widely held beliefs that (1) dissatisfaction with the terms and conditions of employment is associated with prounion attitudes, that (2) workers' views toward unions are generally related to their age, length of service,

and position in the organizational hierarchy, and that (3) professional workers' views are also associated with their perceived ability to influence events in the employing organization. Our findings also support the hypotheses developed in this paper concerning the importance of communication and influence processes to *all* employees, and concerning the apparent influence that work group attitudes may have on individual employee opinions.

There were also ways in which our results were unexpected. Correlations with economic satisfaction variables derived here are generally smaller than those reported elsewhere.¹⁴ We might have expected that professionals' views concerning unionization would be more closely related to their perception of control and influence over their own jobs and departments and to satisfaction with career opportunities.

In a subsequent analysis not reported here for space reasons, we divided the professionals into two subgroups: those with and without the MLS degree. Those with the MLS were younger and more positively disposed to unions, and for that subgroup of librarians career dissatisfaction and decision-making variables emerged as stronger correlates of positive union statements than for the non-MLS librarians. Clerks and technical employees with education *in excess* of job requirements constituted another identifiable subgroup. The pattern of correlates of union attitudes for this group was strikingly similar to that of the MLS librarians. Career dissatisfaction was a particularly strong correlate of pronunion sentiment for such "over-educated" clerical and technical workers. These analyses provide evidence that broadly defined occupational groups may encompass distinct subpopulations which relate differently to the union issue.

All of the findings here must be interpreted cautiously. Sample size precluded the use of more sophisticated multivariate techniques which could otherwise be employed to draw inferences about the relative importance of the various correlates of pro- and antiunion views. And because the respondents were all members of the same employer organization, the generalizability of these results is limited. There is, however, evidence that the relationships reported in this paper are stable over time within this library system. Preliminary analysis of a second wave of data, collected one year later, replicates the basic pattern of correlations reported in Table 1. Thus, there is support here for the arguments that organization and situational variables do contribute to the formation of attitudes about unionization and that additional research of this kind is warranted.

¹⁴ Schriesheim.

DISCUSSION

CHARLES R. GREER

Oklahoma State University

The Daymont and D'Amico paper represents a careful examination of earnings functions which were constructed on the basis of micro data from the National Longitudinal Surveys (NLS). Although the NLS data sets are small in comparison to data sets such as the Census Public Use Samples, they have two advantages in this particular application. They allow the formulation and comparison of earnings functions from an expansionary period (1969) with those from a recessionary period (1976) and provide matched data for the control of several individual characteristics.

The most interesting features of the paper involve the intertemporal comparisons and the industrial organization variables (unionization, profitability, capital intensity, firm size, and market power). The theorized relationships, with only a few exceptions, are borne out in significant coefficients of the proper sign although the 1976 regressions have somewhat limited explanatory power. Several of the conclusions on the effects of human capital, region, and type of unionization are supportive of the NLS-based study by Kalachek and Raines of male wages in 1966 and 1969.¹ The paper makes a substantial contribution in its investigation of how the various industrial organization variables interact and act as moderators. An example is the exploration of how the earnings effect of market power is moderated by other industrial organization variables.

One of the more interesting results involves the coefficient for the extent of unionization variable. The authors interpret the smaller 1976 coefficient as evidence of a diminished union threat effect during economic downturns. With this interpretation, nonunion firms would see less need during downturns to emulate union wages in attempts to forestall unionization. There is, however, other evidence that there has been a long-term decline in the threat effect. The unionized proportion of

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[Editor's Note: The Daymont and D'Amico paper, "Industrial Organization, Economic Conditions and Earnings," will be published elsewhere.]

¹ Edward Kalachek and Fredric Raines, "The Structure of Wage Differences Among Mature Male Workers," *Journal of Human Resources* 11 (Fall 1976), pp. 484-501.

the labor force² and union success ratios in representation elections³ have been declining steadily for over 20 years. Thus, the diminished threat effect may be a long-term phenomenon rather than a cyclical one as the authors suggest.

One of the few results contrary to the authors' predictions involves the depreciation proxy for the degree of capital-intensity. The authors argued that the depreciation coefficient would be smaller in 1976 because firms in capital-intensive industries tend to respond to economic downturns by cutting labor costs—one of the few costs which they can reduce. Although the dependent variable is the log of hourly earnings, some weakening of the labor market in such labor-intensive industries during downturns was expected to affect hourly earnings. Contrary to their prediction, the coefficients were negative and significant in both 1969 and 1976 and the 1976 coefficient was not significantly smaller. Thus, in both years after other factors were controlled, more capital-intensity was associated with lower hourly earnings.

It is at this point in trying to account for such contrary results that the price of the tradeoff for the richness of the NLS data becomes more evident. Since the NLS data set is relatively small, the number of subjects from each industry is somewhat restricted. The importance of this limitation may be explained in the following argument. If we are to accept the authors' speculative interpretation of these contrary results, we must also agree that there are low levels of specific skills in capital-intensive industries⁴ and that therefore, earnings are consequentially lower. We must also agree that specific skills are not controlled by the skill variables. Since the skill variables (with the exception of experience) are essentially measures of general training, the latter seems quite reasonable. The major problem with such an interpretation is that it seems to rest to a certain extent on the existence of a linear relationship between specific skill level and capital-intensity. Bright has presented evidence of a complex relationship between increasing levels of skill (Y) and increasing mechanization (X) which seems to approximate, in a rough sense, a downward opening parabolic function.⁵ If the level of specific training is to some extent captured in this more general skill dimension, then the complex functional relationship poses analytical

² U.S. Department of Labor, Bureau of Labor Statistics. *Directory of National Unions and Employee Associations, 1977* (Washington: U.S. Government Printing Office, 1979).

³ Myron Roomkin and Hervey Juris, "Strategies and Problems in Union Organizing," *IRRA Proceedings* (1978), pp. 212–222.

⁴ Harry Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974).

⁵ James R. Bright, "Does Automation Raise Skill Requirements?" *Harvard Business Review* 36 (July-August 1958), pp. 85–98.

problems. Since according to such a function the highest specific skill levels would be found at intermediate levels of mechanization or capital-intensity, sampling becomes critical. If there is an underrepresentation of very capital-intensive industries, a positive relationship between capital-intensity and levels of specific training (and wages) would be found, while a negative relationship would be found if there is an underrepresentation of labor-intensive industries. Thus, the unexpected negative capital-intensity coefficients may only represent a spurious relationship.

The Maxey and Mohrman study of worker attitudes provides a substantial contribution to the knowledge base on union attitudes because of its unique variables and sound empirical results. The correlational analysis produces surprisingly strong results in spite of the generally low explanatory power of many union attitude models and the limited explanatory power that is typically obtained when each independent variable is treated individually. Approximately 65 percent of all the correlations were significant at the $p < .05$ level or better and 16 of the 36 disaggregated correlations individually explain greater than 10 percent of the variation in union attitudes. Furthermore, the instrument's internal reliabilities are generally impressive. Although the authors have not conducted a multivariate analysis of these data, it would seem desirable to control for interaction effects and to have an estimate of the overall model's explanatory power. Even though the disaggregated data sets are somewhat small, dummy variable controls for hierarchical position would allow analysis of the pooled data although multicollinearity may be encountered.

A strong feature of the paper is the differential analysis of responses on the basis of hierarchical position. An indication of the value of this approach may be obtained by examining some of the pooled correlations. An example is the pooled coefficient for formal influence effectiveness. Although the pooled coefficient is significant at the $p < .05$ level, it explains only 3 percent of the variation in such attitudes. The same variable, however, explains 25 percent of the variation in supervisors' attitudes but is not even significant for professionals and nonprofessionals. Likewise, demographic variables explain a substantial amount of variation in nonsupervisory employees' attitudes while little explanatory power for supervisors' attitudes is evident. Furthermore, the degree of influence deprivation is apparently of great importance in the formation of union attitudes for supervisors, but of somewhat less importance for nonsupervisory employees. Such results point out the potential for development of a theoretical framework for predicting such relationships between union attitudes and influence mechanisms.

DISCUSSION

DAVID W. STEVENS

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Both the Betson-Bishop and Butler-Sisti papers examine important contemporary public policy issues. Most of my comments address the latter paper simply because it offers more opportunity for future refinement and elaboration.

Betson-Bishop demonstrates the implausibility of the Kemp/Roth tax proposal sustaining tax revenues through increased labor supply induced by lower marginal tax rates on earned income. This conclusion is insensitive to the choice of labor supply estimates, so there is no need to quibble about the relative merits of the Keeley versus Robins and West estimates. This part of the analysis should receive high visibility, as an example of the contribution economics can make to deliberations about the relative merits of public policy issues.

Having said this, I am less enthusiastic about the three alternative proposals introduced by the authors. The tax exemption and deduction proposals would require a reliable procedure to record hours worked by each adult. I am unaware of feasible ways to do this. Administrative aspects of the wage rate subsidy proposal are also troubling. I am aware that the authors' purpose did not require them to examine these issues.

There are promising developments under way in the creation of simulation models and data to estimate the micro-relations specified in them. A major investment in refining the labor supply estimates that are produced through micro-simulation is now under way in conjunction with the evaluation of the Carter Administration's Employment Opportunity Program demonstration project.

Butler-Sisti offer estimates of the potential importance of employer incentives that have been overlooked in public consideration of unemployment insurance legislation. Future refinements of this analysis should provide the reader with a more comprehensive understanding of unemployment insurance legislative action and program administration. For example, experience rating practices are, in part, a function of unemployment patterns: Unusually high or prolonged unemployment

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in covered sectors creates pressure on the trust fund from which unemployment insurance benefits are paid. This, in turn, puts pressure on the Congress and individual state legislatures to increase the tax rate on covered earnings. This means that the specification of an appropriate lag structure in the relation between insured unemployment and experience rating practices is very important.

There are many questions to be answered about the uniqueness of the data that were chosen for the analysis reported in this paper. Aggregation at the industry level masks much of the really interesting variance among firms in their sensitivity to market conditions, which is exhibited in the simultaneous occurrence of layoffs by some firms and new hiring by other firms in the same industry. The time-series interval 1942–67 includes periods during which any notion of normalcy in employer personnel practices must be inapplicable. The proper interpretation of the percentage of firms that have not been individually experience rated requires much more information than is given in this paper. South Carolina experienced rapid industrial growth during the latter half of the period covered. How is this reflected in the variable PERNR? The presence of female employees in an industry should be modified to reflect only their representation among layoffs, not employment per se. Defining the unemployment rate as the number of weeks of insured unemployment divided by the number of covered employees times 50 ignores the relevance of uneven incidence of benefit exhaustion across industries, and perhaps even unevenness in nonfiling among the covered sectors.

The policy relevance of the estimates reported is questionable for the reasons noted, but the importance of repeating a similar line of inquiry should be obvious. I concur with the authors that intra-state data are most appropriate for analysis of this type, but individual firm data will offer more reliable estimates for policy guidance than the industry aggregates used here. Also, it is not obvious to me that the range over which experience ratings have traced during the observation period permit us to say much about the behavioral consequences that would follow more dramatic changes in the rate structure. The absolute rate is so low, the range so narrow, and the earnings base so slow to adjust in these inflationary times, that the overall cost implications of different layoff practices have been quite small historically.

XIV. IRRA ANNUAL REPORT

IRRA EXECUTIVE BOARD SPRING MEETING

April 16, 1980, Philadelphia

President Barbash called the meeting to order at 8:20 p.m. In attendance were officers Jack Barbash, President; Rudy Oswald, President-Elect; David Zimmerman, Secretary-Treasurer; Barbara Dennis, Editor; and Board Members Gladys Gershenfeld, Gladys Gruenberg, Robert D. Helsby, Thomas A. Kochan, Hervey A. Juris, Raymond W. MacDonald, Bernard L. Samoff, and Donald H. Wollett. Others present were Milton Derber, Richard Humphries, Jack Stieber, John C. Shearer, Ed Pereles, Michael Borus, and Kitty Barbash. Office staff present were Betty Gulesserian, Executive Assistant, and Marion Leifer, Staff Assistant.

Secretary-Treasurer David Zimmerman presented the financial and membership report. IRRA has had consecutive expensive publication years because of the *Directory* and the Collective Bargaining volume. The dues increase approved at the last Executive Board meeting is needed to cover an expected deficit resulting from these publications and the general inflationary trends in Association costs. IRRA also has been requested by the auditor to fund a small surplus (approximately \$12,000) to cover previous life memberships.

The membership of the Association has held steady at about 4,800. There has been no major promotion of new members in the last year because of staff involvement in the *Directory* and other publications, including the transfer of the *Newsletter* to Ohio State University. Promotion efforts have been concentrated on persons who are members of local chapters but are not members of the National Association. A promotion brochure has been sent to the members of local chapters, urging them to join the National Association and providing a special offer in which they receive both the *Directory* and the Collective Bargaining volume. The basic format of the promotion brochure, which was designed by a publication consultant, can be used for promotion

efforts in future years. It was suggested that local chapters be rewarded for getting new members for the National Association, and this suggestion was put on the agenda for the chapter luncheon meeting in Philadelphia.

The slate of candidates for the 1980 Executive Board election was reported, as follows: Alexis M. Herman and Kenneth E. Moffett; Robert C. Garnier and James Harry Jordan; Walter D. Froh and Richard M. Prosten; Edward B. Krinsky and Herbert L. Marks, Jr.; and James J. Scoville and Mark E. Thomson.

President Barbash presented the following Nominating Committee recommendations for Executive Board approval: Morris Weisz, Chairman, Anthony Alfino, Sanford Cohen, James Crawford, Audrey Freedman, Harish Jain, Bert Seidman, and George Seltzer. It was pointed out that the by-laws provide for only seven persons to serve on the Nominating Committee, and it was moved, seconded, and passed that one name be removed, with the suggestion that the person removed be considered for the Nominating Committee for the following year. Several Board members suggested that a practitioner be on the Nominating Committee, and that the IRRA should try to involve a management person in the nominating process.

With respect to the Editor's report, Jack Steiber reported that the 1981 research volume entitled *U.S. Industrial Relations 1950-1980: A Critical Assessment* was progressing and that a final list of chapter authors was nearly complete. He noted that Lloyd Ulman was unable to be an editor because of other commitments and that he had been replaced by D.J.B. Mitchell. Tom Kochan, editor of the 1982 research volume devoted to a review of industrial relations research in the 1970s, provided a tentative list of authors for the volume. He reported that an outline of each chapter will be given to the volume editors by July 1.

Editor Barbara Dennis read suggestions from the Atlanta meeting for the 1983 volume. She has presented a compilation of previous IRRA research volumes. It was suggested that the Board vote for three or four issues as possible candidates, and that the president present names of appropriate editors for these topics at the September meeting. The four topics selected for further considerations were (1) work ethic and comparative industrial relations, (2) competition for jobs in the face of technological change, (3) collective bargaining and higher education, and (4) productivity and the new and changing nature of job content.

Ms. Dennis also reported that with no promotional efforts the IRRA had sold over 300 copies of the *Collective Bargaining* volume. Several promotional efforts were discussed, including the insertion of ads in

industrial relations journals and newspapers, such as the Wall Street Journal and New York Times. It was also suggested that we compile a list of special interest groups that might be interested in the volume, and Barbara Morton of Inland Steel was suggested as a possible source for this material. Several reviews of the book are forthcoming in IR and other journals. The Board recommended that further consideration be given to placing ads in the major industrial relations journals, and Editor Dennis will obtain price quotations from them.

There were no applications for affiliation of new local chapters presented.

With respect to the next Annual Meeting in Denver September 5 through 7, 1980, President Barbash reported on the changes in the program that had to be made because of the unavailability of session chairpersons or convenors, as well as other reasons. He reported that he had tried to follow through on the many suggestions given to him for session content. President-Elect Oswald suggested that we need more practitioners in the programs and urged the Association to take steps to insure that this be done. It was also suggested that the Association do more to appeal to "the legal side" of our constituency. Secretary-Treasurer Zimmerman noted that the Program Committee should make suggestions as to the general type of program and program format as well as selecting specific topics for the next upcoming meeting. Board member Helsby suggested that the topic of program content at the Annual and Spring Meetings be discussed further at the Denver Executive Board meeting.

A proposal was received from Richard Block for the inclusion at Annual Meetings of nonpublished sessions, that is, sessions in which the papers would not be published in the proceedings. After considerable discussion of the merits of this suggestion, Tom Kochan moved that it be referred to the Program Committee and that they pursue it as a possible variant on the workshop concept. The motion was seconded and passed.

The Plaza Cosmopolitan has been selected as the hotel for the IRRA at the Denver meetings. Members were urged to send in their reservations early, since the *Newsletter* will not go out until after other ASSA members have received their preregistration material, and rooms are reportedly scarce in Denver. No definite date has been established for the 1981 spring meetings. A meeting will be held shortly to finalize the date and develop a preliminary set of session topics. The West Virginia IRRA chapter distributed a survey to Board members on suggested topic areas for the program. Members were asked to send pro-

gram ideas directly to Richard Humphries, who is coordinating the arrangements for the spring meetings.

President Barbash noted that a replacement for the current IRRA legal counsel had to be made, since Frederick Livingston is resigning from that post. Board members were instructed to provide names to President Barbash and a decision would be made at the Denver meeting. It was suggested that the Association explore possibilities from representatives of organizations who have members who belong to the IRRA, such as the AMA, teachers and nurses organizations, etc., to see if they have any ideas. President Barbash and Secretary-Treasurer Zimmerman will coordinate the effort to recommend a new legal counsel.

John Shearer presented the program outline for a seminar on the teaching of industrial relations, to be held May 7 at the Oklahoma State University in Stillwater. Forty persons from eight states were asked for comments on program content. The emphasis will be on exploring mutual experience with colleagues, rather than formal presentations. No papers will be presented, and a report on research in progress will be part of the program. This seminar is a result of a suggestion made by President Barbash at the Atlanta meetings for a revival of the teaching seminars that used to be part of the IRRA activities.

President Barbash adjourned the meeting at 11:25 p.m.

IRRA EXECUTIVE BOARD ANNUAL MEETING

September 5, 1980, Denver

The meeting was called to order by President Jack Barbash at 7:30 p.m. In attendance were President Barbash, President-elect Rudy Oswald, future President-elect Milton Derber, Secretary/Treasurer David Zimmerman, Editor Barbara Dennis, Newsletter Co-editors Michael Borus and Kezia Sproat, and Board members Jean Boivin, Gladys Gershenfeld, Gladys Gruenberg, Donald Hoffman, James E. Jones, Jr., Hervey Juris, Thomas Kochan, Raymond MacDonald, and Bernard Samoff. Also present were newly elected Board members Edward Krinsky, Kenneth Moffett, and Richard Prosten, Executive Assistant Elizabeth Gulesserian, Friedrich Fürstenberg, the President-elect of the International Industrial Relations Association, Jack Stieber, editor of the 1981 IRRA research volume, Walter Brauer, Denver local arrangements chairman, and Kate Barbash.

Secretary/Treasurer Zimmerman gave the membership and financial reports. He noted that membership had held steady from the previous year, which was expected because of only a modest promotion effort

due to the pressing demands of major publications (the Directory and the Collective Bargaining volume) in the two previous years. A larger promotion effort is slated for the coming year. Zimmerman also noted that the financial situation of the Association remained good, even though it had financed two expensive publications in two years. However, his belief was that increasing publication costs and across-the-board inflationary trends would adversely affect the Association's finances in coming years. A surcharge on publications was suggested, but the Board took no action. After considerable discussion, the Board passed a resolution to increase regular membership dues from \$30 to \$33 in 1982 and instructed the Secretary/Treasurer to change the ratio of other membership categories to regular membership dues to more closely reflect the ratios that existed in previous years. This will mean an increase in other types of memberships, such as student, contributing, foreign, and family memberships. The financial situation of the Association will be reviewed again at the spring Executive Board meeting.

Mr. Zimmerman also presented the results of the most recent IRRA election. Milton Derber was elected President-elect of the Association, and the following five members have been elected to the Executive Board for three-year terms: James H. Jordan, Vice President, Imperial Chemical Industries, Ltd.; Edward B. Krinsky, Associate Director of Employment Relations Studies, Wisconsin Center for Public Policy; Kenneth E. Moffett, Deputy Director, Federal Mediation and Conciliation Service; Richard M. Prosten, Director of Research, Industrial Union Department, AFL-CIO; and Mark E. Thompson, University of British Columbia.

Friedrich Fürstenberg of the University of Linz, Austria, and President-elect of the International Industrial Relations Association, was introduced by President Barbash. Professor Fürstenberg reported briefly on the 5th World Congress held in Paris in September 1979 and the upcoming 6th World Congress to be held in Tokyo in 1982. He also expressed the need for solidarity and support for colleagues in industrial relations in all countries of the world.

The Board passed a resolution providing the Secretary/Treasurer and the Editor with honoraria of \$3300 and \$2800, respectively.

The Board also approved requests for affiliation with the National Association for three local chapters: Inland Empire (Spokane/Cheney), British Columbia (Vancouver) and Central Florida (Clearwater/Tampa).

Editor Barbara Dennis gave the Editor's report for the Association. First, Jack Stieber reported on the 1981 annual research volume, which

will be entitled *U.S. Industrial Relations 1950–1980: A Critical Assessment*. The co-editors of the volume will be Jack Stieber, Robert McKersie, and D. Quinn Mills. Copy should be ready for the printer by May 1. Tom Kochan reported that the 1982 research volume will be entitled *Industrial Relations Research in the 1970s: Review and Assessment*; the co-editors will be Tom Kochan, Lee Dyer, and Daniel J. B. Mitchell. Jack Barbash proposed that the topic for the 1983 volume be “The Work Ethic—An Analysis.” It was suggested that the basic theme and definition of work ethic be provided to the authors of the individual chapters to ensure consistency in the treatment of the concept of work ethic. However, other Board members felt that this may be too inhibiting. After further discussion the Board approved the proposal, and President Barbash will put together an editorial panel for the volume. The following other topics were suggested for future research volumes: The Graying of America, New Labor History, Unions and the Individual Worker, Immigrant Labor, Comparative Industrial Relations, and Productivity and the Nature of Jobs. Editor Dennis was also authorized to spend up to \$1000 to promote *Collective Bargaining: Contemporary American Experience*, recently published by the Association.

The Nominating Committee presented its slate of candidates for President-elect and for the five positions on the Executive Board to be filled next year. The Board unanimously approved all of the nominees and thanked Chairman Morris Weisz and the committee for its efforts.

Co-editor Mike Borus reported on the IRRA newsletter. He sought the Board’s guidance on whether or not to run advertisements from other associations in the IRRA newsletter. After extensive discussion of the matter, the Board passed a motion to reject reciprocal advertisements for other organizations in the IRRA newsletter. The Board also voted not to accept for the newsletter meeting notices for other organizations except those that relate directly to the activities of the IRRA.

The 1981 IRRA Spring Meeting will be held April 30 through May 1 in Huntington, West Virginia. Only general information on the program was available, and the Board asked that President-elect Oswald work with the West Virginia chapter to improve the planned program for the meeting.

Invitations to host the 1982 Spring Meeting were received from the following chapters: Hawaii, Southern Nevada (Las Vegas), Wisconsin, Detroit, Northeast Ohio (Cleveland), and Western New York (Buffalo). The Board selected the Wisconsin chapter as the host for the 1982 Spring Meeting, which will be held in Milwaukee.

President-elect Oswald briefly outlined the plans for the 1981 Annual Meeting to be held in December in Washington, D.C. The recommenda-

tions of the IRRA Program Committee for topics for invited sessions, contributed paper sessions, and workshops were presented to the Board. Two additional topics—"Federal Collective Bargaining" and "Deregulation and the Teamsters"—were proposed by Executive Board members as session topics.

The Board approved a resolution naming George H. Cohen and Michael Gottesman of the Washington law firm of Bredhoff, Gottesman, Cohen, and Weinberg as co-legal counsels for the Association. Cohen and Gottesman will replace Fred Livingston, who is retiring as IRRA legal counsel.

Tom Kochan noted several efforts that were being undertaken by the U.S. Department of Labor in the area of industrial relations research. He asked whether the Executive Board would provide a supporting statement for these research efforts and also whether or not the IRRA would recommend persons for membership on the Advisory Board to the Secretary of Labor. Several members expressed the opinion that it was not appropriate for the Board to take a formal stand on such issues in the name of Association members. They suggested that individual lobbying efforts would be more appropriate. No formal action was taken on these issues.

The meeting was adjourned at 11:15 p.m.

IRRA GENERAL MEMBERSHIP MEETING

September 6, 1980, Denver

Incoming President Rudy Oswald opened the meeting at 4:30 p.m. Secretary/Treasurer David Zimmerman presented a report on the membership and finances of the Association. He noted that membership had remained steady at approximately 4600 members over the past year. He pointed out that the national Association staff activities were concentrated on the publication of two major volumes (the *Membership Directory* and *Collective Bargaining: Contemporary American Experience*), and only limited promotion efforts were undertaken. Expanded promotion activities are planned for the coming year.

Mr. Zimmerman also noted that the financial condition of the Association was reasonably good, given the fact that it had incurred the costs of the two aforementioned major publications in consecutive years. However, general inflationary pressures—particularly those relating to escalating publication costs—were likely to lead to financial difficulties for the Association in the coming years. In order to protect the Association from these pressures, the Executive Board at its most recent meeting approved a resolution to increase the dues of regular members from

\$30 to \$33 a year, and to provide for increases in other membership fees as well. The Executive Board has the authority to increase member dues without a referendum by an amount up to the rate of inflation.

IRRA Editor Barbara Dennis presented a report on future Association publications. She stated that the 1981 research volume, which has been coordinated by Jack Stieber, will be entitled *U.S. Industrial Relations, 1950-1980: A Critical Assessment*, and will be edited by Stieber, Robert McKersie, and D. Quinn Mills. The 1982 research volume, which is being coordinated by Thomas Kochan, will focus on industrial relations research in the 1970s. The Executive Board at its recent meeting also approved a resolution by outgoing President Jack Barbash that the 1983 research volume will deal with "the work ethic." Professor Barbash was instructed to begin work on securing authors and chapter titles for the volume. Ms. Dennis also reported that the sales on the 1980 Collective Bargaining volume had been going very well and that additional promotional efforts on the volume had been approved by the Executive Board.

President Oswald reminded the members that the 1981 Spring Meeting would be held in Huntington, West Virginia, on April 29-May 1 at the Downtown Holiday Inn. He urged members to attend the Spring Meeting, which is being hosted by the West Virginia chapter, with assistance from the Tennessee and Greater Cincinnati chapters. President Oswald also noted that preliminary planning on the program for the 1981 Annual Meeting in Washington, D. C., in December had been completed by the IRRA Program Committee.

President Oswald also announced that George Cohen and Michael Gottesman, of the Washington, D. C., law firm of Bredhoff, Gottesman, Cohen and Weinberg, had been appointed co-legal counsels to the Association by the Executive Board at its most recent meeting. The new co-legal counsels replace Fred Livingston, who has resigned as IRRA legal counsel.

Several members expressed interest in the contributed papers sessions that are part of the Annual Meeting program. One member noted that the reviewers of the contributed papers should have wide discretion to accept or reject papers in order to upgrade the quality of the contributed papers sessions. Another member indicated that it was important to have a balance between contributed papers sessions and workshops in order to maximize interest in the Annual Meetings. President Oswald and Secretary/Treasurer Zimmerman briefly outlined the procedure followed by the Program Committee in planning the Annual Meetings and urged members to have input into the planning process.

President Oswald adjourned the meeting at 5:00 p.m.

IRRA AUDIT REPORT

We have examined the statement of cash and investments of the Industrial Relations Research Association as of June 30, 1980 and 1979 and the related statement of cash receipts and disbursements for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As described in Note 1, the Association's policy is to prepare its financial statements on the basis of cash receipts and disbursements; consequently, certain revenue and the related assets are recognized when received rather than when earned and certain expenses are recognized when paid rather than when the obligation is incurred. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly the cash and investments of the Industrial Relations Research Association as of June 30, 1980 and 1979 and the cash transactions for the years then ended, on the basis of accounting described in Note 1, which basis has been applied on a consistent basis with that of the preceding year.

SMITH & GESTELAND, Certified Public Accountants

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION
Madison, Wisconsin
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
For the Year Ended June 30, 1980 and 1979

	1980			1979
	Unrestricted	Restricted	Total	Total
Cash and investments—July 1	\$ 37,835.40	\$	\$ 37,835.40	\$ 36,477.26
Cash Receipts				
Membership dues	\$ 74,300.94		\$ 74,300.94	\$ 74,424.80
Subscriptions	11,288.50		11,288.50	10,569.00
Chapter dues	3,046.25		3,046.25	3,846.25
Sales	12,479.46		12,479.46	6,749.42
Mailing list	3,796.14		3,796.14	4,489.51
Travel, conferences and meetings	9,117.64		9,117.64	7,067.02
Royalties	1,233.25		1,233.25	1,149.01
Interest income	1,950.86		1,950.86	2,172.61
Miscellaneous	58.00		58.00	16.00
Grant income		20,186.00	20,186.00	
Total cash receipts	\$117,271.04	\$ 20,186.00	\$137,457.04	\$110,483.62
Cash Disbursements				
Salaries and payroll taxes	\$ 34,860.26	\$	\$ 34,860.26	\$ 33,041.43
Retirement plan	3,824.08		3,824.08	3,100.08
Honorarium	5,500.00		5,500.00	4,000.00
Postage	6,671.68		6,671.68	6,545.00
Services and supplies	6,807.15		6,807.15	14,917.87
Publications and printing	55,958.01	15,000.00	70,958.01	39,244.78
I.R.R.A. conferences and meetings	5,890.91	4,067.00	9,957.91	6,271.01
Telephone and telegraph	724.67		724.67	917.70
Audit	775.00		775.00	750.00
Miscellaneous	404.97		404.97	337.61
Nonrelated business income tax	111.59		111.59	
Total cash disbursements	\$121,528.32	\$ 19,067.00	\$140,595.32	\$109,125.48
Excess (deficit) of receipts over disbursements	\$ (4,257.28)	\$ 1,119.00	\$ (3,138.28)	\$ 1,358.14
Cash and investments—June 30	\$ 33,578.12	\$ 1,119.00	\$ 34,697.12	\$ 37,835.40

Secretary-Treasurers' Note: Below is an analysis of estimated receipts and disbursements for the final 6 months of 1980 calendar year operations. This analysis illustrates how 1980 member dues are to be utilized in fulfilling IRRA's obligations to its members for the remainder of 1980. In addition, an estimated reserve for funding Life Members has been included.

Total Cash and Investments July 1, 1980		\$34,697
Estimated Cash Receipts July 1 to December 31, 1980	\$80,400	
Less 1981 Dues Paid in Advance	[54,200]	26,200
		60,897
Estimated Cash Disbursements July 1 to December 31, 1980		
Publication Costs	29,500	
Wages and Others	28,600	
	58,100	
Less Expenses Paid Related to 1981	[11,440]	46,660
		14,237
Less Estimated Reserve for Funding Life Members		12,000
Estimated Cash and Investments at December 31, 1980 Related to 1980 Calendar Year Operations		\$ 2,237

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION
Madison, Wisconsin

STATEMENT OF CASH AND INVESTMENTS
June 30, 1980 and 1979

	1980	1979
CASH AND INVESTMENTS		
Checking account—First Wisconsin National Bank of Madison	\$	\$ 3,987.96
Golden Passbook—90 day—First Wisconsin National Bank of Madison		10,407.66
Golden Passbook—1 yr.—First Wisconsin National Bank of Madison		86.34
Golden Passbook—2-½ yr.—First Wisconsin National Bank of Madison		23,353.44
Checking account—Randall State Bank	11,989.19	
Savings—Randall State Bank	6,827.82	
Certificate of Deposit—182 day—Randall State Bank	15,880.11	
Total Cash and Investments	\$34,697.12	\$37,835.40
Restricted Cash and Investments	\$ 1,119.00	\$
Unrestricted Cash and Investments	33,578.12	37,835.40
Total Cash and Investments	\$34,697.12	\$37,835.40

NOTES TO FINANCIAL STATEMENTS, June 30, 1980 and 1979

NOTE 1—ACCOUNTING POLICIES

Financial statements are prepared on the basis of cash receipts and disbursements. Revenue is recognized when received and expenses are recognized when paid.

NOTE 2—LINE OF BUSINESS

The association is a non profit association. Its purpose is to provide publications and services to its members in the professional field of industrial relations.

NOTE 3—RETIREMENT PLAN

The association has a retirement annuity contract covering the executive assistant. The amount of funding in 1980 and 1979 was \$3,824 and \$3,100 respectively. These amounts are treated as additional compensation to the executive assistant.

NOTE 4—TAX EXEMPT ORGANIZATION

The association is exempt from income tax under Section 501 (c)(3) of the Internal Revenue Code. However, net income from the sale of membership mailing lists is unrelated business income and is taxable as such.

NOTE 5 RESTRICTED GRANT FUNDS

Three grants were received during the year, all of which included restrictions on the use of grant funds. A \$5,000 grant from the Ford Foundation and a \$10,000 grant received from the U. S. Department of Labor were restricted to use in defraying publication costs of the book, "Collective Bargaining: Contemporary American Experience."

A grant from the National Science Foundation for \$5,186 was restricted to use for travel expenses of association members to an annual conference. The \$1,119 restricted cash balance at June 30, 1980 represents unexpended funds from this grant.

NOTE 6—COMMITMENTS

On June 30, 1980 \$28,129 was due to Pantagraph Printing for publication of the proceedings of the 32nd annual meeting. This expenditure is not reflected in the financial statements for the year then ended. This booklet is one of the publications members are entitled to in exchange for payment of their membership dues. It is intended that part of these costs will be covered by membership dues received in the upcoming fiscal year.

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