INDUSTRIAL RELATIONS RESEARCH ASSOCIATION SERIES

Proceedings of the Thirtieth Annual Winter Meeting

DECEMBER 28-30, 1977 NEW YORK CITY

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Edited by Barbara D. Dennis

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PREFACE

Secretary of Labor Ray Marshall, in his Presidential Address at the IRRA's 30th Annual Winter Meeting in New York City, noted that one of the Association's assets is that "our discipline is not narrow." Thus, the program planned by the Secretary and his colleagues reflected the broad interests of the members, with two sessions on international topics, one on bargaining theory, another on proposed changes in the National Labor Relations Act, as well as sessions on older workers, rural labor markets, occupational choice, public-sector bargaining, and wage differentials.

An innovation at the 1977 meeting was the Dissertation Round Table, where five young members presented abstracts of their dissertation research. Another feature was a session on labor history, organized as a memorial for the late Philip Taft, prominent labor historian and former IRRA president. And the number of Contributed Papers sessions was increased to three this year, allowing presentation of 10 papers by young scholars on the general topics of manpower, organizational behavior, or collective bargaining.

The two informal workshops (unpublished), "Next Steps in Equal Employment" and "Collective Bargaining in the Public Sector During Fiscal Crisis," were arranged in cooperation with local IRRA chapters.

In his Presidential Address, Secretary Marshall described the relationship of the Administration's employment policy to overall economic policy.

The Association is grateful to Secretary Marshall and his assistants for arranging the program, to Patrick Westerkamp and his committee for handling local arrangements, to the authors and discussants for preparing manuscripts for publication, and to Elizabeth Gulesserian, Joan Krikelas, and Marjorie Lamb for their generous assistance during all phases of developing and carrying out the program and publication of the Proceedings.

BARBARA D. DENNIS *Editor*

You are invited to be a member of

THE INDUSTRIAL RELATIONS RESEARCH ASSOCIATION

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

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

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

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Charles C sworth

IRRA President 1978

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Selective Employment Policies to Achieve Full Employment

RAY MARSHALL Secretary of Labor

The IRRA is one of my favorite organizations. It is the only organization I was previously associated with that I didn't resign from when I became Secretary of Labor. I agreed that, if the board of directors permitted, I would serve out my term as president. I was delighted to do that, and I have had a lot of good help from people who had to pick up the slack that I was forced to leave as a result of my new work.

I have a strong commitment to the IRRA for a number of reasons. I think it's a remarkable organization in terms of subject matter. Those of you who know the Department of Labor know that the concerns we have in the Department—to protect and promote the interests of American workers—almost coincide with the concerns of the IRRA. I also think that one of the most valuable aspects of this organization is the fact that it brings together people from diverse academic disciplines and the practitioners and government officials to consider the problems of industrial relations, as we have come to define that term broadly.

I value the fact that our discipline is not narrow and our approach to industrial relations problems is not narrowly circumscribed. I think we have an appropriate methodology for dealing with industrial relations that makes it possible for us to handle our problems effectively. At the same time, we have not become preoccupied with methodology. I used to say to some of my friends who were preoccupied with methodology that I like to eat, but I'd never fall in love with a knife and fork. What we need to know is what use we can make of these tools. I think the Industrial Relations Research Association is the best example I know of an organization that has brought these diverse disciplines to bear on

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some extremely important problems, and it is this interaction that we have with the practitioners that has made it possible for the researchers to know what was worth researching. That's an extremely valuable asset that we have.

I also think that my participation in the IRRA helped me greatly in the transition from the classroom to the government. I must say that it took me some time to get used to that transition. Many times it occurred to me that I was still lecturing, but people were no longer taking notes and nobody came up to ask me if it was going to be on the final. Once you adapt to that, there's another great transition you have to make. That is, when you're lecturing, your students are the President, the Congress, and the general public. You don't grade them; they grade you. That's a real transition you have to make in terms of the concern you have to have about what you're saying.

You probably also think that I still have another problem that carries over from the classroom, and that is that I am programmed to talk in 50-minute segments. I assure you I won't talk that long, even though I'll have to confess the temptation is always great because you do indeed become programmed for 50 minutes.

What I would like to do in this Presidential Address is to outline some of my current thinking with respect to employment policy. I do that not because I think I have any great insight into it, but because I'd like to solicit your help with it. I think the most important problem we face is trying to get full employment without inflation. I believe we can do it. It's going to require a lot of hard work, and we're going to have to know more about a lot of things than we now know. That's where I think we can use the talents of certain practitioners in the Industrial Relations Research Association.

I am asking for your help. And here I feel a little like one of my favorite governors, Earl Long of Louisiana, who used to always prevail upon members of the legislature to help him get some bill passed. Earl would not let people see much daylight. He'd bring all the pressure he could to try to get their help. One of my students at LSU was a member of the legislature. After Long put him through the pressure treatment, he finally said to the governor, "Now, Governor, when you're right, I'm with you. But this time I can't support you." And the governor looked at him and said, "Hell, man, when I'm right, I don't need you."

In my case, I believe I am right and we do need you—to help us build consensus and support for selective employment programs as a part of economic policy. By way of introduction, I think it's fair to say that a major commitment of the Carter Administration has been to make selective employment policies an integral part of overall economic policy. I won't outline all the programs, but if you look at the commitment we have already made to provide jobs and training programs for about 3 million people by 1981, you will see that we are already involved in one of the greatest buildups in public-service employment since the Great Depression of the thirties. We have made a really substantial commitment, but we still have a long way to go in order to accomplish it.

We are also committed to the Humphrey-Hawkins bill, which establishes an unemployment target of 4 percent by 1983. There are a lot of people who believe we cannot make that target, but I believe we can. In fact, I think we can demonstrate the possibility of achieving that objective. From the history of the IRRA's preoccupation with this question, you know well what the main rationale for the selective employment program is, but let me recall it for you very quickly. The basic concern is: How do you deal with the structural problems in the economy, and how do you pinpoint and target programs rather than approach them from a general or macroeconomic point of view?

I think we can demonstrate that targeting through the selective employment program is a very efficient way to bring unemployment down. I also believe it's a very efficient way to deal with the problem of inflation. Just as we have a structural aspect of unemployment, we also have a structural aspect of inflation. In my judgment, we will never deal with the inflation problem through general or macroeconomic policies alone any more than we can ever deal with unemployment problems through general or macroeconomic policies alone.

These selective programs that we are trying to develop are not intended to displace or replace the general policies, but to supplement them. It's important to stress that because different approaches to the problems of inflation and unemployment have advantages and disadvantages. They go together rather than competing with each other—unless you take the view that you can solve the problems with one of these approaches alone.

There are several components of a selective employment policy. The main characteristic is that it deals primarily with the supply side of the employment equation. The exception, of course, is public-service employment. Supply-side considerations are extremely important and are often neglected. If you look at the present unemployment problem in the United States, it is clear that a very significant part of it is not the fact that the economy is static, that the number of jobs is not growing. We have had unprecedented growth of almost 4 million jobs in just a year, and more than 10 million jobs since 1970.

Our problems have come on the supply side, as the workforce is rapidly increasing. Some part of that increase in the workforce is due to increases in labor force participation. Another part is due to immigration, an aspect of the supply side that we frequently neglect. What we are trying to do now, as far as policy is concerned, is to protect some of these supply-side mechanisms. Let me just quickly list some of those before talking about the main problems involved.

One area of unfinished business is to improve the operation of labor market information systems. Several countries in the world are far ahead of us in this area. We have a long way to go, but we are in the process of trying to make improvements, and I believe they will have a high payoff.

Another component of this selective policy that we need to give more attention to is training. I have just come back from an OECD conference on youth unemployment, and two things struck me as we talked with labor ministers of other countries. The first was how much better our economy is doing than those of most other countries. In fact, their economies tend to be relatively stagnant at a time when ours is showing fairly significant growth in terms of job-creation. The other thing that struck me was the much greater emphasis in those countries on training.

A third category that needs attention is what we call improving labor market mechanisms. There are many examples, and we need to learn as much as we can about them. One is the outreach concept, one of the greatest social innovations of the 1960s—the idea that you don't simply make programs available or announce changes, but that you actually go out and try to recruit people to take advantage of the programs when they are official. I think the outreach program has done a tremendous job, particularly in the antidiscrimination area.

Another example of where we can improve labor market mechanisms is in the antidiscrimination programs. We are not likely to be able to achieve full employment without perfecting those programs. It doesn't do us any good to train people if they are unable to get jobs.

Yet another extremely important labor market mechanism that we are very familiar with is collective bargaining and dispute-settlement procedures. What we need to do is to review that process and integrate collective bargaining with selective employment programs more than we have done in the past. One of the most effective ways to deal with the problem of inflation is by perfecting collective bargaining mechanisms and improving productivity, and I think the mechanism that we have used in collective bargaining can do a lot to improve operations of the labor market.

Another selective employment policy that I have already mentioned, but will stress, is that we need to do more to integrate immigration policy with employment policy. This step, I think, is extremely important, in part because I believe that right now we have more undocumented workers in the country than we have unemployed workers. We don't know how many we have—probably 8 to 12 million—with the number growing at a rate probably between half a million and a million a year at least. If that is the case, then obviously we not only have problems on the supply side, but we also are facing a serious civil rights problem down the road, because what we are building in our communities is a large group of people who live outside the protection of our laws, who are easily exploited, and who, therefore, will form an underclass that will cause us great trouble in the future.

It seems to me that what we have to do is to let enough people into the country to meet our labor market requirements, but to be sure that we develop processes to see first if we can recruit people who are already here. That's another area where we are planning to use the outreach concept—to go out and see if we can find people already in this country who can do the work. We have already demonstrated that we can do it in a few cases, and we are trying to perfect the system.

We also need to do more, and we are trying to do more, to coordinate our selective employment policies with other policies. No policy can be considered in isolation; we have to take a comprehensive approach. The relationship with macroeconomic policy is fairly clear. What is not so clear is how selective employment policies can be coordinated with regional, sectional, urban, and rural development, and it is in these areas where we have a lot to do.

Consider, for example, black youth unemployment. The major problem here is that blacks do not live where the number of jobs is increasing. In the South, this may be a rural problem. In the North, it may be an urban problem. Unless we coordinate our programs in such a way as either to develop the jobs where the people are or to make it possible for people to gain access to the jobs, then the general growth in the economy will not begin to deal with the structural problem. Therefore, we need to give high priority to coordination.

One point that needs to be emphasized is that the Humphrey-Hawkins bill proposed by the Administration is designed to facilitate that coordination. There has been a lot of misunderstanding about Humphrey-Hawkins, partly because it has gone through so many versions. I believe the current one is the fourth version and I think it's the best because what we tried to do was to be sure that the mechanisms outlined there were workable.

It has caused a lot of adverse comment, partly because people don't understand what is proposed in the bill. What it does is to create a *process* for reducing unemployment to 4 percent. It is not authorizing legislation and was not designed to be authorizing legislation. What it does, and I think the most significant thing that it does, is to require the coordination of the principal governmental actors in the economic policy process in order to develop policies to reduce unemployment and to combat inflation.

The principal actors are the President, the Congress, and the Federal Reserve Board. A very significant aspect of what we propose is that the Federal Reserve Board be incorporated and coordinated with the rest of the process. The independence of the Federal Reserve Board should be preserved, but the Board is not and should not be autonomous. You cannot make effective economic policy if it is, and you cannot have an institution that is completely beyond the control of the political process. That's a tricky business, but it's very important, in my judgment. The Humphrey-Hawkins bill requires that coordination.

Another thing that people don't recognize is that one of the reasons we don't have a lot of authorizing legislation is because we already are doing or have already proposed much of what was originally in the Humphrey-Hawkins bill. We already have a substantial buildup in the program. Therefore, what the present procedure does is permit the flexibility to introduce those kinds of programs to meet the need that you have at a particular time rather than simply trying to authorize it all up front.

I believe the Humphrey-Hawkins bill is necessary in order to get the kind of coordination that is needed, and it is not insignificant simply because it is process legislation. I will remind you that the Constitution of the United States is process, but it is not insignificant. It does not authorize money; it does not outline any programs. It establishes goals and establishes processes to achieve those goals.

Another of the selective employment programs, and the last one I'll talk about, is public-service employment—in many ways the centerpiece of our policy. Public-service employment as we define it is not public employment. It is not regular public jobs. It is specially created jobs to target on the needs of particular groups in particular places.

There has been a lot of misunderstanding about the public-service

employment program. First, nobody considers it to be the solution to the unemployment problem. It is *part* of the solution, not the solution. We believe that the best thing we can do is to get people regular jobs, in either the public or the private sector. Public-service employment programs that we have in mind are considered to be relatively short-run. They provide work experience if that's what's needed, training if that's what's needed, and jobs if that's what's needed.

A lot of people criticize these programs as being dead-end. In some sense, that's the case. But I call your attention to a study that Eli Ginzberg did recently that produced a very interesting set of facts. He said that if you try to define good jobs as we ordinarily do, only about 30 percent of the jobs being created in the private sector can be considered good jobs. Seventy percent are not in that category. In the regular public sector, two-thirds of all the jobs are considered to be good jobs.

If we are concerned about better jobs as well as about more jobs, it is clear that we should not look entirely to the private sector where the jobs are being developed now. I emphasize that because a lot of people argue that one of the ways to solve the youth unemployment problem is to have a minimum wage differential for youth. We oppose that, and I think on good grounds—equity grounds—because in a society where jobs are determined by market power, it is not very appropriate for us to object when those who have no market power get an adjustment after three to four years, and everybody else is receiving adjustments during that period.

The other problem with the minimum wage differential, of course, is that you would substitute adult unemployment for youth unemployment. But most important is that if it's true that what young people need is training, work experience, and work discipline, they are not likely to get it in many of those jobs that pay less than the minimum wage. We believe we can do a better job directly by having welladministered training programs to provide work experience, if that's what's needed, rather than making concessions in minimum wages.

A number of other criticisms of public-service employment have been made. Some are not very serious. One is that you can't provide publicservice employment without it being makework. That is silly. There are too many things that need to be done in this country either to tolerate makework or to believe it's necessary. A second of the arguments is that people who are unemployed don't want to work. Well, that hasn't been our experience either. Every time we make a few jobs available, we are swamped with applicants, even when the jobs pay the minimum wage. One of the main problems we have now in bringing unemployment down is that every time we create jobs, we greatly increase the labor force participation rate. During this past year we had 4 million new jobs, and unemployment came down by about one percentage point. This is a very important consideration. What it indicates is that people *do* want to work.

The most serious problem that we have yet to deal with in the publicservice employment and selective employment area is to improve the administration of the programs. We are making progress in our efforts to improve the administration, but we need to do a great deal more.

A second criticism of public-service employment is that there is too much substitution. That is, local units of governments take these programs and do what they would have done anyway; therefore, you get fiscal substitution. Now, some of that substitution is not bad, in the sense that what you want to accomplish is to avoid unemployment. If local units of government are in serious trouble, and if they get some public-service jobs, then they don't have to lay off people. In a sense, that's substitution—but it's preventive substitution.

The substitution we need to be concerned about is where local units of government take the money and do what they would have done anyway, such as reduce taxes. In developing our mechanisms, we have tried to prevent that, and I think we have had some success. We target a program through federal agency agreements, such as with the Young Adult Conservation Corps, which is the rebirth of the Civilian Conservation Corps. You don't get substitution there because one federal agency has made an agreement with another federal agency, and therefore the leakages that you get from local units of government are avoided. We also believe that the project controls as well as program targeting can reduce substitution.

One final problem that we face with public-service employment and with our public employment and training program is establishing linkages with regular public and private jobs. If we really are going to have a situation where these jobs are temporary, then we have to develop mechanisms to move people through those jobs and into the regular private and public sectors of the economy.

The lack of such linkages is, I think, one of our greatest weaknesses and one that needs a lot of concentrated attention. What we are trying to do, of course, is to promote general economic growth, to get more private-sector involvement in our programs, to develop mechanisms particularly at the local labor market level that will create better coordination between public and private programs, to use taxes and tax and other incentives to try to induce private employers to train and employ people, and to improve our training and work-experience programs to make people more attractive to employers in the working economy.

As I mentioned at the outset, we know, or feel strongly, that some of these things would work. About others, we are uncertain. We are not sure that we can perfect linkages, and we are not sure that we can eliminate substitutions entirely. But we think it is extremely important to try.

This means, of course, that we are back to where many of us were 20 years ago—still grappling with the problem of how to simultaneously reduce unemployment, avoid inflation, and try to maintain a free society. I don't believe we know all that we need to know to be able to do that. But I am still convinced—as much convinced now as I was when the Industrial Relations Research Association was founded—that this is one of the most important problems that we face and that we need to develop these selective employment policies in order to be able to deal with it.

I. OCCUPATIONAL CHOICE

Autoregressive Degree Patterns: Evidence of Endogenous Cycles in the Market?*

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Two of the most important indicators of the career choice of young persons—enrollment and degrees in various fields of study—have fluctuated substantially in the United States in post-World War II years. In 1965, for example, there were 79,872 first-year students in engineering; in 1973, 51,925; in 1976, 82,454. Between 1969 and 1973 the number of bachelors granted in mathematics dropped by 16 percent while total degrees granted rose by 27 percent. To what extent can these and similar patterns of change in enrollment and degrees be attributed to economic responsiveness in occupational choice? To what extent does the fixed time delay due to the length of training cause the flow of young persons to various fields to oscillate toward equilibrium in the cobweb fashion?

This paper examines these questions with an autoregressive model of enrollment and degrees. The model relates the number choosing a field to lagged numbers, indicators of market demand for the specialty, and alternative opportunities, but not to salaries in the field. Elimination of field-specific salaries enables us to examine several occupations for which time-series data are lacking and to test market models without relying extensively on often poorly measured salary data and ad hoc models of expectations. Section I describes the methodology of the analysis and its relation to previous work on career choice. Section II presents estimates of the relevant autoregressive equations for selected

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bachelor's and first professional degree fields and analyzes the properties of the resultant difference equations.

The paper finds that degrees and enrollments follow noticeable "cobweb-type" oscillations in some scientific and vocationally oriented fields, where there are significant adjustment costs in training and where there have been sizable "shocks," largely due to governmental policy, but not in other fields, notably the social sciences and humanities, where the link between training and jobs is looser. The paper identifies certain exogenous demand forces as affecting the flow of students in most areas but has difficulty in identifying such forces in some, suggesting the need for more detailed analysis of the industries and jobs obtained by graduates from these programs.

I. Method of Analysis

The basic equation to be studied in this paper is:

$$G_{t} = \sum_{i=1}^{N} a_{i} \ G_{t-i} = \sum_{i=1}^{N} b_{i} \ A_{t-i} + \sum_{i=1}^{N} c_{i} \ D_{t-1} \ U_{t}$$
(1)

where G_t = degrees or enrollments in a field, A_t = measure of alternatives available to persons in the field, D_t = indicator of demand for specialists in the field, and U_t = residual, with all variables written in log form and where some a_i , b_i , and c_i may be specified to be zero.

Equation (1) relates numbers choosing a field to the lagged numbers in the field and to lagged measures of alternatives and demand, where the lag is determined by the length of the training period. It can be viewed as a reduced-form equation obtained from a two-equation system, with the first equation making supply dependent on salaries, and the second equation making salaries a function of numbers graduating and demand at the time of the career decision. Substitution of the determinants of salaries for expected salaries in a partial adjustment or adaptive expectations supply equation, with a Koyck-type lag, yields equations of the form of (1) (see Freeman, 1976). More generally, the equation relates choice of a field to various measures of the market which might be expected to affect expectations of future job opportunities or salaries, along the lines of recent time-series analyses of macroeconomic relations (Sims, Sargent).

Two aspects of the equation will be considered in some detail. First, the dynamic adjustment path generated by the autoregressive terms. In particular, we will want to know whether the difference equation for degrees yields stable fluctuations of the "cobweb type," a smooth path toward equilibrium, or oscillations. Several studies of the job market (Freeman, 1971, 1975a, 1975b, 1977; Withers and Freebairn, Comay and Melnick) have found cobweb-type fluctuations. Nonoscillatory adjustment paths, of the "incomplete adjustment" type (Freeman, 1971, Ch. 2; Nerlove) are also possible from essentially the same structural pattern, and it is thus desirable to allow for both possibilities. The path that is generated can be determined by the roots to the difference equation. The link between the estimated autoregressive parameters and the market adjustment path can be most readily illustrated in the case of a second order difference equation:

$$G_t = a_1 \ G_{t-1} + a_2 \ G_{t-2} + X \tag{2}$$

where X summarizes all of the nonautoregressive terms, including the residual. The solution to the homogeneous form of (2) depends on the roots of the characteristic equation:

$$G^2 - a_1 G - a_2 = 0 \tag{3}$$

which will be complex, inducing fluctuations, if $a_1^2 < 4a_2$, and dampened as long as $a_2 < 1$, and which will move toward equilibrium in a stable nonoscillatory path if both roots are positive and less than unity and in a stable oscillatory path if both are a negative and less than one in absolute value (for all the possibilities see Baumol; Goldberg). As equation (1) places a minimum of structure on the data and does not force it into either a recursive adjustment cob-web type model nor into a smoothly adjusting rational expectations framework, the nature of the solution can be viewed as providing reasonably strong evidence on the movement toward equilibrium in the market.

The structure of the residuals in (1) can be important in evaluating the nature of the adjustment path. If, to take an extreme case, U_i was perfectly serially correlated so that $U_i = U_{i-1} + v_i$ where v_i is distributed randomly, the second order difference equation would look like:¹

$$G_t = (1 - a_1) G_{t-1} - a_1 G_t + b_1 \triangle X_t$$
(4)

which has complex roots for all $a_1 < 1$. This would imply a fluctuating path to equilibrium when, in fact, the correct path would be set by

$$\triangle G_t = a_1 \triangle G_{t-1} + b_1 \triangle X_t \tag{5}$$

a standard partial adjustment logistic curve (with Gs in logs).

To take account of this problem we will estimate first-order serial

¹With $U_i = U_{i-1} + V_i$ and the model $G_i = aG_{i-1} + bX_i + U_i$, then because $G_{i-1} = aG_{i-2} + bX_{i-1} + U_{i-1}$, substitution for U_i would yield $G_i = aG_{i-1} + bX_i + G_{i-1} - aG_{i-2} - bX_{i-1}$ or $G_i = (a+1)G_{i-1} - aG_{i-2} + b\Delta X_i$.

correlation parameters as part of the analysis. More complex adjustments with higher order serial correlation corrections are of course also possible but will not be pursued here.

The second important aspect of equation (1) relates to the effect of the exogeneous factors, A_{t-i} and D_{t-i} , on enrollments or degrees. The issue is whether information beyond the autoregressive structure of the dependent variable contributes to predicting or explaining the series. Econometric analyses of macroeconomic phenomena have found only modest significance to exogeneous variables in similar autoregressive models (Sargent), which implies that this "test" is a difficult one. As we have fewer observations (annual rather than quarterly data) and lack adequate information on the alternatives available to persons in many fields and, except in a few cases, on specific determinants of demand, any positive findings can be regarded as lending considerable support to the hypothesis that flows of students to areas are affected by changing market conditions.

II. Empirical Analysis

Table 1 summarizes the results of estimating equation (1) for a variety of baccalaureate and first professional specialties. The dependent variable is (the log of) the number of degrees in each area; the alternative opportunities variable is the annual income of male professionals; the demand indicator differs by field as specified in the table note. All of the equations were first estimated with a first order serial correlation parameter; when the parameter had a t-statistic below one, the serial correlation then was dropped and ordinary least squares used. Column 1 of the table records the coefficient of variation of the share of degrees in the field in the period. It shows considerable fluctuation over time, which makes the propensity to study in an area a critical parameter in the flows of students to diverse occupations: methods (such as those used by the Office of Education in the past), which postulate constant (or smoothly changing) growth of degrees or enrollments, cannot account for such developments, making more detailed supply analyses potentially fruitful. Columns (2)-(4) give the coefficients on the autoregressive terms, lagged one, two, and in some instances three periods. In most cases, a two-period lag appears to capture the autoregressive scheme, though in physics and chemistry, a third order term enters quite significantly and alters the coefficient pattern. The significant, often large, negative coefficient on the second or third lagged term implies, as will be seen, considerable cobweb type oscillations in some of the areas. Columns (5)-(7) record the coefficients on the demand

Coefficients of Explanatory Variables											
Field Years	Coefficient of Variation of Share of Degrees	Constant	D1	D2	D3	Demand ^b	<i>ALT</i> ℃	MED^{d}	Rho	R^2	SEE
1. Physics 1951–1975	. 2	5.1	1.24 (.10)	64 (.07)		.42 (.07)	87 (.18)		46 (.18)	. 989	.041
2. Physics 1951–1975	.28	6.7	.82 (.22)	08 (.27)	29 (.14)	.57 (.11)	-1.12 (.23)		28 (.20)	.990	.039
3. Mathematics 1951–1975	.35	3.7	1.07 (.12)	40 (.11)		.57 (.09)	78 (.29)		0.L.S.	. 995	.052
4. Chemistry 1953–1975	. 24	4.3	$1.04 \\ (.21)$	48 (.20)		.51 (.16)	10 (.19)	.15 (.11)	.32 (.20)	. 989	.030
5. Chemistry 1953–1975	.24	4.5	1.36 (.21)	74 (.29)	.26 (.18)	.38 (.14)	60 (.30)	.31 (.10)	0.L.S.	. 987	.030
6. Biology 1953–1975	.21	7.1	1.19 (.18)	31 (.16)		.83 (.24)	-1.07 (.45)	.34 (.14)	0.L.S.	. 996	.048
7. Education 1950–1975	.13	1.66	1.08 (.16)	44 (.16)		$1.36 \\ (.75)$	95 (1.20)		0.L.S.	.976	.080
8. Social Sciences 1953–1975	.19	-2.0	.80 (.16)	13 (.09)		1.06 (.48)	13 (.24)		.82 (.12)	. 998	.034
9. Humanities 1953–1975	.10	-2.6	.11 (.21)	.16 (.19)		1.68 $(.56)$.22 (.28)		.72 (.15)	.995	.036

 TABLE 1

 Estimates of Autoregressive Degree Equations^a

 Coefficients of Explanatory Variables

Note: All demand indexes are lagged three years except line 7, where a two-year lag is used. Standard errors in parentheses.

^a All variables are in log form and deflated by GNP deflator where appropriate. D1, D2, and D3 are degrees in the given field lagged one, two, and three years, respectively. Degree data from American Council on Education, Factbook of Higher Education.

^b The following demand indexes were used: Physics and Mathematics: (RDP) National R&D expenditures. Chemistry: (DRC) National income in the chemical and products industry. Biology: (DHEP) National income, medical and other health services. Education, Social Services, Humanities: (ENRT) Total enrollment in public primary and secondary schools.

• ALT is median income of professional, technical, and kindred workers.

^d MED is the percent of applicants accepted into medical schools, lagged three years.

indicators and on the measure of alternative incomes. These exogeneous factors were entered as third order lags on the hypothesis that decisions were made on the basis of conditions at that time. The demand indicators include R&D spending (physics, mathematics), national income in the chemical industry (chemistry), enrollments in elementary and secondary school (education), and expenditures on medicine (biology) and other presumably relevant factors, as specified in the table note. In virtually all cases these factors obtain economically sensible and reasonably sized coefficients, though some exceptions are apparent. Column (8) gives the estimated serial correlation parameter or, in the case where it was not significant, the notation OLS for ordinary least squares results. Finally, columns (9) and (10) summarize the fit of the equations in terms of the R^2 and standard errors of estimates.

The analytic properties of the autoregressive scheme and the extent to which the exogenous terms contribute to explaining degree patterns over time are examined in Table 2, which records the nature of the roots of the relevant difference equation, the dampening factor, the length of fluctuations from peak to trough, and which gives F-tests for the significance of the exogenous factors. With respect to the difference equations, the solutions for several scientific fields, particularly the natural sciences, have complex roots that generate cobweb-type fluctuations, with highly dampened and reasonable cyclic frequencies of about four years-the length of the relevant training period. In other areas, such as social sciences and humanities, and in biology, the roots are real and positive, indicating a smooth nonoscillatory path to equilibrium. The differences presumably reflect differences in the vocational specificity of training (which is modest for social sciences and humanities), in the pattern of demand shifts in the period (steady increases in biology). and in other institutional features of the market.

While the finding of fluctuations in the adjustment path runs counter to a naive rational expectations model of the market, the observed pattern does not necessarily reject such an expectations process, for persistent patterns are possible with adjustment lags and incomplete information at the time of decisions (Sargent, Sims). Note, moreover, the highly dampened nature of the fluctuations: a typical dampening factor of .6 to .8 implies that a given shock will have an effect at most .40 times its initial impact four years later. This implies a rapid movement toward equilibrium, so that cycles can be expected to persist only in areas subject to continual shocks. Both the oscillatory and smooth adjustment paths support the relevance of recursive adjustment models to the job market for college graduates, certainly as opposed to steady-

Fie	eld	Roots of Difference Equation	Dampening Factor ^a	Length of Fluctuation ^b Peak to Trough in Years	F-Test ^o of Exogenous Variables	F-Test ^d with Serially Correlated Results
1.	Physics (second order)	complex	.80	4.54		48
2.	Mathematics	complex	.63	5.63	26.7	
3.	Chemistry	complex	. 69	4.31		9.4
4.	Biology	real, positive	.83	_	9.5	
5.	Education	complex	.81	4.97	5.4	
6.	Social Sciences	real, positive	. 57	_		4.5
7.	Humanities	real, positive ^f	. 46			9.6°

TABLE	2
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Properties of Autoregressive Equations

^a The dampening factor is the modulus of the complex roots and is given as the dominant root of the real positive roots.

^b Calculated from the complex conjugate $c \pm di$ as $1/2 [360^{\circ}/\operatorname{arcsin} (d(c^2 + d^2)^{-1/2})]$. ^c The F is calculated by taking the difference between the sum of squared residuals with and without the exogenous variables divided by the number of variables over the sum of squared residuals in the equation with the variables over degrees of freedom.

with and without the exogenous variables divided by the number of variables over the sum of squared residuals in the equation with the variables over degrees of freedom. ^d The F here is based on variance covariance matrix U of estimated coefficients $\hat{a}' = (\hat{a}_1, \hat{a}_2)$, and has been calculated as $\hat{a}'U^{-1}\hat{a}$ which is asymptotically distributed as F(2,n-k). The 5 percent level of significance for either test F(2,n-k) is about 3.4, depending on the precise degrees of freedom.

• The test refers to the demand shift variable alone.

^f The roots are positive. The positive root dominates.

state models which would not allow for different market dynamics.

More important in terms of economic responsiveness, the F-tests on the exogenous factors show that in general the demand shift and alternative income terms have economically plausible coefficients and high statistical significance, particularly in fields where the demand indicator is reasonably well-determined (i.e., physics, where research and development is used). Weak results are obtained in the social sciences presumably in part because of the problem of obtaining specific indicators of demand for these "general fields." In the humanities the alternative income variable had a positive sign, perhaps because it is a good measure of income in the jobs obtained by humanities graduates. Here we report the F-statistic for the demand shift variable alone.

In terms of time-series analysis, the fact that the exogenous factors have contributed substantially to explaining the patterns over time above and beyond the autoregressive features of the series—can be viewed as providing considerable support to the role of economic factors in career choice. Comparable calculations in macroeconomics have found much weaker results on exogenous factors, once the autoregressive properties of a series are taken into account (Sargent).

	Engineering First-Year Enrollments 1951–1975	Physics Junior-Year Enrollments 1956–1975	Law First-Year Enrollments 1948–1971
Constant	10.9	5.7	7.15
Lagged enrollment	.45 (.17)	.93 (.17)	.88 (.16)
R&D	.20 (.16)	.36 (.18)	
FRB index of durable goods	.21 (.15)		
National income, legal services			.39 (.48)
Court cases			.36 (.17)
Alternate income	65 (.53)°	68 (.37)	-1.30 (.97)°
Graduates	32 (.18)	29 (.19)	33 (.12)
R ²	.801	.938	.960
SEE	.068	.058	.063
Rho	1.32 (.19)	ь	ь

TABLE 3
Estimates of the Effect of Market Factors on Enrollments ^a

^a All variables are in log form; standard errors of estimate are in parentheses.

^b The adjusted D.W. statistics calculated by the Durbin procedure were .07 and .98 in the first two columns. Hence we kept the OLS results. See Durbin.

^e Alternative income was wage and salaries of full-time workers in the economy, from U.S. Department of Commerce, *National Income and Product Accounts*.

Source: Physics and engineering data from Center for Policy Alternatives data bank, based on figures from American Institute of Physics (physics junior-year enrollment and degrees); Engineers Joint Council (engineering enrollments); U.S. Office of Education (degrees); Federal Reserve Board (FRB index of durable production); law data from Freeman, 1976.

Definition and Source of Endogenous Variables

All variables are in log form. Variables are deflated by GNP deflator.

- ALT Median income of professional, technical, and kindred workers. Current Population Survey, Consumer Income Series P-60, various editions.
- DHEA Personal expenditure on health. U.S. Department of Commerce, National Income and Product Accounts, as given NBER Time Series Data Bank.
- DRC National income in the chemical products industry. U.S. Department of Commerce, National Income and Product Accounts, as given in NBER Time Series Data Bank.
- ENRT Public school enrollments, grades 1-12. National Center for Educational Statistics, 1976.
- R&D National R&D expenditures. National Science Foundation, National Patterns of R&D Resources 1953-1976. NSF76-310. Washington: 1976.

The analysis of the determinants of career choice at the bachelor's level is pursued further in Table 3, which examines enrollments rather than degrees granted. Enrollments have the advantage of pinpointing the timing of a decision more clearly, and of isolating the effect of numbers graduating in a given year on decisions made at about that time. Column 1 links future enrollments in engineering to past enrollments, R&D spending, output in durable goods, alternative incomes, and B.S. engineering graduates. Column 2 links junior year enrollment in physics to past enrollment, R&D spending, alternative incomes, and B.S. graduates in physics. Column 3 links first-year law enrollments to measures of demand in that field, alternatives, and graduates.

The negative impact of degrees on enrollment in the two areas captures the relevant fluctuations in the market, as large numbers of graduates in a given year depress and small numbers increase the number of enrollees. As in the previous table, the alternative income and demand shift variables obtain a priori plausibly sloped coefficients, of reasonable magnitude and generally high statistical significance.

In addition to the experiments recorded in Tables 1 and 2, we also investigated models with a time trend and with total number of bachelor's degrees as explanatory factors. Because of the significant fluctuations in choice of field, these variables have no clear effect on the dependent variable: time was almost always insignificant, while total bachelor's degrees had roughly as many negative as positive coefficients, indicating that it was a weak indicator of the overall size of the relevant population considering an area. The autoregressive terms tend to dominate.

III. Conclusion

This paper has set out a reasonably general mode of investigating the effect of economic factors and the path of adjustment in labor markets with lengthy fixed training periods. The principal advantage of the autoregressive method is that it makes relatively small demands on salary data. A weakness is that it requires good knowledge of demand in the fields for which students are preparing. While the empirical work described here can obviously be modified, improved upon, and developed with more sophisticated statistical tools, the general finding that the flow of students to bachelor's and first-degree professional fields is affected by market factors, with some fields moving toward equilibrium with dampened cobweb-type fluctuations due to fixed time delays and adjustment costs and others moving along smoother paths, is unlikely to be overturned.

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A Longitudinal Analysis of the Occupational Mobility of Immigrants¹

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I. Introduction

Studies of the economic progress of immigrants to the United States, using earnings, occupation or another index of socioeconomic status have relied on cross-sectional data. This does not allow the researcher to follow the progress of the same persons over time. Although longitudinal (panel) data sets have been developed in recent years, the number of observations on the foreign born are too small for reliable statistical analyses.

This paper exploits longitudinal data in the 1970 Census of Population (5 Percent Questionnaire) to test hypotheses concerning the occupational progress of immigrants to the U.S. Although the Census is a cross-sectional sample, respondents were asked to report their occupation in both 1965 and 1970. The hypotheses to be tested are discussed in Section II, while the data are described and the empirical analyses are presented in Section III. Section IV is a summary and conclusion.

II. Hypotheses

International migration is likely to involve occupational change arising from the lack of perfect international transferability of language, skills, and credentials, particularly in the short run. This implies downward occupational mobility when the "last job" in the country of origin is compared with the "first job" in the country of destination. As time passes in the country of destination, however, immigrants learn the language, modify their skills to local requirements, and obtain the appropriate credentials, thereby increasing the transferability of the skills

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¹ Because of the severe space constraints, the tables (Tables A-1 to A-11) are in a statistical appendix which is available from the author upon request. Diana Kirk's research assistance is appreciated.

acquired in the country of origin. The immigrants would then experience upward occupational mobility.

The extent to which immigrants experience systematic changes in occupational status depends on the similarity of the labor market and occupational structure in the countries of origin and destination. If the two countries are alike in *all* respects, the U-shaped pattern of occupational change with time in the country will be the weakest as the skills are readily transferable. Indeed, a larger proportion of immigrants experience an initial increase in occupational status (i.e., they move for a higher status job) with a subsequent regression toward the mean.² If the countries differ somewhat, one would expect a mild initial deterioration and a mild subsequent rise. Yet, if the countries differ substantially in language and in the requirements for engaging in an occupation, the initial deterioration and subsequent rise in occupational level would both be more intense.

The extent of initial deterioration and subsequent rise in occupational status would depend in part on whether the immigrants are primarily economic migrants or refugees (political or economic). The economic incentives to migrate are greater for younger workers and for workers with skills that are more readily transferable across countries. Engineers and economists are more likely to migrate than are lawyers and judges. Immigrants who are primarily refugees tend to be older and a larger proportion are in occupations with little international transferability (e.g., Cuban lawyers and judges). Due to the different age and occupational distributions, refugees are likely to experience a sharp initial decline in occupational status. As they adjust to the new environment they can be expected to experience a sharper rise in occupational status, although a priori it is not clear whether they will return to their original occupational level.

This analysis suggests the following hypotheses with regard to the change in occupational status for immigrants living in the U.S.:

1. Immigrants experience a decline in occupational status when

² Using the National Longitudinal Survey for adult (native-born) men, Bartel and Borjas find that voluntary job change in the U.S. is associated with movement to a higher wage job with a subsequent regression of earnings toward the mean, other things the same. Chiswick finds that the earnings pattern in the U.S. for immigrants with middle and high levels of schooling who were born in English-speaking countries is consistent with this pattern for voluntary job change among native-born men. Ann Bartel and George Borjas, "Middle-Age Job Mobility: Its Determinants and Consequences," in *Men in Pre-Retirement Years*, ed. Seymour Wolfbein (Philadelphia: Temple University Press, 1977), pp. 29–96; Barry R. Chiswick, "The Effect of Americanization on the Earnings of Foreign Born Men," *Journal of Political Economy* (forthcoming).

their "last job" in the country of origin is compared with their "first job" in the U.S.

2. The occupational status of immigrants increases after their "first job" in the U.S.

3. The U-shaped pattern of occupational change is weaker for immigrants from countries similar to the U.S. (e.g., Canada, Britain) than it is for immigrants from countries that differ more in language, occupational requirements, and labor market structure (e.g., non-English-speaking countries).

4. The U-shaped pattern of occupational change is stronger for immigrants who are primarily refugees (e.g., Cubans) than for immigrants who are primarily economic migrants (e.g., from other non-Englishspeaking countries).

III. Empirical Analysis

After a description of the data to be analyzed, the extent of occupational change from 1965 to 1970 of foreign-born men is compared with that of native-born men. Separate analyses are then performed comparing the "last" occupation in the country of origin with the "first" occupation in the U.S. for immigrants who have been here less than 5 years, and subsequent occupational mobility of immigrants who have been in the U.S. for 6 or more years.

THE DATA

The 1970 Census of Population, 5 Percent Questionnaire, asked country of birth, year of immigration, and occupation in both 1965 and 1970. Thus, it is possible to trace the occupational progress of immigrants over a five-year period. The data analyzed here are for adult (age 25 to 64) white native- and foreign-born men living in the U.S. in 1970. The men are active members of the labor force; they reported an occupation in both 1965 and 1970 and worked at least one week in 1969. The foreignborn are studied overall, and separately within four country-of-origin groups: English-speaking developed countries (Canada, Britain, Ireland, Australia, and New Zealand), Cuba, Mexico, and other countries. The data for the native-born and pooled native-born-foreign-born analyses are for a 1/1000 sample of the population, but in the analyses limited to the foreign-born a 1/100 sample of the population is used. The number of observations for the foreign-born in the 1/100 sample (over 19,000) is sufficiently large not only for a general analysis but also for analyses by country of origin.

This study is not concerned with changes in detailed occupational

categories, but rather with the major occupational groups. The 10 occupations considered are professional, technical, and kindred (PTK); manager (nonfarm); sales; clerical; crafts; operatives; nonfarm laborers; farmers and farm managers; farm laborers; and service workers.³

Comparing Native- and Foreign-Born Men

From 1965 to 1970, 21 percent of the foreign-born men experienced a change in occupation compared with 24 percent for the native-born (Table A-2).⁴ The proportions are 21 percent for both the foreign-born and the native-born when members of the armed forces in either year are excluded from the data. Occupational change appears to be greatest for Cuban and Mexican immigrants, and is most frequent among recent immigrants.

For immigrants who came to the U.S. between 1965 and 1970 (0 to 5 years since migration), the change in occupation is between the "last" occupation in the country of origin and the "first" (early) occupation in the U.S. About 38 percent of the immigrants who came after 1965 changed their occupation, with a range of 57 percent for the Cubans to only 27 percent for men from English-speaking countries.

The extent of occupational change in the 5-year period declines the longer a cohort has been in the U.S. (Table A-2). However, cohorts that have been in the U.S. longer are also older, and occupational change tends to decline with age (or labor market experience). A multiple regression analysis is needed to separate the effects of years in the U.S. from the effects of age.

Regression equations were computed where the dependent variable "occupational change" (OCCHG) is a dichotomous variable equal to unity for a person who was in a different major occupational category in 1970 than in 1965, and zero if he was in the same occupation. The explanatory variables (defined in Table A-5) include schooling, years of labor market experience, marital status, region (north/south), and area (urban/rural), as well as dichotomous variables for country of origin and year of immigration. Among adult white men (Table A-6), the probability of occupational change from 1965 to 1970 declines with the level of schooling (1.2 percentage points decline for an extra year of schooling) and the number of years of labor market experience (1.0 percentage point decline for an extra year of experience, evaluated at

 $^{^{3}\,}See$ Table A-1 for the Duncan Index of Socioeconomic Status for the major occupational categories.

 $^{^{\}rm 4}$ For matrices cross-classifying occupation in 1970 by occupation in 1965 for the native- and foreign-born, see Tables A-3 and A-4.

20 years of experience). Men who are married (spouse present) are less likely to change their occupation (1.5 percentage points), but region and area have no effect on occupational change. Among the foreignborn (Table A-7), the coefficients of schooling and experience are also negative, but are somewhat smaller in magnitude (coefficients of 0.9 percentage point for schooling and 0.7 percentage point for experience evaluated at 20 years). Marital status as well as region and area have no significant effect for the foreign born.

In a pooled foreign-born-native-born regression (Table A-6), a dichotomous foreign-born variable is insufficient because of offsetting effects. Compared to the native-born, the foreign-born in the U.S. up to 5 years have a much higher probability of occupational change (coefficient of 10.8 percentage points, *t*-ratio of 3.48). For those in the U.S. 11 or more years there is less occupational change (by 3 percentage points) in the 5-year period than among native-born men with similar characteristics.

In an analysis limited to the foreign-born (Table A-7), holding country of origin and other variables constant, compared to those in the U.S. 11 to 20 years, the most recent immigrants (0 to 5 years) have a very high rate of occupational change (14.1 percentage points higher), while those in the U.S. 6 to 10 years have a moderately higher rate (3 percentage points). However, there is no difference when those in the U.S. 11 to 20 years are compared with those here for more than 20 years. Compared with men from "other countries," men from Cuba have a much higher rate of occupational change (10.3 percentage points, t = 7.0), men from Mexico have a slightly higher rate (2.4 percentage points, t = 2.2), and men from the English-speaking countries have the same rate.

THE FIRST FIVE YEARS

About 38 percent of the immigrants in the U.S. less than 5 years experienced occupational change from 1965 to 1970. To a large extent this represented downward mobility (Table A-8). Of the 659 immigrants who were professional, technical and kindred workers (PTK) or non-farm managers in 1965, 78 percent were still in these occupations in 1970. Ninety-four percent of the 126 men from English-speaking countries in these high-level jobs in 1965 were in these jobs in 1970. Of the 72 Cubans only 42 percent were still in these occupations, while of the 16 Mexicans the proportion was 44 percent. For the 445 immigrants from other countries, 81 percent remained as PTK or managers in 1970.

Among clerical and crafts workers in 1965, what mobility occurred

tended to be downward to operative, laborer, and service jobs, and this tendency was strongest for immigrants from Cuba and Mexico and weakest for those from the English-speaking countries.⁵ Of the 418 craft workers in 1965, 71 percent were in craft jobs in 1970; 21 percent were operatives, laborers, or service workers; and 8 percent were in whitecollar jobs. Of the 110 clerical workers, 46 percent remained in clerical jobs while 34 percent became craft, operative, and service workers. Men employed in the lowest skilled jobs in 1965, operatives and laborers (farm and nonfarm), tended to remain in these occupations.

Thus, the high rate of occupational change among immigrants in the U.S. less than 5 years is disproportionately downward mobility. That is, compared to their occupation in the country of origin, their early occupation in the U.S. is of a lower status. Immigrants from Cuba and Mexico experienced greater downward mobility than did others, while immigrants from the English-speaking countries had the least downward mobility.

FROM SIX TO TWENTY YEARS

Among immigrants who arrived in the U.S. between 1950 and 1964, 23 percent were in a different major occupational category in 1970 than in 1965. Compared to more recent immigrants, the occupational mobility was more likely to be upward, with the net upward mobility greater for those in the U.S. 6 to 10 years than for those here 11 to 20 years.⁶

The tendency toward upward occupational mobility among the foreign-born who came to the U.S. between 1950 and 1964 varied by country of origin (Table A-11). Among unskilled workers in 1965, 17 percent experienced upward mobility.⁷ Unskilled men from Mexico experienced the least upward mobility (10 percent) while those from Cuba and the relatively small number from the English-speaking countries

⁶ The relative proportion of off-diagonal elements in the 1965–70 occupational matrix is an index of mobility. With the occupations classified into four major groups (as in Tables A-8 to A-10), mobility was related to years in the U.S.:

	Percent Expe	Number of	
Period of Immigration	Downward Mobility	Upward Mobility	Observations
1965–70 (Table A-8) 1960–64 (Table A-9)	18.7 6.9	9.4 12.1	1,941 2,390
1950-59 (Table A-10)	5.7	9.4	4,772

 7 "Low skilled" jobs were defined to include operatives, laborers, and service workers, while "high skilled" jobs include PTK, managers, sales, clerical, and crafts workers.

⁵ Of the 63 Cubans in clerical and craft jobs in 1965, 27 percent experienced downward mobility, as was the case for 39 percent of the 33 Mexicans. However, only 11 percent of the 72 clerical and craft men from English-speaking countries and 21 percent of the 360 men from other countries experienced this downward mobility.

were more likely (21 percent and 25 percent, respectively) to move on to a higher level occupation. Among PTK workers in 1970, a larger proportion of the Cubans than of any other group had lower level jobs in 1965—30 percent for the Cubans compared to 16 percent for all immigrants. At the other extreme, only 12 percent of the immigrants from the English-speaking countries who were in PTK in 1970 were not in this occupation in 1965. In general, the immigrants from Cuba showed the greatest, and the immigrants from Mexico and the English-speaking countries showed the least upward mobility.

IV. Summary and Conclusions

This paper is concerned with the occupational mobility of immigrants. The hypotheses developed in Section II are tested in Section III. The data are primarily from a 1/100 sample of the 1970 Census of Population and are for mobility from 1965 to 1970 among the 10 major occupational categories for adult white foreign-born men living in the U.S. in 1970.

For immigrants in the U.S. less than 5 years, their occupation in 1965 was in their country of origin. Among these men 38 percent had changed their occupation, compared with 21 percent for all immigrants, 23 percent for immigrants in the U.S. 6 to 20 years, and 24 percent for adult white native-born men (21 percent for native men not in the armed forces in either year). The extent of occupational change for new immigrants was small for those from English-speaking countries (27 percent) but high for those from Mexico (48 percent) and Cuba (57 percent). The change was predominantly to lower status occupations, particularly for the Cuban and Mexican immigrants.

Among immigrants who lived in the U.S. 6 to 20 years by 1970, the occupational change tended to be upward mobility, with those in the U.S. 6 to 10 years showing a greater net improvement than the cohort here 11 to 20 years. The men from Mexico and the English-speaking countries experienced the least upward mobility, those from Cuba showed the greatest upward mobility.

These findings are consistent with the hypotheses discussed in Section II. Because of the less than perfect international transferability of skills and credentials, and the time required to find one's "best" employment opportunity, immigrants initially experience downward occupational mobility compared to their occupation in their country of origin. With the passage of time, however, they adjust their skills and credentials and learn about job opportunities in the U.S. As this occurs, they experience upward occupational mobility. This tendency toward a U- shaped pattern of occupational change is apparently weakest for immigrants from countries similar to the U.S. (e.g., the English-speaking countries in contrast to other countries) and greatest for immigrants from non-English-speaking countries who are predominantly refugees (e.g., Cubans).

Sources of Occupational Information Among High School Seniors^{*}

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Persistent high rates of unemployment, particularly among teenagers, has rekindled interest among manpower researchers in the area of occupational choice. Serious imbalances in the labor market raise questions about whether the youth of this country are able to match their educational achievements and skills with the educational achievements and skills actually required for jobs. Appropriate occupational choice requires accurate occupational information in order for the individual to assess accurately the returns on investments in education and training.

Ivar Berg and Marcia Freedman chastise neoclassical economics and human capital theory for the assumption that occupational information is widespread.¹ Mark Blaug offers the observation that ". . . the humancapital explanation of labor training founders on the failure to provide a testable theory of occupational choice."² In truth, little research has been done over the years by labor market analysts on the subject of occupational choice and occupational information. In 1951 Eli Ginzberg and his associates concluded that vocational choice is an irreversible process, occurring in reasonably clearly marked periods, which is characterized by a series of compromises the individual makes between his wishes and his possibilities.³ Since 1951, with the exception of the human

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¹ Ivar Berg and Marcia Freedman, "The American Workplace: Illusions and Realities," *Change*, vol. 9 (November 1977), pp. 24-30.

² Mark Blaug, "Human Capital Theory: A Slightly Jaundiced Survey," Journal of Economic Literature, vol. 14 (September 1976), pp. 827-55.

³ Eli Ginzberg, Silvia W. Ginsberg, Sidney Axelrod, and J. J. Herma, Occupational Choice: An Approach to Theory (New York: Columbia University Press, 1951). For a major revision, see Eli Ginzberg, "Toward a Theory of Occupational Choice: A Restatement," Vocational Guidance Quarterly, vol. 20 (March 1972), pp. 169-76.

capital theorists, most of the contributions have been made by psychologists and sociologists.⁴

This paper is concerned only indirectly with a theory of occupational choice. It has the modest goal of attempting to understand the use of occupational information by teenagers in the senior year of high school, a crucial period in the transition from school to work. Current research to be reported at a later time by the authors will examine the usefulness of alternative sources of occupational information.

Correlates of Occupational Information

Empirical studies indicate that the major influences on the amount of and sources of occupational information as well as subsequent occupational choice appear to be socioeconomic origins, intelligence, race, sex, and labor market experience. Parnes and Kohen reported that a simple occupational information test administered to young men produced scores that were positively related to amount of education, measured intelligence, and socioeconomic status (SES) of family or origin.⁵ Nuckols and Banducci found that information regarding low-level occupations was extensive and held equally by students from both high- and low-level SES families.⁶ Neither group of students, however, had much information regarding high status occupations. Pallone, Rickard, and Hurley found that high school male students cited most often a person currently holding a job in the desired occupation as their major source of occupational information.⁷ The use of other sources of occupational information, however, varied by race and sex. White males cited their fathers while black males designated both parents as equally influential. In a later study, the authors found that females of all races most often designated their mothers as the key source of occupational information.⁸

With regard to labor market experience, Parnes and Kohen concluded that labor market experience may not make any difference in the extent

⁴ For a review of this literature, see Adeline Levine, "Educational and Occupational Choice: A Synthesis of Literature from Sociology and Psychology," *Journal of Consumer Research*, vol. 2 (May 1976), pp. 276–89.

⁵ Herbert S. Parnes and Andrew I. Kohen, "Occupational Information and Labor Market Status: The Case of Young Men," *Journal of Human Resources*, vol. 10 (Winter 1975), pp. 44–55.

⁶ Troy J. Nuckols and Raymond Banducci, "Knowledge of Occupations-Is It Important in Occupational Choice?" Journal of Counseling Psychology, vol. 21 (May 1974), pp. 191-95.

⁷ Nathaniel Pallone, Fred S. Rickard, and Robert B. Hurley, "Key Influences of Occupational Preference Among Black Youth," *Journal of Counseling Psychology*, vol. 17 (November 1970), pp. 498–501.

⁸ Nathaniel Pallone, Robert B. Hurley, and Fred S. Rickard, "Further Data on Key Influences of Occupational Expectation Among Minority Youth," *Journal of Counseling Psychology*, vol. 20 (May 1973), pp. 484–86.

of occupational information among white students, but it does for black students.⁹ However, among nonstudents, number of years in the labor force bore a statistically significant relationship with occupational information for whites, but not for blacks. Labor market experience also pays off with regard to job search success. Rogers reported an increased maturity in vocational selection by high school seniors who had work experience while in school.¹⁰ Burgess and Kingston estimated a much larger payoff for work search knowledge gained in the labor market than from additional secondary school education.¹¹

The most important sources of occupational information appear to be parents, teachers, guidance counselors, and television. The literature also seems to imply that high SES students are more influenced by counselors and low and middle SES students by teachers. Thorne found that for students entering college or trade and technical schools, counselors were the primary source of information.¹² Hall, on the other hand, reported that middle and low SES students designated their teachers as the primary source of occupational information.¹³ Parnes and Kohen found that the intensity of guidance, as measured by the number of counselors, was unrelated to the student's occupational information.¹⁴ Hanson and Sander, however, reported that unrealistic choices could be improved by counseling high school students.¹⁵ The general labor market literature criticizes counseling in high schools for not providing adequate occupational information.¹⁶ However, as we have noted above, counseling can be effective for specific student groups in particular situations. While the role of the media has not been assessed in comparison with alternative information sources, it does appear to be significant for some subgroups. Hall reported that television was an important original

⁹ Parnes and Kohen, p. 49.

¹⁰ Ronald C. Rogers, "Work Experience as a Mediating Variable in Theories of Occupational Choice," Ph.D. dissertation, Northwestern University, 1975.

¹¹ Paul L. Burgess and Jerry L. Kingston, "Worksearch Knowledge, Schooling and Earnings," *Industrial Relations*, vol. 13 (October 1974), pp. 308–12.

¹² Joseph L. Thorne, "The Relationship of the Job Market and Motivational Factors on the Career Goals and/or Job Choices of Flint High School Seniors," Ph.D. dissertation, University of Michigan, 1974.

¹³ Julia G. Hall, "An Examination of Some Social Psychological Determinants of the Occupation Decision-Making of Urban High School Seniors," Ph.D. dissertation, University of Pennsylvania, 1973.

¹⁴ Parnes and Kohen, p. 49.

¹⁵Jerrold T. Hanson and Daryl L. Sander, "Differential Effects of Individual and Group Counseling on Realism in Vocational Choice," *Journal of Counseling Psychology*, vol. 20 (1973), 541-44.

¹⁶ For criticism of counseling, see Paul Bullock, Aspiration vs. Opportunity: Carcers in the Inner City (Ann Arbor: Institute of Labor and Industrial Relations, University of Michigan, 1973).

source of occupational information for students.¹⁷ Newspapers were found by Thorne to provide motivation and information for male and female high school seniors.¹⁸

Data and Methodology

Fourteen high schools in the state of Alabama were selected for this study on the basis of their size, geographic location (urban, suburban, or rural), and racial composition. The objective was to develop a representative sample of high school seniors in the state. The mean size of the senior class in these 14 schools was 220 of which an average of 26 percent of the student body was nonwhite. Forty-three percent of the schools were located in Standard Metropolitan Statistical Areas (urban and suburban) while 57 percent were located in rural areas.¹⁹

Surveys were sent to the schools and completed during the third week of November 1976. Cooperation was not difficult to achieve, since all of these schools had previously agreed to participate in an experimental computerized occupational information system which was to be installed in 1977.²⁰ All seniors in all 14 schools were to be surveyed. However, due to absenteeism and failure to complete the questionnaire properly, a final sample of 2116 usable questionnaires was obtained. This represented 69.2 percent of all enrolled seniors at the 14 schools. A breakdown of respondent characteristics showed an average age of 17.4, 54.3 percent females, 26.4 percent nonwhites, and 26.7 percent indicating their father's occupation to be professional or managerial. In addition, 50.8 percent were enrolled in a college preparatory program, 80.1 percent had held a paying job, and 20.0 percent had held a volunteer job.

A descriptive table was developed showing the number and percentage of students using various sources of occupational information. These included informal sources such as parents and friends, as well as formal sources such as counselors, teachers, books and magazines, and television and films. Multiple regression analysis was used with each of the occupational information sources as the dependent variable. All of the information sources were coded 1 if the student indicated he or she used the particular source and 0 otherwise.

²⁰ This system has subsequently been evaluated by the authors. See Trevor Bain and Myron D. Fottler, *Evaluation of the Alabama Occupational Information System* (Montgomery: Alabama Occupational Information System, June 1977).

¹⁷ Hall.

¹⁸ Thorne.

¹⁹ These data indicate that the sample of schools is representative of all high schools in Alabama. However, the average high school in Alabama is smaller and has an overrepresentation of black students and students from rural backgrounds as compared to the national average. Data furnished by the Center for Business and Economic Research, Graduate School of Business, University of Alabama.

The independent variables were sex (1 = female, 0 = male); college preparation (1 = college preparatory program, 0 = general program); race (1 = white, 0 = nonwhite); volunteer job (1 = volunteer job, 0 =no volunteer job); paying job (1 = paying job, 0 = no paying job); father's occupation (1 = professional or managerial, 0 = otherwise); school location (1 = urban or suburban, 0 = rural) and racial composition of the school (percentage of nonwhite students). A number of other variables, such as age, preferred occupation, and grade point average, were also run against the dependent variables, but were later dropped from the analysis when it became apparent that these were either not related to any dependent variable or were highly correlated with one or more of the independent variables used.

Results

Table 1 shows the extent of student use of both formal and informal sources of occupational information.²¹ It is quite clear that informal sources are used more often than formal sources in the aggregate. Parents and friends were the most important sources of occupational information. Alternatively, the least used sources were counselors, teachers, films and television for which only 32–37 percent indicated they had used the particular source for occupational information. Books and magazines appear to be the only significant formal source of information. The limited role of teachers and counselors found here is compatible with the findings of Christopher Jencks that children are far more influenced by what happens at home or in the streets than by what happens in school.²²

The fact that those individuals with whom a student spends more time (parents and friends) would be viewed as more significant information sources than those with whom he has more limited contact (individual teachers and counselors) is not surprising. However, some educators may feel that even though sources in the school are not consulted as often, they are actually more influential than parents and friends. Yet the data do not support this contention. When students were asked which sources *influenced* their choice of a career, the most important were parents (51%) and friends (38%). Teachers and counselors were mentioned by 22 percent and 15 percent of the respondents, respectively.

²¹ This division parallels that used to analyze sources of labor market information. For example, see George J. Stigler, "Information in the Labor Market," *Journal of Political Economy*, vol. 70 (October 1962), pp. 94–105, and Albert Rees, "Information Networks in Labor Markets," *American Economic Review*, vol. 51 (May 1966), pp. 559–66.

²² Christopher Jencks et al., Inequality: A Reassessment of the Effect of Family and Schooling in America (New York: Basic Books, 1972).

	Have Used Sources		Have Not Used Sources		
Occupational Information Sources	no.	%	no.	%	
Informal sources:					
Parents	1788	84.5	328	15.5	
Friends	16.53	78.3	462	21.7	
Formal sources:					
Counselors	792	37.4	1324	62.6	
Teachers	733	34.6	1383	65.4	
Books and magazines	1458	68.9	658	31.1	
Films and television	682	32.2	1434	67.8	
None of the above:	99	4.7	2017	95.3	

TABLE 1 Student Use of Various Occupational Information Sources

Books and magazines were mentioned by 21 percent, while television and movies were influential for just 10 percent of the respondents.

Table 2 shows the multiple regression results. While none of the runs indicates a high coefficient of determination (R^2) , this situation is not unusual where dichotomous dependent variables are used. It has been pointed out elsewhere that there are some upper limits on the potential value of the R^2 statistic when the dependent variable is binary.²³ Results show that female students tend to use all six sources of occupational information to a greater degree than do males and the differences are statistically significant for three of the six sources. Females are significantly more likely than males to receive occupational information from friends, teachers, and books and magazines. The reasons for the greater female utilization of all sources of occupational information are not clear. Perhaps female high school seniors perceive more career options and more complex combinations of options, including nonmarket activities, than do males.

Students in the college preparatory program were also significantly more likely to use all the sources than were those in the general high school program. White students tended to use all sources of occupational information, with the exception of films and television, to a significantly greater extent than did nonwhite students. White students may have more interest in or access to sources other than television and films.

Previous experience in a volunteer or paying job was also associated

^{2:3} Donald C. Morrison, "Upper Bounds for Correlations Between Binary Outcomes and Probabilistic Predictions," *Journal of the American Statistical Association*, vol. 67 (May 1972), pp. 68–70.

TABLE 2
Regression Results for the Determinants of Student Use of Various Occupational Information Sources (<i>l</i> -value in parentheses)

	Informal	Informal Sources		Formal Sources			
Independent Variables	Parents	Friends	Counselors	Teachers	Books and Magazines	Films and Television	
Personal characteristics:							
Sex	.023	.099	.020	.056	.064	.035	
College preparation	(1.41) .087 $(5.32)^{**}$	(3.42)** .091 (4.93)**	(0.96) .219 $(10.2)^{**}$	$(2.65)^{**}$.111 $(5.19)^{**}$	(3.08)** .120 (5.73)**	$(1.65) \\052 \\ (2.43)^*$	
Race	.075	.140	.062	.095	.048	056	
Volunteer job	$(3.98)^{**}$.024 (1.22)	$(6.53)^{**}$.019 (0.84)	(2.47)* .077 (3.01)**	(4.00)** .096 (3.77)**	$(1.98)^*$.050 $(2.00)^*$	(2.27)* .072 (2.81)**	
Paying job	.012	.060	.011	$.032^{'}$.006	.041	
Father's occupation	(0.59) .026 (1.42)	(2.64) .013 (0.64)	(0.42) .029 (1.20)	(1.21) .042 (1.75)	(0.24) .025 (1.04)	(1.56)035 (1.24)	
School characteristics:							
School location	016	.006	008	072	036	023	
Racial composition	(0.93)001 (1.82)	(0.30) 002 (3.13)**	(0.36) .062 (2.47)*	(3.36)** .001 (0.01)	(1.62) 000 (0.18)	(1.02) .003 (3.46)**	
Coefficient of determination (R^2)	.036	.067	.070	.043	.030	.020	
F Value (d.f. $= 8,2107$)	9.80**	18.9**	19.7**	13.6**	8.05**	5.30**	

Note: * p < .05 (two-tailed test); ** p < .01 (two-tailed test).

with greater use of the various occupational information sources, although the volunteer job appeared to be the more influential of the two. The father's occupation, a proxy for the family's socioeconomic status, was positively related to the use of all information sources except films and television. However, the results were not statistically significant. Our results indicate that the family's socioeconomic status is less important as a determinant of the use of occupational information than previous research has found for educational or occupational aspirations.²⁴

There were no statistically significant differences between students attending rural and urban schools with the exception of their use of teachers as an information source. The fact that rural students were significantly more likely to use their teachers as an information source may reflect the more important role of the teacher in the rural community. Finally, the racial composition of the school affects the student body's relative use of different information sources. Students in schools with a high proportion of nonwhites tend to use friends and counselors to a lesser extent and films and television to a greater extent than do other students.

Conclusions

The results in this paper indicate that informal sources of occupational information are used much more frequently than are formal sources. These results are consistent with previous research on the use of alternative sources of job information. The extent of use of occupational information is positively related to the high school seniors' anticipated investment in education. Those students who plan to attend college use all sources of occupational information to a greater extent than those who do not. In addition to having higher occupational aspirations,²⁵ they also appear to seek and receive more occupational information.

Since nonwhite students tended to rely more on television and films for their occupational information, public policy aimed at expansion of occupational information for minorities should emphasize the media. A new medium, currently being pilot tested in eight states, is a computerbased occupational information system supported by the Employment and Training Administration of the U.S. Department of Labor. The authors are currently evaluating the use of this innovative formal source in providing occupational information to high school students. A major issue is whether this approach will be of more use to minorities and the noncollege-bound than traditional formal sources.

²⁴ Jencks et al., pp. 138-41.

²⁵ Jencks et al., pp. 180-85.

DISCUSSION

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The paper by Freeman and Leonard demonstrates two things: (1) that the supply of workers to selected professional occupations is responsive to the kinds of economic variables postulated by classical economic theory, and (2) that in occupations for which there are relatively specific types of college training and that are subject to pronounced shifts in demand, flows of recruits tend to oscillate toward equilibrium cobweb fashion.

Neither of these findings is new, for the very substantial body of research that Professor Freeman has already done on the operation of the labor market for college graduates has produced persuasive evidence with respect to both of them. The chief contribution of the present paper is methodological: it illustrates an autoregressive approach to investigating the effects of economic factors on the flows of students into particular programs and the nature of the process whereby supply adjusts to changes in demand. The method obviates the need for data on salaries. Rather than using salaries at the time of career decision as the explanatory variable for number of graduates from a particular program, the authors use instead the determinants of these salaries—supply, as measured by the number of graduates at the earlier period, and a measure of demand, also lagged.

Unfortunately, I am not competent to evaluate the technical aspects of the paper, although I must confess to wondering about some aspects of it, such as the use of enrollments in primary and secondary schools as an index of demand for graduates in the social sciences and humanities. Nevertheless, for purposes of my comments, I accept the findings of the study as valid, and focus on their interpretation and implications.

It seems to me that there are two major implications of the paper, one of which the authors make explicit, while the other remains implicit. The first of these is that methods of forecasting supplies of graduates from a given field that extrapolate past trends cannot be relied upon and should be replaced by more sophisticated models comparable to that which the authors employ. The second, which is implicit rather than explicit, is that since occupational choice appears to be responsive to measures of demand and of alternative opportunities as economic theory would suggest, labor markets can be left more or less to their own devices in channeling youth into occupations. The first of these implications I accept without reservation. The second causes me considerable concern.

The danger, as I see it, lies in forgetting that statistically significant relationships between economic variables and flows of college students into various fields of study attest only to very broad central tendencies and by no means allow us to be complacent about the way in which the process of occupational choice typically takes place. I can make the nature of my fear clearer, perhaps, by citing a sentence or two from an earlier work of Professor Freeman: ". . . the market [for high level manpower] operates in accord with economic theory, with an informed group of suppliers responding rapidly to economic incentives, and salaries determined, albeit with a lag, by supply and demand. . . . Since the market is a responsive mechanism, the chief policy problem is not to find ways to influence the behavior of suppliers and employers, but rather to choose an appropriate set of manpower goals."¹

The question at issue is how adequately informed are youngsters as they make their career decisions. No one supposes that youth have the "perfect knowledge" that is the hallmark of a perfectly competitive labor market. On the other hand, no one believes, either, that labor market decisions are made in absolute ignorance. The long-standing debate over the adequacy of workers' labor market information has been largely sterile, since there is no easy criterion for judging how much of a good thing is enough. The economic maxim that information should be pursued until its marginal cost exactly equals the discounted contribution of the information to the individual's future income stream, whatever its merits in some contexts, is largely fatuous in the context of occupational choice, where individuals may not even be in a position to know the *kinds* of information that are relevant to their needs. The notion of an 11-year-old making marginal calculations to determine how much he or she should learn about alternative occupations is illustrative.

Even if there is sufficient labor market information for supplies of high level manpower to respond to signals provided by the market and Professor Freeman's research has persuaded me that this is the case —there is no doubt in my mind that many workers and potential workers have serious deficiencies in certain types of knowledge that are

^t Richard Freeman, *The Market for College Trained Manpower* (Cambridge, Mass.: Harvard University Press, 1971), pp. xxvi, 228.

essential for self-serving labor market decisions. It is this fact that requires emphasis for policy purposes.

A number of studies of youth have emphasized the limited occupational information of young persons during the period in which crucial educational and occupational decisions are being made.² There is evidence that the extent of labor market information is positively related to educational attainment, socioeconomic status, and I.Q.,3 and we would therefore expect that college students would be more knowledgeable in this respect than other youth. Professor Freeman, in his study cited earlier, surveyed almost 3,000 male college students in Massachusetts and concluded that they were well informed about economic opportunities. Yet even his data show that a sixth of the undergraduates and an eighth of the graduate students believed that the information available to them at the time they made their career choices was inadequate, while an additional one-fourth regarded it as "barely adequate."⁴ Moreover, other investigations of the career choices of college students have drawn generalizations different from those of Freeman. A study of almost 2,000 male and female members of the 1972 graduating classes of five Pennsylvania colleges and universities reported that many of the students believed they were forced to make career choices earlier than they would have preferred and on the basis of inadequate information. Two-fifths of the students reported that they were "not too aware" and one-fifth that they were "not at all aware" of the job market in the field of their major at the time they selected it.⁵

However great are the needs of college students for occupational information, I am more concerned about the needs of those youth who are *not* college students but who might have been had adequate information been available both to them and their parents early enough. In my view, the importance of occupational information in the context of

² Larry D. Singell, "Some Private and Social Aspects of the Labor Mobility of Young Workers," Quarterly Review of Economics and Business, vol. 6 (Spring 1966), p. 23; A. P. Garbin, Robert Campbell, Dorothy P. Jackson, and Ronnie Feldman, Problems in the Transition from High School to Work as Perceived by Vocational Educators, Research Series 20 (Columbus: Ohio State University Center for Vocational and Technical Education, 1967) pp. 49–50; Saul S. Leshner and George S. Snyderman, "Job Seeking Patterns of Disadvantaged Youth," Employment Services Review (November 1966), pp. 53–55.

³ Herbert S. Parnes and Andrew I. Kohen, "Occupational Information and Labor Market Status: The Case of Young Men," *Journal of Human Resources* (Winter 1975), pp. 44–55.

⁴ Freeman, p. 194.

⁵ David Gottlieb et al., Youth and the Meaning of Work (University Park: Pennsylvania State University, Institute for the Study of Human Development, 1973), pp. 144-46.

occupational choice is not merely that it allows a more responsive labor force, but also that it improves the quality of decisions of the individual and makes for greater equality of opportunity. We like to think of labor markets characterized on the supply side by complete freedom of occupational choice. The truth of the matter, however, is that in the absence of adequate information the freedom to choose is hollow indeed. The fact that supplies of manpower can be shown to be responsive to changes in demand is no guarantee that true freedom of occupational choice exists.

DISCUSSION

MARKLEY ROBERTS AFL-CIO

I find the general thrust of the Chiswick paper to be misleading. Why? Because it rests on marginal analysis rather than central tendency analysis.

By this I mean that I am struck by the high degree of occupational stability—not mobility—of both foreign-born and native-born white males. From 1965 to 1970, according to Chiswick's data, 79 percent of the foreign-born and 76.2 percent of the native-born did *not* change their major occupational category. They experienced neither upward nor downward occupational mobility, according to Chiswick's standard of measurement.¹

Of course, a great deal of economic mobility (change of earnings and income) takes place *within* major occupational categories. I suggest that upward economic mobility into higher income jobs is a much greater concern for most immigrants than upward occupational mobility into higher status jobs. Bigger economic rewards—not higher occupational status and higher occupational prestige—are what most immigrants seek.²

The key variable in immigrants' job success in the U.S. is command of the English language.³ This helps to explain Chiswick's finding that in the first five years, immigrants from English-speaking countries had the least downward mobility, while immigrants from Cuba and Mexico had greater downward mobility. Chiswick also notes that over a longer

¹ For a general discussion of 1965–70 occupational mobility and limitations of the data, see Dixie Sommers and Alan Eck, "Occupational Mobility in the American Labor Force," reprint with corrections and additions from January 1977 Monthly Labor Review. See also Robert Warren, "Recent Immigration and Current Data Collection," Monthly Labor Review (October 1977), pp. 36–41.

²For discussion of this view, see Larry A. Sjaastad, "The Costs and Returns of Human Migration," Journal of Political Economy, vol. 70 (October 1962), Pt. 2, pp. 80–93. See also Gerald Rosenbloom, Immigrant Workers: Their Impact on American Labor Radicalism (New York: Basic Books, 1973).

³ David S. North, *Immigrants and the American Labor Market*, Manpower Research Monograph No. 31, U.S. Department of Labor, 1974, p. 2. This excellent report, based on documents filed by 5,000 working-age immigrants with the Immigration and Naturalization Service, should be read as a supplement to the Chiswick paper.

period, 6 to 20 years, immigrants from Mexico and from the Englishspeaking countries had the least upward mobility. This finding deserves more of an explanation. I interpret the relative lack of upward mobility on the part of immigrants from English-speaking countries as the result of many being already in "high skill jobs"—which Chiswick has lumped together to include professional, technical, kindred workers, and also managers, sales, clerical and craft workers (Table A-11). For the immigrants from Mexico, I suspect that their relative lack of upward mobility is related to low education attainment. There is a high correlation between the amount of education obtained before arriving in the U.S. and the ability to speak English.⁴ Thus, education may explain a considerable portion of the longer-period upward mobility of the "upper and middle-class" immigrants from Cuba.

I question the relevance and validity of Otis Dudley Duncan's Index of Socioeconomic Status. The Duncan index is essentially a prestigerating system. Education is the most important determinant of occupational status, but Blau and Duncan note that the index is not a substitute for measures of income or education.⁵ Furthermore, Blau and Duncan warn that "occupations of very different character may have similar status scores. In particular, there is considerable overlap of scores of occupations in distinct major occupational groups."⁶

Thus, within the "professional, technical, and kindred workers" category (average index score 75) we find dentists, 96; physicians and surgeons, 92; lawyers and judges, 93—and personnel and labor-relations workers, 84. We also find dancers and dancing teachers, 45; dieticians and nutritionists, 39; entertainers, n.e.c., 31; professional nurses, 46; and medical and dental technicians, 48. Among "operatives" (average index score 18), we find power-station operators, 50; railroad switchmen, 44; truck and tractor-drivers, 15; and textile workers, 6.

I also question the timeliness of the Duncan index. The Duncan index is derived from occupational classifications used in the 1950 Census. Some 30 years have passed. Duncan himself in 1961 noted that "over a long period of time," the index "probably will be subject to serious obsolescence."⁷ However—in spite of my doubts—a recent cross-national

⁴ North, p. 42.

⁵ Peter Blau and Otis Dudley Duncan, *The American Occupational Structure* (New York: John Wiley & Sons, 1967), p. 241; and Otis Dudley Duncan, "Properties and Characteristics of the Socioeconomic Index," in Albert J. Reiss, Jr., *Occupational and Social Status* (New York: Free Press, 1961).

⁶ Blau and Duncan, p. 121. See also Reiss, App. B, Table B-1, "Socioeconomic Index for Occupations in the Detailed Classification of the Bureau of the Census: 1950," pp. 263-75.

⁷ Duncan, p. 153.

comparison of occupational prestige status rankings appears to support the relative stability over time of occupational prestige ranking and also Chiswick's assumption that socioeconomic occupational ranking as measured by the Duncan index is much the same in other countries as it is in the U.S.⁸

Chiswick's data are for white men aged 25 to 64 years. To achieve analytical simplicity by ignoring white women and young persons, and nonwhite men, women, and young persons is understandable, but the results therefore have less general validity for understanding occupational mobility of all immigrants. David North pointed out to me the upward economic and occupational mobility of many immigrant women who became factory workers after household work or farm labor. But I am more concerned about potential for confusion on ethnic and racial descriptions. The 1970 Census question on race calls for self-description. Mexico's population is 60 percent mestizo (Indian-Spanish), 30 percent American Indian, and 10 percent Caucasian.⁹ Cuba's population is 30 percent white, 20 percent mestizo, 49 percent Negroid, and 1 percent Oriental, according to a 1971 report, which said, "The majority of those leaving the island (since 1959) are upper and middle-class whites and mestizos (persons of mixed heritage, including Negro-white, Negro-Chinese, and white-Chinese). There is also a high percentage from the Jewish community and an undetermined number of Chinese among the refugee population."10 Furthermore, Chiswick's paper makes no reference to U.S. immigration law and policies and to illegal immigration which affect the demographic and occupational characteristics of the U.S. immigrant population. I conclude that Chiswick's white male sample of Cuban and Mexican-born white men is not representative of the ethnic and racial composition of the immigrant population from these countries.

⁸ Donald J. Tremain, Occupational Prestige in Comparative Perspective (New York: Academic Press, 1977).

⁹ Countries of the World and Their Leaders (Detroit: Gale Research Co., 1977), p. 677.

¹⁰ Howard I. Blutstein et al., Area Handbook for Cuba (Washington: U.S. Covernment Printing Office, 1971), p. 71.

DISCUSSION

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The Department of Labor (DOL) operates a multi-million dollar labor market information program. In the past, much of the occupational LMI we turned out was of a statistical nature. Written by economists and researchers, it was directed to other economists and researchers, and to government officials and manpower planners. Obviously since one of our missions is to serve as a labor market intermediary, we have always provided some occupational LMI for employers and job-seekers.

Only relatively recently, however, did we begin to focus attention on the LMI needs of another major audience, youth in transition from school to work. In 1974, the Department launched a new initiative—the Occupational Information Systems Grants Program—to improve the quality and dissemination of occupational information to the nation's youth.

Even more recently, the Congress made apparent its interest in fostering more widespread availability of occupational LMI particularly for young people. The Education Amendments of 1976 and the Youth Employment and Demonstration Projects Act of 1977 each mandate the creation of national and state agency committees to develop and disseminate occupational LMI.

I am pleased to have this paper by Drs. Bain and Fottler. It confirms our understanding of the sources high school seniors use to obtain the information they need for exploring occupations and choosing careers. I look upon this paper as a kind of "market survey," a useful step in the process of understanding this "new" audience, and of promoting methods to package and deliver LMI in formats and media in the most effective manner.

It is worth noting that the survey of seniors in the 14 Alabama high schools described in the paper was part of a pilot effort to determine the impact on students of occupational information systems developed by grantees under the new DOL program in eight states: Alabama, Colorado, Massachusetts, Michigan, Minnesota, Ohio, Washington, and Wisconsin. This paper represents the first formal presentation of data from that study.

As the authors of this paper indicate, their findings that informal sources of occupational information, such as parents and friends, are used more frequently than formal sources, such as professional staff and the media, confirm previous research in this area. One new finding, that a family's socioeconomic status (SES) is less important as a determinant of the use of occupational information than other research has indicated, is of interest. It is not clear, however, whether this finding may be due to the uniqueness of the respondents' social environment, or perhaps to the study's particular method of measuring SES as contrasted with other SES indices.¹ The study's regression results showing relatively low coefficients of determination for the variables chosen to explain the information sources used also point out the need for further work in this area.

Be that as it may, I should like to pursue the paper's suggestion that "public policy aimed at expansion of occupational information for minorities should emphasize the media." Before doing so, however, some perspective on the general problem of the lack of occupational knowledge seems in order. I shall assume for the purposes of this discussion the utility of occupational information for career choice and a more optimal allocation of labor as addressed by human capital theorists and others. This is said in full recognition of the mixed findings to date of the effects of occupational knowledge on such outcomes as wages, unemployment rates, occupational status, and occupational goal information.²

While this paper and others report a number of factors that appear to account for the relative amount and types of occupational information possessed by the individual, it is important to note that the problem of lack of knowledge of the broad spectrum of occupational oppor-

¹See, for example, Andrew I. Kohen, "Determinants of Early Labor Market Success Among Young Men: Race, Ability, Quantity and Quality of Schooling" (Columbus: Center for Human Resource Research, Ohio State University, 1973), pp. 177–83.

² See, for example, Herbert S. Parnes and Andrew I. Kohen, "Occupational Information and Labor Market Status: The Case of Young Men," *Journal of Human Resources*, vol. 10 (Winter 1975), pp. 44–55; Frank L. Mott and Sylvia F. Moore, "The Determinants and Consequences of Occupational Information for Young Women" (Columbus: Center for Human Resource Research, Ohio State University, 1976); Robert L. Darcy, Richard V. Kauffman, and Edward P. Milker, "Manpower Economic Education and the Transition from School to Work: Impact on a Cohort of Ohio Secondary School Students" (Ft. Collins: Colorado State University Center for Economic Education, 1974); John T. Grasso in collaboration with Andrew I. Kohen, "The Formation and Revision of Goals by Young Men," in Herbert S. Parnes et al., *Career Thresholds: A Longitudinal Study of the Educational and Labor Market Experience of Young Men*, vol. 6, R&D Monograph 16 (Washington: U.S. Department of Labor, Employment and Training Administration, 1977).

tunities is widespread, particularly among youth, and not just among minorities or the disadvantaged alone.

Thus, for example, Prediger and his colleagues reporting on their 1973 national survey of 8th, 9th, and 11th graders, which included a test on occupational characteristics and preparation requirements, found that less than 50 percent of the 11th graders could answer more than three-fourths of the occupational characteristics items correctly. This, in spite of the authors' judgment that "with appropriate career guidance experiences" at least 90 percent of the students should have achieved this level of success. As for the occupational preparation requirements items, slightly less than 40 percent of the 11th graders could answer three-fourths of these correctly.³

Similarly, as reported by Reubens:

The National Longitudinal Survey of Ohio State University's Center for Human Resource Research gave males and females 14 to 24 years old limited and fairly simple tests of occupational information in 1966. Through multiple choice questions, the young males were asked to identify the duties and choose the amount of schooling associated with each of 10 occupations, and, for eight pairs of occupations, to select the one which provided the higher average annual earnings; the test results for the boys aged 14 to 17 showed fairly poor performance. The female contingent was asked only to identify the duties of 10 occupations, all of which employed some females. Over onefourth of in-school white girls 15 to 17 years old made high scores (defined as six to 10 points out of a possible 10), against 9 percent for black girls. Among girls of the same age not enrolled in school, only 8 percent of white and 7 percent of black girls had high scores.4

Given the widespread lack of knowledge and the generally consistent findings on the predominant use of parents and friends in obtaining occupational information, the conclusion must be drawn that these informal sources have failed to do an adequate job in providing needed information. Consequently, public policy insofar as DOL has been concerned—and as reflected by the eight grantee states we are working with—has stressed the need to serve all individuals involved in making career choices through the use of formal means of information develop-

³ Dale J. Prediger, J. D. Roth, and R. J. Noeth, "Nationwide Study of Student Career Development: Summary of Results," ACT Research Report No. 61 (Iowa City: American College Testing Program, 1973).

⁴ Beatrice G. Reubens, "Bridges to Work: International Comparison of Transition Services" (New York: Conservation of Human Resources, Columbia University, 1977), p. 57.

ment and delivery including such media as computers and microfiche. The present relatively high ratio of fixed to variable costs of developing occupational information also adds to the utility of serving the entire spectrum of those making career choices despite the admittedly relatively greater need which some subgroups have for information.

Although the use of media for information delivery is necessary to fill the occupational knowledge gaps characteristic of the majority of those making career choices, experience suggests it is the use of media *along with* other sources—such as parents, counselors, and teachers that produces the most efficacious delivery and utilization of occupational information.

Experience with DOL's program of state occupational information systems reveals that media, such as computer terminals, can by themselves be a highly useful tool for delivering information and stimulating the career choice process. Indeed, it was in full consideration of the necessity to have attractive, efficient, easily usable delivery mechanisms for all potential information users that DOL was prompted to establish certain guidelines in this area.⁵

Nevertheless, our experience and that of others confirm the need to couple the use of the media with such personal resources as parents, teachers, and counselors. At least two reasons account for this strategy. First, to be useful, information must be credible. Computerized information has generally been rated as highly acceptable.⁶ Still, experience suggests that additional interactions between information users and those they respect and consider knowledgeable enrich the acceptability and utilization of the information.

Second, given the fact that the occupational information that is generated must be generalized to the extent that it will be useful to many information seekers, interpretation of the relevance of such information to the individual is often necessary.

To sum up, I would remind you that adequate occupational information is a necessity for the vast majority of individuals making career choices, not just particular subgroups; and that policy prescriptions calling for the use of media for information delivery must recognize the need to integrate media use with the community's personal resources.

The Bain-Fottler piece is an interesting and—at least for my organization—a useful addition to the literature, and we look forward to reviewing more studies of this type.

⁵ See "Career Information Systems: Standards for Organization and Development" (Washington: U.S. Department of Labor, Employment and Training Administration, 1977).

⁶See JoAnn Harris, "The Computer: Guidance Tool of the Future," Journal of Counseling Psychology, vol. 21, no. 4 (1974), pp. 331-39.

II. RECENT DEVELOPMENTS IN PUBLIC-SECTOR COLLECTIVE BARGAINING

Unionization of the U.S. Armed Military Forces—Its Development, Status, and Future

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Introduction

It is noteworthy that the very first labor dispute between federal employees and the United States government over working conditions for civilian employees took place at the Philadelphia Navy Yard in 1835. Today the U.S. Department of Defense is preoccupied with the problem of not only its civilian employees, but the emerging concern of some members of its uniformed forces that the trade-union model of due process is adaptable to conflicts that may take place between the upper and lower ranks of command.

In an earlier period many citizens of the United States refused to relinquish their rights of citizenship when they entered America's workshops. The workshop was governed by the authoritarian master-andservant relationship. The answer to this dilemma was the invention of the trade union and the associated procedures such as arbitration of disputes between employer and worker, substituting due process for employer authoritarianism. Today many citizen-soldiers who have entered the all-volunteer anned forces are asking the question whether the historic authoritarian model of command persists because of inertia or because it is the most effective kind of organization to perform the military mission in a democracy. Modern high school graduates, the

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source of recruits for a volunteer armed force, have been exposed to newspaper stories about the sadism of some marine training sergeants at Paris Island. These stories have left them wondering if they must subject themselves to this kind of brutality until an untimely fatality hits the newspapers. Novels like the *Caine Mutiny* have elicited the question in their minds, at what point do you blow the whistle on a psychotic Captain Queeg? To be sure, our military force commanders have not ignored these questions. They have developed institutions like the army's post of inspector general to give the lower ranks some independent access to the upper reaches of command. They have researched problems of applied psychology and indoctrinated their officer corps with theories of command and leadership that eschew authority of rank as a principal source of power to give orders. They have placed emphasis on the importance of leadership.

But when all is said and done there is no independent system of checks and balances separate from the line of military command to check abuses. To be sure, there is the compelling argument that the luxury of a time-consuming system of checks and balances is impractical under combat conditions. Does the same argument hold for a peace-time military force?

Military men by and large reject the concepts of checks and balances in the same terms that an earlier generation of police chiefs, fire marshals, and sea captains voiced. The unionization of these occupations has not reduced safety at sea in ships under the command of dues-paying masters, members of the union of Master, Mates, and Pilots. The engineers and seamen, all members of their sea-going local unions, seem to sail effectively under the unionized master's command. We have not been able to determine any marked diminution of police or fire-fighting effectiveness since these occupational groups have joined local unions and negotiated the terms of their employment with the public authorities. It has been these examples, plus those of unionized military establishments in the military forces of our European allies, notably the Federal Republic of Germany, Norway, and Sweden, that in all likelihood raised this question in the minds of the leadership of the American Federation of Government Employees when they announced a premature drive to enroll members of the armed forces in their ranks.

A Comparison with European Experience

The purpose of this paper is to examine the present and prospective climate for the organization of the military forces of the United States against the background of the trade-union organization of the armed forces among our European allies.

The Wharton School of the University of Pennsylvania was the fortunate beneficiary of a grant from the Office of Naval Research to look into and report on the unionization of the armed forces. The principal and co-principal investigators were Professors Ezra Krendel and William Gomberg.

This grant gave us the opportunity to spend the summer of 1975 investigating the unionization of the armed forces in Norway, Sweden, and the Federal Republic of Germany. Although we actually added Holland, Austria, Great Britain, and Denmark to our itinerary, all of whom have some degree of organization, this paper will confine itself to the first three inasmuch as we feel that these examples—Norway, Sweden, and Germany—offer the best informative data against which to analyze the U.S. problem. I have drawn my information from our notes and Dr. Krendel's write-up of our observations of the European Military Unions.¹

The Problem of Subversion Disguised as Trade-Union Function

A distinction must be made at the outset in looking at European military trade unions. There are those who confine themselves to the problems of working conditions and due process. The mission of the military is left for definition to the democratically elected public authority. Then there are those organizations that attempt to wear a tradeunion cover to seek an illegitimate veto of the military mission by encouraging a rejection of the national policy by agit-prop activities among the armed forces membership. Occasionally this subversive element will make progress among conscript organizations. The conscripts do not look upon themselves as professional soldiers. They are primarily interested in serving their "time" and returning to their civilian pursuits. By and large their lack of interest in the profession leads them to ignore the organization that alleges to speak in their name. The conscript organization is captured by political extremists who then use the organization's platform for purposes irrelevant to the interests of the absent membership, but vital to their revolutionary purpose and subversive of the military mission. They seek to achieve by subversion what they cannot accomplish via the public ballot. The U.S. had an experience with

¹ See Ezra Krendel and Bernard Samoff, eds., Unionizing the Armed Forces (Philadelphia: University of Pennsylvania Press, 1977), pp. 135–56; also Alan Sabrosky, ed., Blue Collar Soldiers (New York: Foreign Policy Research Institute, 1977) (report of a symposium held April 1977 in Philadelphia, under the Institute's auspices).

this kind of thinking during the tenure of the Vietnam soldier organization, now extinct.

This background must be kept in mind when we analyze the crosscurrents of opinion within the military establishment itself. Colonel William J. Taylor, Jr., a member of the permanent faculty of the U.S. Military Academy at West Point, presents six issues around which the debate on military unionism is rationally argued within the armed forces themselves. These are: (1) societal trends and public employee union; (2) diverse views on unionization of the military; (3) relevant analogies; (4) impact of unions on military effectiveness; (5) constitutional rights and military membership in unions; and (6) alternatives to military unionization.²

Colonel Taylor hinges his argument for unionization on the creation of the all-volunteer armed forces, the pattern of citizen recruitment since the abandonment of the draft. The Colonel asserts that existing mechanisms for promoting justice for service personnel are inadequate and that military unionism is one answer to this problem.

Colonel Taylor does note the possible negative effects of unionism on military effectiveness, and he lists as an alternative to unionism, the abandonment of an all-volunteer force and the return of compulsory national service. However, he feels that a military union would assist the military leader by instituting the kind of self-discipline in the force that responsible civilian unions exercise when confronted with wildcat strikes. In addition, he expects that the existence of a military union would facilitate communications between the upper and lower levels of command, thereby strengthening rather than usurping the chain of command.

Messrs. Denholm and Humes, on the other hand, voice what they consider the fundamental incompatability between unionism and the military mission. They declare that collective bargaining is a system for presenting demands based on an adversary relationship, and that inasmuch as unions in the public sector have invoked strikes as a means of "illegitimate" pressure against popular sovereignty, there is no reason to believe that they would act differently in the military. In addition the political activities of unions would project the nonpartisan military into partisan politics as a military interest, with all the dangers that this implies for the emergence of left-wing and right-wing Caesarism.

Messrs. Denholm and Hume warn that the military union incorporates within itself the officer corps as well as the noncom. officers and privates and that sooner or later ambitious officers with a white-horse complex can use these unions to realize their own ambitions.

² Sabrowsky, Blue Collar Soldiers.

PUBLIC SECTOR

The Experience with Military Unionism Abroad

THE NORWEGIAN EXPERIENCE

The Norwegian Parliament, the Storting, between 1931 and 1968 passed a series of bills that legitimized organizations for soldiers. Conscripts elected representatives (tillitsmen) as spokesmen for companysize units. A battalion of a thousand men would be represented by five tillitsmen who, together with five officers—the commander, the deputy commander, the chaplain, and the doctor plus one other officer—composed a board of trustees for the battalion, with the commander as its chairman. Complaints and problems arising in the battalion network, unresolved at the local level, were presented to the ombudsmen. In 1968, the tillitsmen were authorized to hold a national convention. Shortly thereafter, the Red youth group of the Workers Communist party as well as the youth group of the regular Norwegian Communist party saw in the tillitsmen organization a vehicle of political activism and agit-prop activity. Infiltrating these organizations was relatively easy.

The average Norwegian young citizen experiences conscription as a temporary form of required penal activity which he was anxious to leave behind when he had completed his term of service. He was not military career oriented. Company tillitsmen were elected at the end of the first week that conscripts spent in camp. The lack of interest of the conscriptees provided an opportunity for the highly motivated fanatical left to capture posts far in excess of their miniscule following in the public electorate. By standard communist tactics, the left captured post after post, with the result that the political complexion of the tillitsmen was as follows: six from the Marxist-Leninist group and one centrist. The tillitsmen organization became a source of agit-prop activities designed to subvert the military mission and NATO, much to the chagrin of the ruling Social Democratic party.

The Social Democrats introduced two bills into the Storting in 1974 in an effort to checkmate the communists by forbidding political activity by conscripts and providing a forum for competition in political ideas. The struggle between authoritarian and social democratic ideologies continues.

Sweden

The Swedish trade union movement is made up of the LO, with a membership of 1.8 million blue-collar workers; the TCO, the central organization of white-collar salaried employees; and SACO, the Swedish confederation of professional employees and independent professionals, such as lawyers and doctors.

Military unions in Sweden represent 99 percent of the regulars of the personnel in the Swedish armed forces. Conscripts are barred from these unions. The unions had their origin in 1907 when a company-grade officers union was founded. It was shortly followed by the organization of a union for noncommissioned officers. The purposes of the union was to improve officers' salaries and working conditions and to extend the retirement age. The SOF officers unions are serviced by five full-time employed members who carry on under the direction of the executive board of the union. The union of officers from ensign to lieutenant (KOF) and the union of noncommissioned officers (POF) are both affiliated with TCOS, the civil-service division of the united white-collar federation.

The government has been dominated by the Social Democratic party which, in turn, is dominated by the blue-collar unions organized in the LO. Conversations with the officers of the military unions revealed that many of them felt as if they were a not-so-well-treated minority under the domination of the LO and forced to conform to its egalitarian principles. Government policy to compress wage differentials between blue-collar workers and professionals was resented by the officers' union.

In March 1974, the TCOS and SOF issued a document stating their mission and, in the name of democracy, defining their new objectives:

In addition to information and mutual consultation rights, employees within the defense organization must be guaranteed the right of codetermination as soon as possible. The right of codetermination must be built up according to an established pattern and be relevant throughout the hierarchy of the defense sector. The right of codetermination shall have a trade union foundation and shall be developed through collaboration among the union organizations.

Do these objectives conflict with response to the chain of command, or are they a luxury specific to a country who has not fought a war in over 100 years?

THE FEDERAL REPUBLIC OF GERMANY

Military unions were legalized in Germany after a two-year legal dispute ending on August 1, 1966. On that date a defense ministry decree permitted unions to solicit membership among the armed forces.

The Deutscher Gewerkshaftsbund undertook a campaign to organize

the military from general to private. The name of the union was the German Public Service Transport and Communications Worker union (OTV), affiliated with the Deutscher Gewerkshaftsbund (DGB). Its rival union, the association of the German Army (Deutsches Bundeswehr Verband) also undertook a membership campaign. The DBwV is closely associated with the DBB, the organization of top civil-service managers; they share an elitist point of view.

Both the OTV and the DBwV lobby for soldiers' rights, welfare, and pay. However, they have very different philosophies. The object of the transport workers union is to keep the army close to its working-class origins and basic civilian orientation. Though it voices allegiance to democracy, the "organization of the German Army" is a completely nationalistic-oriented career institution reminiscent of the prewar Stalhelm. It claims some 70 percent of the armed forces as members, from the lowly private to the inspector-general of the army.

The rival OTV includes about 50 percent of the nontenured civil servants within its ranks. By 1975 it could claim only 8,000 members, ranging from private to lieutenant general. The great majority of its members are junior officers, who depart from the philosophy and attitudes of the old officer corps. The DGB, formerly antimilitary because of its historic roots, is now encouraging its young men to become officers and resist assimilation by the old officers corps' elitist philosophy. To the OTV, the DBwV is a facade for the old siren songs of blood and honor, the accoutrements of German militarism and privilege.

The OTV has been adapting the concept of codetermination to the German military mission. They are:

- 1. To restrict existing positions of power and to subject them to effective control,
- 2. to humanize 'the whole of social and economic life,' that is, the workshop as not only a 'place of production' but also 'a place of human association,' and
- 3. to put 'formal democracy' into practice 'in a decisively important sphere of life.'3 $\,$

These examples of military unionization present a number of relevancies to the American situation.

The Norwegian example with subversive tillitsmen finds its analog in the American servicemens' union organized in 1968 during the Vietnam war with the real purpose of subverting the military's Vietnam mission in ways foreign to the American democratic tradition.

³ Sabrowsky, Blue Collar Soldiers.

Germany's experience with the DBwV, the rival "union" of the German army, is a reminder of David Y. Denholm and Theodore C. Humes's caveat that unionization can provide a vehicle for ambitious officers to play with Caesarism.

The feelings of the Swedish officers against proletarianization to match the blue-collar style of life must be uppermost in the minds of our own military officers when they are subjected to raillery and budgetcutting. They are likely to overlook the distinction between honest pacifism and subversive conspiracies under these circumstances. The climate for trade unionism within the U.S. armed forces at the present time is pictured by the following set of events.

The American Environment

The passage by the Senate of the Strom Thurmond act, with only four senators dissenting, makes it a criminal offense for any member of the armed forces to join a union. In addition, any organization attempting to solicit membership among the armed forces is likewise subject to criminal penalties.

The act goes even further in Section 3, which instructs organized civilian technicians, employed by reserve components of the armed forces and who are also members of reserve components of the armed forces to terminate their membership in any collective bargaining unit. In other words, civilians who have exercised collective bargaining rights in the past must now drop this protection.⁴ A parallel bill has not yet come up for a vote in the House. The administration has opposed the bill, although the President and the Secretary of Defense have expressed their opposition to collective bargaining for the military. They prefer the route of control by departmental order.

The Secretary of Defense issued proposed D.O.D. Directive 1354.1, prohibiting collective bargaining in the armed forces. Section 143.5 of the directive defines permissible activity. Paragraphs e and f of that section leaves the civilian technicians with their historic organization and collective bargaining rights intact. In all likelihood the final issuance of this directive will head off the congressional legislation.

It is significant that the moribund civil service appeal machinery that had been the instrument of the top bureaucracy has taken on a new vitality since its challenge by an alternative arbitration route of appeal. Perhaps a similar development of the country's sensitivity to like needs in the military will lead to changes in public attitude some time in the

⁴ Congressional Record (Senate), 9/16/77, pp. S156-62.

future when the public will have learned that no bureaucracy—not even the military dedicated to country and honor—can be trusted to monitor itself and that a system of checks and balances is required for this purpose.

The American Federation of Government Employees, whose officers expressed an interest in organizing the military, has been compelled to put such a project on the back burner.⁵ A referendum put to the members of the AFGE by its president, Kenneth Blaylock, resulted in a 4-1 rejection of such an undertaking by the rank and file.⁶ The prospect for unions in the American military looks dismal indeed when we review these events—that is, until we begin to recall some history.

Back in the thirties President Roosevelt, largely responsible for the revitalization of collective bargaining in the private sector, expressed complete and total opposition to collective bargaining in the public sector. The reason that collective bargaining in the public sector has become a commonplace is that the problem of due process for aggrieved public workers repeatedly came to the fore until a suitable mechanism was created for their solution, specifically the government trade union. President Roosevelt was followed some 30 years later by President Kennedy who by executive order established collective bargaining in the federal executive service.

The matter of due process in the armed forces of the U.S. will continue to assert itself over the years, and what is forbidden at the present time may well emerge as conventional behavior in the future.

⁵ Bureau of National Affairs, Government Employee Relations Report, 8/29/71, 723:34.

⁶ Bureau of National Affairs, Government Employee Relations Report, 9/12/77, 725:7.

Some Determinants of Collective Bargaining in Government Business-Related Activities^{*}

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Government business-related activities can be found in a number of institutional and structural settings. Government corporations are represented by the U.S. Postal Service, Tennessee Valley Authority (TVA), and a number of banking and insurance operations, such as the Federal Deposit Insurance Corporation. Although an agency of the federal government, each of these has an independent board of directors, most of whom are appointed by the President of the United States. Not all business-like functions of the federal government operate in a government corporate structure, however. Some agencies of the federal government have engaged in a variety of business activities, including power generation and transportation. Bonneville Power Administration and Alaska Railroad, for instance, are part of regular executive agencies. Other business-type dealings of the government are conducted by private agents, but these, too, vary in structure. Much of the work established under the Atomic Energy Act of 1954, as amended, is contracted to private corporations and university laboratories.¹ An example is Union

[•] This paper is based largely on government documents. Information on the atomic energy labor relations program was obtained from Ms. Irene Unterberger, formerly an employee of the Atomic Energy Commission's Division of Labor Relations and of the Lawrence Livermore Laboratory, a contractor to the Atomic Energy Commission and the Department of Energy. Useful secondary sources were J. Joseph Loewenberg, "Collective Bargaining in the U.S. Postal Service," in *Collective Bargaining: Contemporary American Experience*, ed. Gerald G. Somers (Madison, Wis.: Industrial Relations Research Association, forthcoming), and Michael L. Brookshire and Michael D. Rogers, *Collective Bargaining in Public Employment* (Lexington, Mass.: D.C. Heath and Co., 1977). Author's address: School of Business Administration, Temple University, Philadelphia, PA 19122.

¹ The Department of Energy, established in August 1977 under Public Law 95-91, incorporated various activities previously located in a number of other government agencies. Included were the Department of Interior facilities engaged in power marketing and transmission, such as Bonneville Power Administration, and functions of the Atomic Energy Commission, such as production facilities and laboratories. The provisions of Section 161 of the Atomic Energy Act of 1964, as amended, which control government authority in negotiating with private contractors, was transferred at the same time to the Department of Energy.

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Carbide, which has operated the Oak Ridge, Tennessee, plants for 30 years. The National Railroad Passenger Corporation (Amtrak) is a private, for-profit corporation established by the Rail Passenger Service Act of 1970 to provide intercity passenger rail service. Nine of its 13member board of directors are selected by the President of the United States, and it remains dependent on federal subsidies for its continuation. The Regional Rail Reorganization Act of 1973 created the nonprofit Government Railway Association, which, in turn, established the United Rail Corporation (Conrail) as a private corporation to assume the rail property and activities of seven defunct northeast and midwest railroads. What all of this suggests is that limiting a study of collective bargaining implications to government corporations would exclude substantial amounts of government business activities. A more useful approach would be to analyze ingredients of federal government businessrelated activities that affect collective bargaining.

Not all government business-related activities have become involved in collective bargaining. A review of the types of organizations mentioned suggest some of the factors which affect the existence of and climate for collective bargaining in government business-related activities.

Legal Environment for Collective Bargaining

Inferences about collective bargaining histories and legal frameworks cannot be drawn from the classification of government business-related activities according to structure and ownership. TVA, for instance, began collective bargaining four decades ago and was subject to the executive orders governing federal labor relations from 1962 until it was specifically exempted in 1976. A number of activities originally in the Department of Interior, some of which have recently been transferred to the Department of Energy, also began bargaining prior to Executive Order 10988 in 1962 and continue to be part of the federal labor relations program.² Postal employees did not begin to bargain with management until Executive Order 10988. When Congress legislated creation of the U.S. Postal Service, however, it removed postal labor relations from the executive order system in favor of the private-sector legal framework with two exceptions: postal employees were not allowed to strike or to bargain for union-shop provisions in their agreements. Private employers

² In 1961 the Department of Interior had collective bargaining agreements with 23 unions in the following bureaus: Alaska Railroad, Bureau of Reclamation, Bureau of Mines Helium Activity, and power plants of the Bureau of Indian Affairs. U.S. Civil Service Commission, *Employee-Management Cooperation in the Federal Civil Service* (Washington: U.S. Government Printing Office, August 1962), p. 305.

who contract to operate atomic energy projects are subject to rules for reimbursement adopted under the Atomic Energy Act of 1954. Some rules may vary among contractors, thereby affecting the degree of agency involvement in bargaining. The financial aspects of all collective bargaining agreements between private contractors and unions are subject to agency approval. The atomic energy system of labor relations also provides for the National Labor Relations Board to conduct representation elections, for the exclusion of safety and security from the scope of bargaining, and for its own impasse procedures. Conrail and Amtrak continue to operate under the provisions of the Railway Labor Act, although the legislation authorizing their creation contained special measures to protect the tenure and earnings of employees of the former railways and, in the case of Conrail, mandated a single agreement with each union.

The legal framework for collective bargaining is important. The executive order system limits collective bargaining in federal agencies that had no experience prior to 1962. Full-scale bargaining became possible in the U.S. Postal Service because of the Postal Reorganization Act of 1970. Legislation is not a sine qua non for meaningful collective bargaining, however, as demonstrated by TVA and various Department of Interior activities in the period before 1962. In other cases, legal authorization for collective bargaining has not led to implementation of the process. Hence, other factors must contribute to the explanation.

Specific detail of the legal framework for collective bargaining will have implications for the extent and conduct of bargaining. One example is representation rights accorded to supervisors. Craft groups in the private sector may include first-level supervisors, and similar groups in the public sector may also. Recognition may go further in government business-related activities. Formal consulting rights are extended by law to organizations selected for such purposes by supervisors in the U.S. Postal Service. Postal supervisors have taken advantage of the right and have challenged management decisions through legal suits. While the current recognition accorded supervisors chafes management, supervisory organizations seek to expand their legal rights. Further progress to collective bargaining rights would affect internal organizational relationships and make possible coordinated efforts by employee and supervisory organizations.

Economic Environment of the Business-Related Activity

The nature of an enterprise's activity and the economic environment in which it operates influence its labor posture. While all of the activities considered in this paper have been termed business-related, some can more easily be found in the private economy than can others. The more closely an activity resembles one existing in the private sector, the more likely it is to follow established collective bargaining patterns. The public power-generation and railroad enterprises are perhaps the clearest examples. Employee, union, and management proclivities reinforce the tendency, and public critics may be more tolerant of quasi-private labor relations in such circumstances. Collective bargaining in government business-related activities are not necessarily identical with private-sector bargaining in the same industry, as the TVA example illustrates, but the existence of private-sector counterparts in a related business environment encourages parallel developments. Identification of government business-related enterprises to private-sector counterparts applies in cases where collective bargaining is weak (banking and insurance) as well as where it is relatively strong (power generation and transportation).

Other business-related activities have no full counterparts in the private sector. A national postal service has always been a function of government; Congress has long granted such a service monopoly over first-class mail. Atomic energy production programs are also unique to government. In such cases, the pressures for collective bargaining cannot come from the general industry environment. Private-sector precedent is lacking, and identification with government and government labor relations is strengthened.

Some government business-related activities were formed to carry out new functions, e.g., TVA. In others, on-going government functions were transferred from one structural form to another, as occurred when the Post Office Department became the U.S. Postal Service. In still other cases, private-sector functions were converted into quasi-public forms; Amtrak is a case in point. The existence of precedent organizations performing identical functions influences a variety of employer behavior and attitudes, including labor relations. It also affects the employer's ability to think innovatively about the activity, its employees, and employee-employer relations. The TVA formula was more likely to emerge in a new enterprise than in an on-going function. Likewise, the transfer of private railway labor relations into Amtrak was almost inevitable as long as the economic environment permitted it.

The economic development of government business-related activities is another factor affecting collective bargaining. An activity able to operate and flourish in a competitive environment is in a much better position to cope with collective bargaining demands and to retain an independent stance than one in a declining industry or in a poor competitive position. This factor is frequently related to financial independence, which is discussed below.

Independence

Independence of the government business-related activity is a key to its ability to determine its labor relations program. Independence may take two forms: freedom from outside regulation and financial autonomy.

Freedom to make independent decisions is a relative matter in government business-related activities. The limitations of the executive order system of collective bargaining are now largely due to congressional control of major issues normally dealt with in bargaining. Congressional involvement may extend to other areas. Veterans' preference influences a host of personnel decisions from hiring through layoffs and discharges. Government corporations as well as federal executive agencies are bound by such requirements. Civil Service regulations and procedures contain other restrictions on individual agency autonomy; only a few agencies are exempt from Civil Service: e.g., TVA, U.S. Postal Service, Federal Reserve System, and security agencies. In general, Congress has granted government corporations more autonomy than executive agencies. That is one reason for the earlier and fuller development of collective bargaining in TVA than in power-generating operations of the Department of Interior.

Independence is also affected by agency structure and operations. Department of Interior bureaus were semiautonomous and therefore had considerably more latitude than bureaus in many other executive agencies. On the other hand, private contractors performing atomic energy work must abide by regulations enforced by the public agency. Included are items usually within the scope of regulatory agencies, such as Wage & Hour Division and OSHA of the U.S. Department of Labor.

Involvement by outside agents—whether Congress, Civil Service Commission, or higher levels in the enterprise's organization—in potential substantive areas of bargaining impedes the bargaining relationship. The more that external controls exist, the less the parties are able to determine their own course.

A second aspect of independence involves money. Those enterprises that are self-financing, i.e., their operating costs are covered by revenues collected for services rendered, are better able to direct their labor relations activities free from outside interference. Financial independence also permits management and unions to concentrate on their collective bargaining relationship rather than to devote resources and attention to

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lobbying in Congress. TVA and the U.S. Postal Service offer contrasting examples of this point. TVA has been self-financing for almost two decades, thereby giving the agency considerable freedom in bargaining on financial matters. The postal parties started differently: during the Post Office Department, unions and management were heavily engaged in lobbying on many issues, including financial support. The U.S. Postal Service was created on the basis that it would be self-financing by 1985. The realization that the goal would not be met has renewed congressional interest in postal affairs and lobbying activity by unions and management. The result, at least for now, is a weakening of collective bargaining and increasing dependence on outside sources. A parallel development has occurred in Amtrak and Conrail. The deteriorating financial condition of these enterprises has resulted in unions seeking some objectives through legislation and congressional subsidies instead of bargaining all issues with management. While political pressure is an inevitable part of enterprises involved with government, the degree of lobbying is affected by the enterprise's dependence on federal monies to support its operations.

Employees

The composition of the workforce is a significant determinant of collective bargaining. Many of the workers who have had the most extensive collective bargaining experience—in some cases predating authorizing legislation—have been members of crafts familiar with collective bargaining in the private sector. Construction and power-generating workers in TVA and Bonneville Power Authority and railroad workers on the Alaska Railroad, for instance, were imbued by their craft with the concepts of collective bargaining. Their skills were transferable to private industry, and they could easily compare their working conditions with comparable workers in the private sector.

In contrast, postal workers neither knew from their craft about collective bargaining, nor could they easily find comparable employment in private industry. Postal workers have long been well organized, but they lacked direct examples of collective bargaining in their own work. Indeed, postal workers were suspicious and dubious about extensive collective bargaining that was part of postal reorganization.

Workers who are employed in quasi-public corporations as the result of failure of private industry, such as Amtrak, are likely to transfer with them their previous attitudes toward and knowledge about collective bargaining.

While blue-collar workers have been most disposed to favor repre-

sentation for collective bargaining, there have been exceptions. The most notable have been white-collar engineers and technical personnel in the TVA Salary Policy Employee Panel. In exclusively white-collar industries, however, collective bargaining has made no more significant headway in government business activities than in the private sector.

Hence, employee attitudes and aspirations and employee identification as expressed in union affiliation influence representation and collective bargaining objectives.

Unions

Workers in government business-related activities are represented by a large number of unions. Most, but not all, of the unions are affiliated with the AFL-CIO. Among the exceptions are the National Rural Letter Carriers Association, the only nonaffiliate of four unions with exclusive bargaining rights in the U.S. Postal Service; the Teamsters, the lone nonaffiliate among 16 national unions in the Tennessee Valley Trades and Labor Council; two of the five unions that comprise the TVA white-collar Salary Policy Employee Panel; and some of the unions representing workers in atomic energy facilities. Some of the unions affiliated with the AFL-CIO organize and operate only among publicsector employees: examples are American Postal Workers Union. National Association of Letter Carriers, and American Federation of Government Employees. At least one other is a separate division of a larger union whose primary strength and experience is in the private sector: Mail Handlers, Watchmen, Messengers and Group Leaders Division of the Laborers' International Union of North America. The remaining workers are integrated into unions with traditional private-sector orientation. Fourteen of the Tennessee Valley Trades and Labor Council unions are members of the AFL-CIO Construction Department, and another is the International Association of Machinists. Alaska Railroad workers are affiliated with five railroad unions as well as three branches of American Federation of Government Employees. Amtrak and Conrail deal with the full gamut of railway craft unions. Employees of atomic energy contractors are for the most part represented by such international unions as the Oil Chemical and Atomic Workers, Service Employees' International Union, International Association of Machinists, and Laborers' International Union of North America.

Past experience of unions affects their orientation and abilities. Unions with extensive collective bargaining backgrounds have different skills and expectations than unions whose primary efforts have been devoted to lobbying. Even among private-sector unions, variations in success of organizing workers and bargaining in different environments may affect methods and goals.

Employee selection of union bargaining agents also affects the ability of different bargaining agents to coordinate activities if they deal with a common employer or operate in a common bargaining framework. Where national union autonomy and pride as well as job jurisdiction are at stake, unions are reluctant to surrender control. The postal unions have coordinated activities only for agreement negotiations. Even so, their alliance is tenuous because of jurisdictional disputes. The Tennessee Valley Trades and Labor Council, on the other hand, has developed a strong structure with considerable control over constituents during and between bargaining rounds.

Employer

Several factors relevant to the employer have already been discussed: formal structure, timing of the enterprise's creation in relation to the onset of activity, and independence in ability to operate. Two other features pertaining to the employer also affect the presence and kind of bargaining.

Attitudes toward union and collective bargaining are a function of individual personality and philosophy as well as enterprise origin and industrial environment. A diversity of attitudes has long existed within the federal government. The early leaders of TVA had considerably more favorable attitudes to unions than did a long line of postmasters general in the Post Office Department. The first chairman of the Atomic Energy Commission, Robert Leventhal, had been chairman of TVA and therefore was influenced by his earlier experience. Attitudes inevitably are reflected in policies and actions.

Related to the issue of individual manager attitudes are the persons responsible for directing and implementing labor relations policies. In enterprises where collective bargaining has developed as the result of established practice or internal evolution, those in charge of labor relations are likely to have been selected from existing management ranks and to be accepted members of the management team. Where full-scale collective bargaining has been unknown and is introduced instantly, however, internal expertise is usually lacking. Organizations then have the option of handling the new situation with inadequately trained staff already on board or hiring outsiders from nongovernment backgrounds. The latter course compounds the problem of acceptance of collective bargaining by the rest of management, as the U.S. Postal Service discovered in the period after 1971.

Conclusion

Government business-related activities are conducted in a variety of organization structures with different degrees of formal ties to the federal government. The underlying theme of this paper is that organizational structure is but one factor—and not always the most significant one—to explain the existence and development of collective bargaining relationships. The paper has advanced some other factors to account for existing differences in collective bargaining in government businessrelated activities. Among the more important may be the economic environment and independence of the activity. One implication of the paper is that creating new structural forms and changing legislative frameworks may affect collective bargaining, but that factors beyond legislative control will also determine the nature of collective bargaining in the activity.

Final-Offer Arbitration and Public-Safety Employees: The Massachusetts Experience*

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Municipal employees in the Commonwealth of Massachusetts have had the statutory right to bargain over wages, hours, and other terms and conditions of employment since 1965.¹ The law was amended in 1973 to allow for final-offer arbitration by package for police and firefighter units. The final-offer arbitration amendments took effect on July 1, 1974, and were scheduled to expire, after a three-year trial period, on June 30, 1977.² Thus, during the spring of 1977 the debate on whether or not to extend the provisions of the law was lively and intense. Firefighter and police unions were the main proponents of extension of the law, and organizations representing the city and town governments of the Commonwealth were the main opponents.

Under the Massachusetts statute, organizations of uniformed officers

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 $^{^1}$ Massachusetts public employees were granted the right to join unions and to present proposals to public employers in 1958 (Ch. 149, General Laws of Massachusetts). In 1964 the law was amended to allow state employees the right to bargain with respect to working conditions, but not wages. The following year all municipal employees were granted the right to bargain about wages, hours, and terms and conditions of employment (Chs. 150 and 150E, General Laws of Massachusetts).

² Sec. 4, Ch. 1078, Acts of 1973.

could petition the State Board of Conciliation and Arbitration for finaloffer arbitration only if (1) the employee organization participated in negotiations, mediation, and fact-finding in good faith; (2) 30 days had passed since the publication of the fact-finder's report; (3) prohibited practices proceedings before the State Labor Relations Commission had been exhausted with respect to complaints filed before the date of the fact-finder's report; and (4) an impasse continued to exist. If these conditions were met, the Board of Conciliation and Arbitration would then appoint a tripartite panel, which would conduct hearings. At the conclusion of the hearings, each side would submit its last best offer to the panel. The panel was required to pick either the entire last best offer of the union or the entire last best offer of the employer, and its selection would be final and binding upon the parties.

In addition to Massachusetts, Connecticut, Iowa, Michigan, New Jersey, and Wisconsin now use some form of final-offer arbitration to resolve police and fire disputes.³ Other states, including Alaska, New York, Pennsylvania, Minnesota, Nevada, Oregon, Rhode Island, Washington, and Wyoming, employ conventional arbitration to resolve police and fire disputes.

The Debate on Final-Offer Arbitration

The debate in Massachusetts in 1977 on the question of continuing final-offer arbitration is symptomatic of a nationwide concern to develop effective and equitable methods of resolving public-safety employee disputes. Final-offer arbitration is a response to some of the criticisms of conventional arbitration. Under conventional arbitration, the arbitrator fashions his award from the various issues submitted to him for resolution. Usually his award is a compromise solution that does not hold entirely with either the position of the union or the position of the employer. It has often been observed that an arbitrator in "conventional" cases will "split the difference" between the final positions of the parties. For this reason, it has been widely held that the parties subject to con-

³Massachusetts and Wisconsin practice a "pure" form of final-offer arbitration whereby each party must submit one final package incorporating all outstanding issues and the arbitrator must select what he considers to be the more suitable package. Connecticut, Iowa, and Michigan adopted a variant of the concept allowing arbitrators to consider each outstanding issue separately and select from one or the other side's final positions on an issue-by-issue basis. Michigan further limits finaloffer arbitration to economic issues only. New Jersey adopted a statute in 1977 that permits the parties in public-safety disputes to choose any "terminal procedure" to resolve an impasse after fact-finding. Final-offer arbitration is one of the choices available to the parties. If the parties are unable to mutually agree on one procedure, the statute provides that final-offer arbitration by package shall be used to resolve economic issues and final-offer arbitration by issue shall be used to resolve noneconomic issues.

ventional arbitration withhold concessions during negotiations and present extreme positions to the arbitrator. Consequently, it is argued that conventional arbitration has a "chilling effect" on negotiations, causing the parties to become more intransigent in their positions than they otherwise would be.

Final-offer arbitration is designed, at least in theory, to overcome this defect. If either party adheres to an unreasonable position, it runs a high risk of losing the arbitration case to its bargaining opponent. Thus the parties no longer have an incentive to withhold concessions during negotiations. Rather, the Draconian nature of arbitral decision-making under this process should cause each party to assume a stance that will appear more reasonable than its opponent's to the arbitrator. If these assumptions about the dynamics of the process are correct, then final-offer arbitration ought to decrease reliance on outside neutrals and lead to more voluntarily negotiated agreements.⁴

The final-offer technique has been criticized, however, on several grounds. First, inexperienced negotiators may not correctly perceive the risk involved in using final-offer arbitration and, if this is so, the presumed incentive to concede and compromise will not be present. Second, negotiators may perceive the risk, but may also be so convinced that their position is correct and just that they do not modify or compromise their stance in negotiations or the initial impasse steps. Third, arbitrators, for one reason or another, may not be able to discern the more "reasonable" of two offers and may select final offers that are not in the public interest. Fourth, under final-offer arbitration by package, a party may present a final offer that is eminently reasonable except for one so-called "sleeper" issue that is totally unacceptable to the other side or unreasonable by other standards. Thus, arbitrators can be confronted with the dilemma of choosing between two final packages, each of which may contain one or more unacceptable demands. In sum, finaloffer arbitration does not guarantee that awards made by arbitrators will necessarily meet tests of fairness and equity.⁵

In addition to the potential problems pointed out in the preceding paragraph, critics of the law in Massachusetts contended that final-offer arbitration clearly favored the unions, had—contrary to the theory of the technique—actually stifled the bargaining process, and had resulted

⁴ Of the many discussions, see especially Carl M. Stevens, "Is Compulsory Arbitration Compatible with Bargaining?" *Industrial Relations* (February 1966), pp. 38–51; Joseph R. Grodin, "Either-Or Arbitration for Public Employee Disputes," *Industrial Relations* (May 1972), pp. 260–66; and Peter Feuille, "Final Offer Arbitration and the Chilling Effect," *Industrial Relations* (October 1975), pp. 302–10.

⁵ See, for example, Charles Feigenbaum, "Final Offer Arbitration: Better Theory than Practice," *Industrial Relations* (October 1975), pp. 311-17.

in inflationary wage settlements. They pointed to the fact that unions won approximately two-thirds of the cases going to final-offer arbitration in the commonwealth. Some of the critics were particularly sensitive to the statutory requirement that municipalities must fund an arbitration award, whereas the funding of settlements reached through negotiations or other impasse steps could be put to a vote by the elected representatives of the town or city. Since arbitrated settlements were guaranteed funding, the critics contended that unions had little incentive to engage in meaningful preimpasse bargaining. Finally, the critics argued that the selection of the union's final position in a few well publicized, visible cases had created a high-wage pattern that other municipalities had been forced to follow even when their public-safety employee disputes had been resolved short of arbitration.⁶

Supporters of final-offer arbitration denied that it resulted in inflationary outcomes, claiming that salary settlements awarded in arbitration cases simply followed comparable settlements reached in other sectors of the economy. Furthermore, supporters argued that the statute's effectiveness was evidenced by the fact that there had been no work stoppages by public-safety employees during the law's existence. Finally, they argued that the proportion of union "victories" could not be used to judge the fairness of the law, since such a "box score" takes no account of the quality of the offers made by the parties to the arbitrator.⁷

In the remainder of this paper, we analyze the effect of final-offer arbitration on the process of police and firefighter bargaining in Massachusetts, focusing particularly on whether the availability of final-offer arbitration created a "chilling effect" in public-safety disputes.⁸

⁶ Paul C. Somers, An Evaluation of Final Offer Arbitration in Massachusetts (Boston: Massachusetts League of Cities and Towns Personnel and Labor Relations Bulletin, November 1976). Mr. Somers is director, personnel/labor relations of the MLCT. As pointed out later in the text, the MLCT has been the major opponent of final-offer arbitration in Massachusetts.

⁷ Richard K. Sullivan, "Final Offer Arbitration: The Massachusetts Experience," printed by the International Brotherhood of Police Officers. Mr. Sullivan is counsel to the IBPO, one of the major organizations representing police officers in Massachusetts.

⁸ For another assessment of the Massachusetts law, see Interim Report of the Governor's Task Force on Chapter 150E and Impasse Procedures, report submitted to Governor Michael S. Dukakis in September 1976. The Task Force, consisting of labor, management, and neutral representatives, had little statistical evidence on which to base an evaluation and so concluded that it was "premature to properly evaluate the law's success." Nevertheless, the Task Force recommended that the final-offer law be extended for an additional two-year period. See also, Lawrence T. Holden, Jr., "Final Offer Arbitration in Massachusetts," Arbitration Journal (March 1976), pp. 26–35. Mr. Holden was chairman of the Massachusetts Board of Conciliation and Arbitration for three years, until 1975.

Final-Offer Arbitration and the "Chilling Effect"

Exhaustive data gathered from the files of the Massachusetts Board of Conciliation and Arbitration allow us to trace the use of impasse procedures in police and fire negotiations over the period from fiscal year 1972 to December 31, 1976, of fiscal year 1977. Information was also gathered on the incidence of impasse in teacher negotiations in order to allow some comparisons to be made between groups of Massachusetts public employees that bargain with and without final-offer arbitration as the final step.⁹

When these data were broken down into two periods-encompassing the three fiscal years preceding the date that the final-offer arbitration amendments took effect and the two and one-half years that elapsed from the date of the new law to December 31, 1976-we found that the number of impasses declared in police, fire, and teacher negotiations increased from 371 in the prelaw period to 630 in the postlaw period; this is an increase of nearly 70 percent. Most of this increase, however, is accounted for by a higher incidence of impasse in police and fire negotiations. The highest percentage increase in impasses occurred in firefighter bargaining; in the prelaw period there were 61 impasses, while in the postlaw period there were 157 impasses, an increase of 157 percent. Police impasses increased from 107 in the prelaw period to 198 in the postlaw period, an increase of 85 percent. By contrast, teacher negotiations resulted in impasses in 202 cases in the prelaw period and 272 cases in the postlaw period, an increase of 33 percent. Thus, this first level of analysis certainly does not indicate that final-offer arbitration promoted the settlement of police and fire disputes without the use of third-party neutrals.

Our second test of the existence of a "chilling effect" involved calculating the proportion of police and fire negotiations that resulted in impasse. As shown in Table 1, we found that the proportion of police and fire impasses increased from 28 percent in the last prelaw year to over 53 percent in the first year under final-offer arbitration. In the second year of the law, however, the proportion decreased to 42 percent. Caution must be used in concluding that this test demonstrates the existence of a "chilling effect." Clearly, many factors determine whether or not

⁹We also gathered information on police and firefighter salaries and fringe benefits and have analyzed whether final-offer arbitration had an "inflationary" impact on public-safety salaries and fringes. Preliminary estimates of the economic impact of the Massachusetts law are contained in David B. Lipsky and Thomas A. Barocci, "The Impact of Final Offer Arbitration in Massachusetts: An Analysis of Police and Firefighter Collective Bargaining," Working Paper 941-77, Alfred P. Sloan School of Management, Massachusetts Institute of Technology, May 1977.

	Police and Fire Negotiations	Impasses	Proportion Resulting in Impasse		
1972	203	39	19.2%		
1973	237	60	25.3%		
1974	249	70	28.1%		
19 7 5	267	143	53.6%		
1976	281	121	42.1%		

 TABLE 1

 Proportion of Police and Fire Negotiations Resulting in Impasse in Massachusetts, FY1972-FY1976

Source: For the number of police and fire negotiations, Somers, An Evaluation of Final Offer Arbitration, p. xviii.

the parties will declare impasse. Certainly the bargaining environment of 1975–76 was different from that of 1972-74. The combination of tightening constraints on municipal finances, significant increases in unemployment in Massachusetts because of the recession that began in 1974, and higher rates of inflation probably made negotiated settlements more difficult to achieve in 1975–76 than they had been in earlier years. Still, it is likely that some part of the increase in the proportion of police and fire impasses can be attributed to the availability of arbitration in 1975– 76.

A third test of the "chilling effect" of final-offer arbitration is based not on the total number of cases going to impasse, but on the number that actually ended with a final-offer award. Our evidence indicates that 37 final-offer awards were issued in the first two and one-half years of the law. In fiscal 1975, less than 9 percent of police and fire units involved in negotiations resorted to arbitration; in 1976 this proportion dropped to less than 2 percent. In other words, over the first two years of the law 93 percent of those municipalities that negotiated new police and fire contracts did so without relying upon arbitration. Thus it appears that final-offer arbitration in Massachusetts may have led to greater reliance on impasse procedures in police and fire negotiations, but clearly did not lead to a large number of cases being settled by arbitration itself.

What impact did final-offer arbitration have on the effectiveness of mediation and fact-finding in resolving public safety disputes? Table 2 provides information on the stage of settlement for the prelaw (1972-74) and postlaw (1975-77) periods. It is clear from this table that the relative proportion of cases settled through mediation *declined* in the post-law period: about 60 percent of police and fire impasses were settled in mediation in 1972-74, compared to 33 percent in 1975-77. By the same token, however, the proportion of mediated teacher cases also declined, from 78.5 percent of impasse cases in 1972-74 to 44.5 percent in 1975-77.

	FY1972-74				FY1975–77							
-	Police		Fire		Teachers		Police		Fire		Teachers	
Stage of Settlement	No.	Pct.	t. No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Withdrawn	5	4.9	2	3.7	6	3.0	14	9.3	7	6.1	71	31.3
Mediation	64	62.1	32	59.3	157	78.5	56	37.1	35	30.4	101	44.5
During fact-finding Following fact-finder's	13	12.6	4	7.4	16	8.0	26	17.2	19	16.5	34	15.0
report	19	18.4	15	27.8	20	10.0	29	19.2	15	13.0	21	9.2
In arbitration	_	_	_	_	_	_	10	6.6	17	14.8	_	_
Following arbitration award	_	_		_	_	_	16	10.6	21	18.3		
Remand to parties	_	_	_	_	_	_	_	_	1	0.9		
Others	2	1.9	1	1.8	1	0.5						
Total	103	100.0	54	100.0	200	100.0	151	100.0	115	100.0	227	100.0
Pending	_		_		_		47		42		45	

TABLE 2 Stage of Settlement by Unit, Before and After the Massachusetts Final-Offer Arbitration Law

Therefore, it is difficult to say to what extent one can attribute the apparent decline in the effectiveness of mediation in public-safety disputes to the availability of arbitration as a final step in the procedure. Staff mediators on the Board of Conciliation and Arbitration, in interviews with the authors, were nearly unanimous in believing that they became less effective in achieving settlements after the arbitration statute was passed, but surely the deteriorating economic environment of the postlaw period had some impact on their effectiveness.

The data in Table 2 give some support to the proposition that factfinding retained its viability as a dispute-settlement technique after the adoption of final-offer arbitration. Before the law, about one-third of public safety impasses were resolved during fact-finding or immediately following the issuance of the fact-finder's report; a slightly higher proportion (and a much larger number of impasses) were settled in this manner after passage of the law. Moreover, another 10 percent of the impasses were settled "in arbitration," but short of the issuance of an arbitration award; in these cases either the parties reached a settlement on their own or the arbitrator successfully mediated an agreement. These data, however, do not completely convey the critical importance of factfinding under final-offer arbitration. Examination of the final-offer awards showed that in all but a few cases the arbitrator selected the final-offer package that came closest to (or was identical to) the fact-finder's formal recommendations.¹⁰ Of all the statutory criteria that the arbitrator is instructed to apply in final-offer cases, the fact-finder's report clearly appears to have been the most compelling to arbitrators. It is not an overstatement to say that, with rare exceptions, in Massachusetts finaloffer awards were in fact determined during the fact-finding process.

Impact of Arbitration on the Process of Bargaining: Comparisons with Other States

The negotiating experience of police and fire units in Massachusetts can be compared with experiences in other jurisdictions where either final-offer or conventional arbitration has been made available to the parties. Table 3 summarizes the impasse experience and arbitration usage in six states for which data are available. What is clearly apparent

¹⁰ Holden, who looked at the Massachusetts experience after one year, believed that "fact-finding has become in reality the cornerstone of the entire impasse procedure. For those disputes that are not going to get resolved at the bargaining table, fact-finding is where the concrete for the foundation of an arbitration award is first poured. It is very difficult to recast the foundation once it has been laid since one party or the other will normally adopt the fact-finder's recommendations as its last, best offer." Holden, pp. 28–29. We found that the arbitration award differed significantly from the fact-finder's recommendation in only five or six cases.

in the table is the marked contrast between the relative use of arbitration in states using the final-offer form and the relative use in states using the conventional form. On the one hand, less than 7 percent of the negotiations subject to final-offer arbitration in Iowa and Massachusetts ended with the issuance of an award in the years surveyed. On the other hand, in Pennsylvania and New York where conventional arbitration is employed, 29 or 30 percent of police and fire negotiations ended with the issuance of an arbitration award. In Michigan, where final-offer arbitration by issue is used, 16.3 percent of negotiations ended with an arbitration award. In Wisconsin, which uses final-offer arbitration by package, 10.4 percent of negotiations ended with an arbitration award in the first two years of the statute's existence, but this proportion increased to 13-15 percent in the following two years. The award rate also seems to have increased over time in Michigan, but the six years of experience recorded for Pennsylvania show no strong trend in arbitration usage one way or the other.¹¹ Although the data are incomplete, there is also some evidence in Table 3 that final-offer arbitration by package is related to a lower incidence of impasse in negotiations than either final-offer by issue or conventional arbitration. This result is, of course, consistent with the "theory" of final-offer arbitration.

In sum, the comparisons presented in Table 3 should give some comfort to the supporters of final-offer arbitration. The prediction that the parties would be more likely to reach agreement on their own and rely less on arbitration if the final-offer form rather than the conventional form were used seems to be borne out by these data. Several caveats need to be mentioned, however. First, rates of usage of impasse procedures and arbitration are dependent on the precise structure of the impasse procedures, on the way these procedures are administered within the state, and on the acceptability of the procedures to the parties. No attempt can be made here to compare such factors across the states listed in Table 3. Second, rates of impasse and arbitration usage are probably also affected both by the precise nature of the relationships between the parties and by the environment in which they bargain. Kochan and his colleagues, for example, found that the level of hostility in the bargaining relationship, the size of the city, the extent to which

¹¹ James L. Stern, et al., Final-Offer Arbitration (Lexington, Mass.: D.C. Heath and Co., 1975), pp. 13–16, 86–89; Thomas A. Kochan, et al., An Evaluation of Impasse Procedures for Police and Firefighters in New York State (Ithaca, N.Y.: N.Y.S. School of Industrial and Labor Relations, Cornell University, 1977), pp. 32–51; Peter Feuille, "Final Offer Arbitration and Negotiating Behaviors," paper presented at the Fourth Annual Meeting of the Society of Professionals in Dispute Resolution, October 1976.

State	Years	Type of Arbitration	No. of Negotiations	No. of Impasses	Impasses as % of Negotiations	No. of Arbitration Awards	Arbitration Awards as % Negotiations
Iowa	1975-10/1976	Final-offer by issue	372	255	68.6	25	6.7
Massachusetts	1975-76	Final-offer by package	548	264	48.2	36	6.6
Michigan	1973-76	Final-offer by issue	540	NA	NA	88	16.3
New York	1974-76	Conventional	118	78	66.1	34	28.8
Pennsylvania	196974	Conventional	276	NA	NA	83	30.1
Wisconsin	1973-74	Final-offer by package	249	86	34.5	26	10.4
	1974-76	Final-offer by package	260-300	144	48.0-55.4	38	12.7-14.6

 TABLE 3

 Comparison of Impasse Experience and Arbitration Usage in Massachusetts with Other States Having Arbitration Statutes

Sources: Iowa: Peter Feuille, "Final Offer Arbitration and Negotiation Behaviors," paper presented at the Fourth Annual Meeting of the Society of Professionals in Dispute Resolution. The Iowa statute applies to all municipal employees, not just police and firefighters. Police and fire experience is not separated out in these data. Wisconsin (1973-74) and Pennsylvania: James L. Stern, et al., Final-Offer Arbitration (Lexington, Mass.: D.C. Heath and Co., 1975), pp. 13-16, 86-89. Michigan, New York, Wisconsin (1974-76): Thomas A. Kochan, et al., An Evaluation of Impasse Procedures for Police and Firefighters in New York State (Ithaca, N.Y.: N.Y.S. School of Industrial and Labor Relations, Cornell University, 1977), pp. 32-51.

Notes: NA = not available or not applicable. Impasse data short of arbitration are not available for Michigan. The Michigan statute requires the parties to petition for mediation 30 calendar days prior to requesting arbitration (Stern, et al., pp. 44, 51). The Pennsylvania statute does not require mediation or fact-finding prior to arbitration (Stern, et al., pp. 8-12.) The Pennsylvania and New York data are based on samples of municipalities. Data for the other states are based on (more or less) complete counts. The Massachusetts data for 1975-76 exclude the fiscal 1977 data reported in Table 2. The Michigan and Wisconsin data include police and fire cases, but exclude data for deputy sheriffs, who are also subject to final-offer arbitration in these two states.

the union employed pressure tactics in negotiations, and the use of outside negotiators all ranked ahead of the nature of the impasse procedures in determining the stage of settlement of disputes in New York.¹² Again, the importance of such variables cannot be controlled in the comparisons made in Table 3. Third, the experience in Wisconsin and Michigan indicates that over time the parties may come to lean more heavily on the use of arbitration, that a "narcotic effect" may develop with the passage of time, even under final-offer arbitration. There has not been enough experience in Massachusetts, Iowa, or elsewhere to know whether this is an inevitable tendency. Finally, there is neither enough data nor sufficient controls to conclude on the basis of Table 3 that final-offer arbitration by package clearly does promote voluntary settlements and reduce reliance on impasse procedures. Although the data in Table 3 are encouraging in that respect, it should be recalled that the rate of impasse usage in Massachusetts was significantly higher under final-offer arbitration than it had been under fact-finding.

We conclude that, in terms of its impact on the bargaining process, final-offer arbitration has had a mixed record in Massachusetts. On the one hand, the law must probably be given some credit for preventing police and firefighter strikes; in addition, the rate of arbitration usage was remarkably low compared to experience in other states. On the other hand, the law probably led to more impasses in police and fire bargaining (although the experience in the commonwealth was still favorable compared to other states) and reduced the effectiveness of the mediation stage of the impasse procedures. Perhaps most important, the law failed to gain acceptance with municipal employers in the commonwealth.

Policy Epilogue

In June 1977, the Massachusetts legislature passed, over the governor's veto, a two-year extension of a revised version of the final-offer arbitration statute. The following important revisions were made in the statute: (1) the parties by their own agreement may now waive the fact-finding step; (2) if fact-finding is not waived, the arbitrator may select the fact-finder's recommendations instead of either side's final offer; (3) the parties by their own agreement may choose a single arbitrator rather than a tripartite panel, and, finally, (4) the scope of arbitral issues was reduced and now excludes appointments, promotions, most work assignments, most transfers, and minimum manning requirements on shifts.

¹² Kochan, et al., pp. 51-96.

Extension of the law did not end the battle, however. In the aftermath of the legislative override of the governor's veto, the main organization opposing the law, the Massachusetts League of Cities and Towns, announced its intention to place the final-offer arbitration question on the ballot in the 1978 state elections. This move apparently prompted the police and firefighter unions to enter into discussions with the League in an effort to avoid a referendum on the issue. With the assistance of Professsor John Dunlop, the parties reached a compromise agreement on a set of recommended amendments to the statute and submitted their recommendations to the legislature for consideration. The legislature accepted the recommendations and in November 1977 created a joint labor-management committee, consisting of six public-safety employee representatives, six municipal employer representatives, and an impartial chairman, all appointed by the governor, and empowered it to intervene at its own discretion in any police or fire dispute at any stage prior to arbitration. The committee has broad authority to act in the cases over which it assumes jurisdiction and can, for example, order the parties to continue bargaining, attempt to mediate a settlement of the case, order conventional arbitration, or allow the case to go forward under the regular statutory procedures to final-offer arbitration. The committee will be chaired by Professor Dunlop and will begin to operate in January 1978. Of course, it remains to be seen what impact this new approach will have on the process of public-safety employee bargaining in Massachusetts.13

¹³ Commonwealth of Massachusetts, "An Act Establishing a Joint Labor-Management Committee to Oversee Municipal Police and Firefighter Collective Bargaining and Arbitration Proceedings," November 21, 1977 (Ch. 345, Sec. 2, Acts of 1977). The provision expires on June 30, 1979. Both the public-safety unions and the municipalities credit Professor John Dunlop with providing the means to achieve a compromise agreement. See the discussion in BNA, Government Employee Relations Report, No. 739, December 19, 1977, pp. 16–20.

DISCUSSION

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In view of recent developments in the United States, it is apparent that our armed service personnel lack the legislative and organizational supports which have legitimized and given substance to military unions in the European examples described by Gomberg. Beyond this, I am not convinced that the European experience has much relevance to the American scene. I agree with Gomberg's concluding remarks that the major impetus to military unionism in this country is the quest to achieve greater due process in handling complaints and grievances. Moreover, these issues are central not only to enlisted persons but also to junior officers who may have even more at stake because of the investment they have made in a career with the armed services.

Additionally, the military has undergone significant changes in recent years. It is no longer a conscription but a volunteer organization. And, like other sectors of our economy, it is confronted with a younger workforce with rising expectations about compensation and benefits for services performed. These issues coupled with the need for due process may have planted the seeds of military unionism. However, there are factors which militate against germination of these seeds in the near future.

For example, legislative support for such a move does not appear to be forthcoming. However, history has given us ample evidence that organizations cannot be thwarted where the impetus is strong and the movement cohesive. The military-civilian cleavage revealed by the recent AFGE vote is but one indication that organizational requisites are lacking. Additional problems exist because a large proportion of the target workforce is transient in nature.

The military has tended historically to be less responsive to the need for change than its civilian counterparts. However, in recent years, there has been considerable progress made in the military, including choice of duty station, financial and other incentives for joining, and amelioration of distasteful working conditions. Given this apparent change to a more proactive orientation, it is my prognosis that the debates over military unionism will be the launching pad for efforts to defuse issues which may have inspired armed services personnel to seek representation.

Joe Loewenberg's paper on Government Business-Related Activities is a unique and inspiring synopsis of bargaining determinants in that area of labor relations. It is apparent that the wide variation in the legal underpinnings for collective bargaining by direct and indirect employees of the federal government has been a factor thwarting the establishment of a rational labor relations system. However, we have learned from experience with Title VII that, like bargaining, legislating opportunities for involvement does not necessarily mean that working relationships will be established or that either side will achieve selfactualization within that relationship. Although legislation is no panacea, I do believe that accommodations to philosophy, experience, and internal and external constraints can be made within an institutionalized framework but should not become substitutes for such a framework.

Additionally, external regulation is not a factor unique to government business-related activity. In fact, a serious question has already been raised whether free collective bargaining generally can survive given the increasing impact of external law. This problem has been compounded in public employment by the numerous other government policies which also impinge upon the bargaining process. Given this environment, it should not be surprising that many employee organizations have become increasingly concerned with developing their effectiveness as lobbying agents.

The problem of external financial control over issues we have traditionally thought to be an integral part of bargaining is equally thorny. A proposal, H.R. 9094, to amend E.O. 11491, could impact upon some of the labor-management relationships discussed by Loewenberg. One element of this proposal is the creation of a seven-member Employee Pay and Benefits Council to negotiate wages. While this proposal is intriguing, its prospects for passage appear to be dim at least in the current session of Congress. More importantly, it will be no simple task politically or practically to divorce wage negotiations from the appropriations process. Absent a clear mandate to effectuate such settlements, a number of problems remain. Specifically, the employees concerned are not, for the most part, constituents of the legislators who will pass on the settlements. Moreover, any action that these legislators take on wage proposals will affect them only marginally in terms of the impact upon their own staff. Finally, the effect of the current anti-Washington syndrome on legislative voting patterns does not appear to auger well for objective consideration of proposals submitted to Congress as a result of the Council's efforts.

Every sector of the economy has had to cope in its labor relations process with differences in tutelage, cohesiveness of organizations, and expertise in bargaining. These problems will continue to exist as long as there is no consistent legal framework for collective bargaining which shapes the expectations of the participants and encourages them to take the process seriously. Another key factor contributing to these problems is the continuing lack of adequate training for advocates on both sides.

I was especially interested in David Lipsky's illuminating analysis of the Massachusetts experience with final-offer arbitration. My questions regarding the system there center mainly around the issue of system design: for example, the fact that funding of settlements is only mandatory when they are achieved through the arbitration process. Given the often severe financial pressures under which public-sector negotiators operate, it is understandable that they might find the arbitration route attractive.

It does not surprise me that few people were willing to take on the labyrinth of final-offer arbitration in Massachusetts. The lengthiness of the dispute-settlement process is, to me, counterproductive to the purposes of providing for such procedures. It also remains a mystery to me how the parties present evidence and testimony in the hearing when they do not present the final offer until the hearing is concluded. Moreover, it does not surprise me that prior mediation under the Massachusetts system was apparently perfunctory. Given the high settlement rate prior to an award in arbitration, it is reasonable to speculate that the most relevant mediation effort was taking place during the arbitration process and not as an antecedent to it. In this conjunction, the question remains to be answered whether the procedure has been used to negotiate agreements rather than to resolve disputes over issues that the parties could not agree upon themselves. I have also considered the role gaming plays in final-offer arbitration under the Massachusetts system. It is hard to imagine that at least some of the parties did not learn that awards tended to fall very close to the fact-finder's recommendations. Consequently, it would appear that a good strategy would be to go to arbitration and tailor your final demands very close to the factfinder's recommendations as a means of getting a little more.

The one potentially hopeful development that has emerged out of the Massachusetts experience is the establishment through emergency legislation of a Joint Labor-Management Committee headed by John Dunlop. The effort to bring upper level advocates together to solve problems could have a beneficial effect upon public-sector labor relations in Massachusetts. Moreover, the JLM approach has the advantage of involving these advocates in local negotiations and of bringing additional expertise and perhaps cooler heads to bear on the problems confronted at the bargaining table. The JLM concept is worthy of serious consideration by any public-sector jurisdiction. In Massachusetts, a great deal will depend upon both Dunlop's and the parties' commitment to making JLM work. For the rest of us, the Catch-22 is that every jurisdiction does not have a John Dunlop to orchestrate establishment of such committees.

III. SOME PERSPECTIVES ON MULTINATIONAL BARGAINING

International Guidelines For Industrial Relations: Outlook and Impact

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The trade union view of the multinational corporation (MNC) as an unbridled and immensely powerful adversary has taken shape only within the last 10 to 12 years. Indeed, to some extent the unions' collective perception of the MNC as a global power in world economic affairs and as a significant center of industrial relations policies and practices is still evolving. And while it is true that already in the mid-1950s the International Metalworkers' Federation (IMF) heeded an initiative of the United Automobile Workers (UAW) to establish several world auto councils as a parallel structure to the major corporations in the automobile manufacturing industry, these councils existed chiefly on paper for the next decade.¹

L

The May 1968 Congress of the International Metalworkers' Federation in Zurich marked an important turning point because the resolution on MNCs adopted at this gathering included several key demands that have since become part of the standard trade union response to the rise of the MNCs. Accorded top priority in the resolution was a demand for "effective action in the collective bargaining and legislative fields,

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¹See in this connection especially the unpublished study by Everett Kassalow, "The International Metalworkers' Federation and the Multinational Automobile Companies: A Study in Transnational Unionism," Madison, Wis., 1974.

including international action, through which the multinational corporations can be compelled to assume their social responsibilities."² For perhaps the first time, a major international labor organization had thus designated the MNC as a proper object for international regulation in the area of industrial relations. Soon thereafter, the International Confederation of Free Trade Unions (ICFTU) adopted a similar resolution at its own 1969 congress, and since then international and national trade union bodies have on innumerable occasions adopted slightly different versions of the same basic demands.

Initially labor's call for regulation assumed a fairly rapid achievement of conditions conducive to international collective bargaining.³ That was certainly the preference of American unions like the UAW whose domestic counterparts on the employer side-General Motors, Ford, Chrysler-were at the same time among the largest MNCs. Consequently the UAW-inspired revitalization of the IMF world auto councils in the mid-1960s was mainly intended to lead to internationally coordinated negotiations, at least over certain minimum terms of employment. It soon became obvious, however, that transnational bargaining faced enormous obstacles in the form of strongly entrenched employer resistance, a complete legal void, and serious organizational disarray among the unions themselves. That realization, coupled with increasing demands for controls on MNCs in areas other than industrial relations, provided the basis for adopting an alternative strategy of first developing through international legislative action a code of behavior or a set of guidelines for MNCs which would include provisions supportive of the ultimate bargaining objective. By the time a so-called Joint Working Party composed of representatives of the ICFTU and the International Trade Secretariats (ITS) was established in 1973, the implementation of a strategy aimed at guidelines and legislation was regarded as the immediate central objective. It implied a relatively greater reliance on labor's composite political strength than on its international bargaining power.

It helped the unions that their decision on strategy coincided with a more general mobilization of international public opinion critical of MNC activities. For example, the revelations about the involvement of the International Telephone and Telegraph Corporation in the internal political affairs of certain countries, notably Chile, became one of the principal factors leading the United Nations to assert jurisdiction over

² For the full text, see IMF, Minutes of the 21st Congress, Zurich, May 1968, pp. 156-57.

³ See for example Karl Casserini's paper on "Multi-National Companies and Collective Bargaining," prepared for an OECD Regional Trade Union Seminar on New Perspectives in Collective Bargaining, November 4 to 7, 1969.

MNCs. In fact, the employment and labor relations policies of MNCs constituted only a portion of the agenda assigned to the two key specialized agencies: the Commission on Transnational Corporations established by the Economic and Social Council of the UN in November 1974 and the Committee on International Investment and Multinational Enterprises (IME) established by the Organization for Economic Cooperation and Development (OECD) in January 1975. By assigning top priority to "the method of legal enactment" in their search for countervailing power, the unions acquired important allies among concerned governments, especially in the Third World.

П

The first set of voluntary international guidelines for MNCs was adopted in June 1976 by the OECD, an organization which consists almost entirely of countries in advanced stages of industrialization.⁴ It has been alleged that the OECD moved quickly so as to set a precedent to discourage the adoption of more stringent codes by agencies more hostile toward the MNCs, but that is an unsupported though not inconceivable speculation.⁵¹ Unions and employers commented on successive drafts through their consultative bodies at OECD-the Business and Industry Advisory Committee (BIAC) and the Trade Union Advisory Committee (TUAC)-and the final product had their joint endorsement. However, the unions gave their consent only reluctantly. They had sought more far-reaching and certainly more enforceable controls. Yet, given the character of OECD as an organization whose decisions depend in effect on a consensus of member governments, and given further the disinclination of some of its most important constituents, including the United States, to support tighter restrictions, there was never any serious prospect for the adoption of a set of binding guidelines.

The OECD document covers a wide range of MNC activities, including—to mention only the principal headings—disclosure of information, competition, financing, taxation, and science and technology. Of special interest here are the provisions that apply to industrial relations and employment. They focus on areas of greatest concern to unions, notably employment security, recognition and collective bargaining, disclosure of information, and access to corporate centers of decisionmaking.

⁴ OECD, International Investment and Multinational Enterprises (Paris, 1976). An even earlier set of guidelines was developed on a voluntary basis by the International Chamber of Commerce in November 1972.

⁵ See John A. Riddell, "Multinational Guidelines," Free Labour World (July-August 1976), p. 18.

In the area of employment the emphasis is on observance of prevailing standards of work, obligations to "train and prepare for upgrading members of the local labor force," and responsibility for mitigating to "the maximum extent practicable" any adverse effects of workforce reductions. Regarding collective bargaining, the provisions rule out threats of production transfers in the event of an industrial dispute and call on management to conduct its negotiations through representatives "who are authorized to take decisions on the matters under negotiation."

The significance of these or any other guidelines depends on their observance. Guidelines based on moral obligations but habitually disregarded become meaningless. Eventually they are either liquidated or else they acquire an enforcement procedure. Enforcement of the OECD guidelines clearly is the aim of the unions, and their strategy is to demonstrate the need for a controls machinery. That explains why they have sought to publicize alleged violations of the guidelines, notably in the Badger case.⁶ Capitalizing on the well-known distaste of most companies for potentially embarrassing publicity, the unions through their national and international bodies negotiated a settlement of the claims against Badger that was based partly on the OECD guidelines. Cases against other multinationals are awaiting disposition. The overall union aim is to build up a dossier sufficiently impressive to convince the IME Committee, and ultimately the OECD Council itself, to incorporate an enforcement procedure into the guidelines. A complete review of the guidelines has been mandated for 1979. The unions will use the remaining time to strengthen their case for revision.

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Another set of guidelines has been in the making at the International Labor Organization (ILO). In April 1977 a working group composed of government, employer, and worker representatives completed the draft of a "Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy" which the ILO Governing Body adopted at its November 1977 meeting. Like the OECD counterpart document, the ILO Declaration has a nonmandatory character.⁷ Indeed, the em-

⁶ For an explanation of the issues in the Badger case, see Heribert Maier, "A Test Case for the OECD Guidelines," *Free Labour World* (March-April 1977), pp. 12–14. A book-length study of the Badger case and its ramifications has been prepared by Professor Roger Blanpain of Leuven University. It was published in 1977 by Kluwer in Deventer, Netherlands.

⁷ "ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy," Appendix II to *The Report of the Reconvened Tripartite Ad*visory Meeting on the Relationship of Multinational Enterprises and Social Policy (Geneva: ILO Governing Body Document 203/6/2, 203rd Session, May-June 1977).

ployers insisted on that restriction, as did a number of governments. However, whether it will retain its voluntary nature is not certain. There is a possibility that the ILO Declaration will eventually become an integral section of a comprehensive United Nations Code for MNCs, now in preparation. Because of strong pressure by Third World countries to frame the UN code in binding terms—pressure that is sure to be resisted by Western industrialized countries—the draft provisions of the ILO Tripartite Declaration acquire special interest, particularly insofar as they go beyond the OECD code.

To begin with, the ILO Declaration, though not hostile to business, goes further than the OECD document in protecting individual workers from antiunion discrimination and establishing a procedure for internal consultation between employees of the several units of a multinational corporation. The ILO draft also provides for the development of grievance procedures, and it outlines in more explicit terms the basis for wage and benefit determination, giving special recognition to the circumstances of developing countries. In the area of employment, the ILO Declaration also goes further than the OECD guidelines since it imposes on MNCs a responsibility to establish some form of income continuity for workers whose employment has been terminated and stipulates that employment creation is an express obligation of MNCs.

Behind these contrasts in scope and stringency are obvious differences in constituency and decision-making. The views of Third World countries had a noticeable influence on the shape of the draft that emerged from the tripartite ILO machinery, whereas in the OECD the governments of industrialized countries had the final say.

IV

At this stage of development there are still ample reasons to be skeptical about the effectiveness of international codes of conduct, whether in industrial relations or in other policy areas. The current OECD guidelines have no teeth; various international agencies seek to assert jurisdiction; the unions are not as united on objectives and means as they appear to be; and the governments of some of the leading industrialized countries are distinctly unenthusiastic about imposing severe restraints, particularly restraints that would operate only against MNCs. Nevertheless we believe that the guidelines, even in their present rudimentary form, constitute a significant rule-making element in the gradual emergence of an international industrial relations system that will eventually acquire its own set of actors, its own system of rules, and its own constraints.

While various intergovernmental bodies (OECD, UN, ILO, and others) are currently contending for the role of foremost rule-making authority, an equally complex sorting-out process is under way on the union and employer sides. The problem of establishing an orderly hierarchy is particularly vexing among the unions where the lines of distinction run not only between international and national bodies, but where international organizations are themselves divided ideologically, functionally, and in terms of strategic preferences. It would lead much too far to disentangle here the complex details of the international trade union structure. Suffice it to note that the authority of the ICFTU/ITS Joint Working Party on Multinational Companies, which since its establishment in 1973 has sought to coordinate the interests of a substantial number of labor organizations, is severely limited. In no sense can it be regarded as a fully mandated representative even of its own constituents. Nevertheless, its policy of promoting the adoption of guidelines "as a first step towards binding regulations set out in international conventions" and embodied in national legislation commands substantial support not only in its own ranks but possibly also among ideologically competitive organizations, such as the World Federation of Trade Unions (WFTU) and the World Confederation of Labor (WCL).8

However, the alternative strategy of according first priority to a breakthrough in international collective bargaining has the support of at least one independent-minded ITS, the International Chemical, Energy and General Workers' Federation (ICEF), and in principle its position may well be shared by other labor organizations that are equally strongly committed to the priority of collective bargaining over legislation.⁹ The existence of such important strategic differences indicates the difficulty of reaching an international trade union consensus on policy and the even greater difficulty of creating an international authority structure among unions. Although the situation is in some respects analogous to the difficulties that in most countries accompanied the rise of national union authority over local autonomy, the complexities at international level are far greater.

As long as the structure on the union side lacks adequate integrative elements, international union solidarity will be a fragile force. It will depend on the ability of the principal actors, i.e., the unions at national

⁸ However, a recent WLC publication denies the existence of a "serious trade union consensus" on the proper trade union attitude and strategy toward MNCs. See World Confederation of Labor, *Orientation Report*, submitted to the 19th WCL Congress, October 17–21, 1977, p. 93.

⁹ For a summarized version of the ICEF position, see "The Trade Union Jet-Set," The Economist, Vol. 265, No. 6998 (October 15, 1977), pp. 89 ff.

and international levels, to find acceptable compromises between conflicting claims in several domains—among industrialized countries, between industrialized and less developed countries, between national and international objectives, and among various international objectives. Thus, although the trade unions have already made some advances in internationalizing their dealings with the MNCs, the precariousness of their consensus limits their ability to formulate and pursue common international goals and actions.

Although the structure on the employer side is less convoluted than on the union side, there is neither a clear hierarchical integration nor a firm consensus on strategy. To be sure, the principal organs of employer representation—the International Organization of Employers (IOE), the International Chamber of Commerce (ICC), and the Business and Industry Advisory Committee (BIAC) to the OECD—have sorted out their respective spheres of activity and are generally in agreement on major goals and strategy, but since they are primarily the spokesmen for national federations of employers associations and not for individual corporations, their links to the MNCs are only indirect and do not effectively circumscribe the freedom of action of the MNCs.

The authority gap between international associations of employers and individual MNCs is reinforced by the heterogeneity of the MNCs themselves. They vary in such critical dimensions as the distribution of internal decision-making powers, capital-labor ratios, integration of the production process, level of technology, the structure of internal communications, and the size of investments sometimes stipulated by host countries. They also vary, of course, in terms of their industrial relations policies, although at least they appear to be uniformly opposed to the development of an international collective bargaining system. Nevertheless some MNCs have demonstrated a readiness to go much further than others in entering into bilateral relations with unions in an international (or regional) context, though still stopping short of collective bargaining. Depending on one's assessment of the concession that is inherent in the very fact of a bilateral meeting, such conciliatory gestures could be, and have been, interpreted as undermining the defensive position of the associations and MNCs and ultimately eroding the resistance of employers to transnational bargaining.

V

One may quite safely assume that in the foreseeable future most unions will continue to press for an extension of the scope and reach of guidelines, most employer groups and MNCs will seek to preserve the status quo, most governments of industrialized countries will at least tacitly lean toward the employers' views, and most governments of Third World countries will at least overtly side with the unions. The main elements underlying these positions can here be given only in summary form.

Unions are at present most concerned with establishing an equilibrium in the balance of power by setting limits to the authority of the MNCs. But there is more to their case than the drive to become an effective countervailing force with the aid of international instruments. At least potentially, they also regard guidelines as a means for restraining the competitive inducements offered to MNCs by capital-starved underdeveloped countries and simultaneously as a way of overcoming the reluctance of home country governments to impose restraints on MNCs that could result in competitive disadvantages. To the extent that unions succeed in gaining their legislative goals in as binding a form as possible, they will regard them as a base from which to press for the adoption of more stringent substantive-as distinguished from procedural-guidelines in such areas as job security, industrial democracy, personnel policies, health and safety standards, decisions on corporate investment and disinvestment. Parallel with these expectations, most unions will also insist on surveillance and enforcement machinery at both international and national levels.

On the other hand the main objectives of employers and their organizations are far more defensive and selective. Aside from unyielding insistence on the nonbinding, nonjudicial character of any guidelines, they will hold out for the principle of equal treatment, both as between multinational and purely national enterprises and as between private, public, and mixed enterprises. Their rationale rests on the preservation of fair competition between the various types of organizations, but the underlying expectation is more subtle. It relies on the substantially greater technical difficulty of imposing universal rules on all categories of enterprises than singling out the politically more vulnerable MNC. They will also oppose union efforts to transform MNCs into spearheads of ILO standards in areas where individual governments have not yet chosen to adopt such standards, and they will in general stress the imperative of flexibility and adaptability to different national situations and development objectives.

As regards the governments of industrialized countries, the OECD guidelines reflect, if not a full consensus, then at least a prevailing view that at this stage of development restraint and caution rather than enthusiastic interventionism should determine the scope and application of codes of conduct. Most governments are still reluctant to yield their individual authority to an untested supranational agency, whether in industrial relations or in other areas. That position would seem to preclude the adoption of binding rules, coupled with an enforcement procedure, especially if the enforcement procedure supersedes national authority. But within limits that still remain to be defined, some governments may be prepared to test the reach and meaning of their compact. To the extent that they permit such testing, as in the Badger case, they contribute not only to the gradual development of a network of rules without which there can be no industrial relations system, but they also define the extent of their own individual and collective responsibility for the observance of "voluntary" guidelines. That is how law emerges.

The governments of less developed countries are in a different position. In their public pronouncements they usually express views close to the constraint-oriented attitudes of the unions. That is because, like the unions, they too experience a sense of dependency and disadvantage, a belief that MNCs respond only to their own strategic imperatives.¹⁰ For them, internationally enforceable guidelines hold out the promise of regaining control and equalizing the balance of power. In fact, however, it is not very likely that the economic development objectives which have in the past led such governments to attract MNCs by promising favorable treatment in industrial relations and other areas will become subsidiary to the desire for binding international guidelines. Nor can such guidelines bridge the conflict of interest between unions in industrialized countries, to whom MNCs often appear as exporters of jobs, and governments in Third World countries, to whom foreign investment, technology transfer, and employment expansion are of critical importance.

Until these and other considerations have sorted themselves out, it may well be premature to move toward the adoption of binding guidelines for MNCs. The voluntary OECD guidelines have barely begun to be tested, and we do not yet know the extent to which they can effectively contribute to the structuring of an orderly international system of industrial relations. One of the key determining factors will be the commitment of individual governments, whether as home or as host countries, to cooperate bilaterally and multilaterally in applying the terms of the guidelines and calling violators to account. If they act vigilantly and in good faith, the guidelines may in due course acquire the status of law. That is, they become the legitimate rules binding together an industrial relations system at the international level.

¹⁰ Raymond Vernon, "Multinational Enterprises in Developing Countries," in David E. Apter and Louis Wolf Goodman, *The Multinational Corporation and Social Change* (New York: Praeger, 1976), pp. 40–59.

A Trade Union Perspective on Multinational Bargaining

LAURENT C. ENCKELL International Union of Food and Allied Workers' Associations

In spite—or perhaps partly because—of the great amount of recent writing on the subject, much confusion continues to exist as to the activities of international trade union bodies, in particular international trade secretariats, relating to multinational companies. Companies themselves have been promoting self-serving points of view designed to play down the importance of the international trade union movement. Commentators and critics, questioning the goals of organized labor, have interpreted events in ways that take little account of realities and have raised theoretical objections of little relevance to the issues at hand.

This brief paper will attempt to clarify those issues, based on the experience of one of the international trade secretariats, the International Union of Food and Allied Workers' Associations (IUF).

Basic Policies

Although the first recorded action by the IUF to mobilize support among affiliated unions against an international firm dates back to 1921,¹ the guidelines for its current policies were established at its 1964 congress. With clarity and foresight, the speaker on the subject, a delegate from a British union, explained that "the problem which the trade unions will have to solve consists of finding ways and means to match the power and influence of these giant corporations," and proposed the following guidelines, later adopted by the congress:

-the organization of a systematic and regular exchange of information on working conditions, collective bargaining, etc., in the multinationals, through the IUF secretariat;

¹A boycott was called against the company, Peter, Cailler, Kohler Chocolats Suisses SA, later to merge with Nestlé; in a report to the 1922 IUF congress, Jean Schifferstein, its first general secretary, remarked that "the concentration of large enterprises in the food industry has involved the Union in all sorts of countries. Here, all the unions in those countries ought to play their part in the struggle."

- -the establishment of a system for solidarity and help between affiliates in the event of conflict in one of the subsidiaries of a multinational;
- -coordination, on the largest possible scale, of collective bargaining carried on by various national unions with the same multinational.²

Refined over the years, the guidelines have been translated into a long-term program, consisting of four distinct, though interrelated, stages. As described in the Report on Activities submitted at the 18th IUF congress in January 1977,³ these stages consist of (a) creation of an information and research service covering all the multinational companies in the IUF industries and able to reply rapidly to requests for information from affiliates; (b) solidarity measures in the event of conflict in a subsidiary by the unions of the other subsidiaries of the company, the moves ranging from messages of solidarity to an international solidarity strike; (c) organization of continuous international action with regards to a single multinational or a group, and the creation of appropriate structures, the company councils; (d) introduction of coordinated international negotiations with the headquarters of the multinationals on problems affecting several countries or the whole company.

The Practice

In practice, the first two of these stages have attained a level of completion far greater than the last two. The fourth stage is still, to a large extent, in its infancy.

The supply of information on multinationals is a daily function of the IUF secretariat. It now goes well beyond the company profiles and rough comparisons of wages and working conditions I was asked to prepare in my early days as research director in our Geneva office. To get an idea of what is being done today, consider, for instance, the case of a union in Jamaica, which last year had to argue the renewal of a collective agreement for workers at a Nestlé-owned condensery before a government arbitration panel.⁴

At the request of our affiliate, we assisted it in the preparation and presentation of its case. Management's position was that the company had incurred losses and could not grant wage and benefit increases de-

² IUF, Minutes of the 15th Congress-Stockholm, 1964, agenda item 8. All IUF material referred to is available from the IUF secretariat in Geneva.

³ IUF, Documents and Minutes, 18th Congress-Geneva, 1977, agenda item 9.

⁴ Proceedings before the Industrial Disputes Tribunal, re. the dispute between Jamaica Milk Products Ltd. and the National Workers Union, Kingston, Jamaica, October-November 1976.

manded by the union. Our argument was based on the fact that the company was a subsidiary of Nestlé SA (then Nestlé Alimentana SA), and that the parent company did derive earnings from its Jamaican affiliate even in years when the latter declared no dividends. We showed, for example, that all of the alleged losses were accountable for by foreign exchange losses incurred on a relatively small and unnecessary debt in Swiss francs. Matters related to royalty payments, technical assistance fees, and transfer pricing were also brought to the attention of the arbitrators, as were some important discrepancies between the figures submitted by the Jamaican company and those available from Nestlé in Switzerland. In other words, the union had access, through the IUF, to information and expertise not otherwise available to it. The relationship between management and the union was changed as a result, the union being now in a position where it could negotiate for its members as employees of the subsidiary of a specific multinational, as distinct from those of a local firm.

The supply of information, which at one time was more sporadic and less suited to the actual needs of affiliated unions, has considerably intensified and improved in recent years. Its use in collective bargaining and other union activities has become increasingly widespread, as IUF affiliates are more conscious of the need to identify subsidiaries of multinationals and to deal with them as such.

Solidarity actions take on a variety of forms. In many cases today, results are obtained through a simple intervention by the IUF secretariat with the parent company's management, informing it of a dispute involving an affiliated union and a subsidiary. In other situations, however, this is far from sufficient and more serious measures have to be taken. The IUF, and other trade secretariats as well, have become more aware of the wide range of possibilities which are available for solidarity actions and, as a result, can often launch them more effectively than in the past. At the same time, management appears somewhat more concerned about international industrial action and is more willing to settle disputes promptly rather than risk a wider conflict.

At the same time, unions tend to refer more questions to their trade secretariats than before. It is significant that at the IUF's 16th congress, in 1970, a report on "Coordination within international corporations" mentioned four solidarity actions during the preceding three-year period, whereas in the four years between January 1973 and December 1976, the number of times the IUF secretariat intervened in such situations amounted to 60.

In a resolution adopted by the 1977 congress of the IUF, it is stated

that "The need to have permanent bodies for unions representing the workers of the same transnationals can best be served through the establishment of company councils and by increasing the activities of existing councils. Company councils can engage in negotiations with the top management of transnationals on issues which are of interest to all or part of their members."

Thus far, six company councils have been created by or in collaboration with the IUF.⁵ For reasons which are mainly financial and organizational, it is not always possible to convene meetings of these councils as often as necessary. For example, after meeting four times in 1973 and 1974, the Nestlé Council did not meet again until 1977. Although much can be done without holding formal international meetings, the councils are, nevertheless, the organizational backbone of any attempt at coordination and ultimately joint negotiations among different unions.

International Negotiations

The IUF has, at various times, attempted to meet with the management of multinational companies. It can be said, without raising too much controversy, that, thus far, no international negotiations in the strict sense of the word have taken place as a result, even though the IUF was the first trade secretariat to successfully arrange a meeting between members of a company council and that company's top officers.⁶ Another company agreed to discuss certain demands of workers in one country with an international delegation, and the talks led to a partial agreement.⁷

On the whole, endeavors to attain this fourth stage have met with stiff opposition from the companies, who have sometimes been supported in their attitudes by "experts" on industrial relations.

Among the arguments frequently put forward by those who oppose attempts at holding collective bargaining at international level are the following:

-Multinational companies are families of individual and autonomous firms, so that nothing, least of all industrial relations, can be usefully discussed with top management.⁸

-International trade union action, which may not even in fact

⁶ With Nestlé on June 13, 1972.

 $^7\mathrm{Brooke}$ Bond Liebig, in 1974, on a question concerning tea estate workers in Sri Lanka; the estates were subsequently nationalized.

⁸ This is a standard company assertion, reiterated ad nauseam.

⁵ Those councils are for Nestlé, Unilever, W.R. Grace, Oetker, tobacco multinationals, and the Compagnie Internationale des Wagon-Lits et du Tourisme.

take place, in no way affects the outcome of negotiations or disputes, as the same settlements would have been reached regardless of what was done internationally; trade secretariats are, therefore, "paper tigers" and letting them negotiate would be a mistake.⁹

-The negotiating of international collective agreements is impossible because, among other things, productivity differences render wage equalization a useless goal and unions are not prepared to relinquish any of their autonomy.¹⁰

None of these arguments, even when stated in a slightly more sophisticated manner, can be considered seriously. They reflect either a desire by companies to discourage unity among unions or a serious lack of understanding and knowledge of what the labor movement is about.¹¹

Independent Subsidiaries

The question of a particular management's philosophy with respect to its relationship with subsidiaries is a management—not a union problem. The unions representing the employees of Unilever, for example, have asked the company to allow its black workers in South Africa to organize and to recognize their unions. Whether Unilever's top management feels that it can or cannot intervene in the industrial relations in its South African subsidiaries is a question which cannot even be debated. If the enforcement of basic policies on trade union rights violates particular management principles, then these principles will simply have to change.

Ineffective Trade Secretariats

Certain observers like to evaluate the effectiveness of the IUF and of other international trade secretariats in terms of the gains obtained by unions involved in international actions. Besides the fact that such

⁹ See, for example, Herbert Northrup and Richard Rowan, "Multinational Bargaining in Food and Allied Industries: Approaches and Prospects," Wharton Quarterly (Spring 1974), and other articles by the same authors.

¹⁰ See, for example, Duane Kujawa, "Collective Bargaining and Labor Relations in Multinational Enterprises: A U.S. Policy Perspective," paper presented at the New York University Conference on Economic Issues of Multinational Firms, November 4-6, 1976.

¹¹ Certain authors are also confused about terminology. Kujawa writes of "federated bargaining" and of "tariff (or wage) agreements" in Germany (in "International Labor Relations: Trade Union Initiatives and Mangement Responses," *The Personnel Administrator*, February 1977); Northrup and Rowan seem equally fascinated by exotic foreign terms, translating the French word *convention* (agreement) into "convention" ("Multinational Bargaining Approaches in the Western European Flat Glass Industry," *Industrial and Labor Relations Review*, vol. 30, October 1976).

an evaluation is probably impossible to carry out, the whole concept is inappropriate. It is noteworthy that such an idea emanates primarily from strongly antiunion sources, whose objectivity can be questioned.

Countless different factors determine the outcome of workers' struggles, the most important of which is evidently the determination of the workers themselves to win. Local and national unions, national and international federations can contribute their support, which will make little or no difference if the workers themselves give up. The IUF can, to a certain extent, encourage this determination, and it has the duty to assist and support its members. But no amount of information, financial support, solidarity strikes, boycotts, or other means which are at the disposal of the IUF can ever make obsolete the need for the workers themselves to fight for what they want. Those who do not understand these elementary facts display a singular ignorance of the nature of the trade union movement. For them to draw the conclusion, from their observations, that the international labor organizations are totally ineffective is to render a serious disservice to those who listen to their advice.

Whether trade secretariats engage in international negotiations or not will, in the last analysis, depend on whether workers and their unions affiliated to those secretariats want it badly enough, not on the opinion of outsiders.

Impossible Dreams

If negotiations do take place, what could be negotiated? The function of the IUF, and of other international trade secretariats, is clearly to support its affiliated unions, not to supplant them. What the IUF would like to see discussed internationally and, perhaps, be the subject of formal agreements, are first of all matters which go beyond the scope of agreements negotiated by member unions, yet are of significant concern to them. This could include the establishment of basic principles governing industrial relations within multinationals (such as respect of trade union rights and right to bargain collectively, neutrality in union elections, etc.);¹² disclosure of information; procedures for handling issues—such as transfers of production—which affect workers in more than one country.

In a second stage, transnational bargaining could cover the harmonization of certain minimum conditions (including minimum wages) and benefits to which all or most company employees may be entitled

 $^{^{12}}$ Where certain multinationals may have adopted such principles, they generally lack a procedure to enforce them throughout their subsidiaries.

(training, severance and retirement benefits, etc.). Any discussion of bargaining on those issues is, however, entirely hypothetical at this time.

It is very unrealistic to expect the IUF, or any other ITS, to seek an equalization of wages or, for that matter, fringe benefits. That this would be unlikely to happen is not, as some commentators have ventured, due to differences in collective bargaining practices between countries.¹³ Rather, it has to do with the fact that trade secretariats cannot (and do not wish to) impose standards or policies on their affiliates.

If an upward harmonization of wages and working conditions is to take place, it will not be as a result of transnational collective bargaining, but as a consequence of mutual support among unions around the world. Those who expect low-wage labor markets to be eliminated through negotiations with multinationals must therefore be patient and look instead to other activities of international trade secretariats, through which workers' interests can be more effectively defended.

¹³Kujawa (in "International Labor Relations . . .") and others think that regional or national bargaining makes company—and, therefore, transnational—bargaining impossible in countries such as France and Germany. This is certainly one of the most trivial problems to be considered.

Multinational Bargaining: An MNC Perspective

G. B. McCullough Exxon Corporation

Today I want to discuss multinational bargaining from the perspective of a multinational corporation, and develop why I do not believe multinational bargaining is very likely. While there are often discussions claiming that unions must go multinational to counter the strength of multinational corporations, there are several reasons why I believe this is unlikely to occur:

- -Multinational companies are economic entities and their economic bases are international.
- Unions are political entities and their political bases are national.
- -Governments have established an international framework to encourage trade and investment, thereby fostering the development of MNCs.
- -Governments have not taken similar actions to develop an international framework to encourage unionization on an international basis.

Later on, I propose to discuss the question of international bargaining in some detail, but first I would like to comment on MNCs as responsible economic performers on the world scene. I would hope this would illustrate why host countries throughout the world benefit from their operations.

Multinational Companies

There is an almost immutable law among corporations that directs they must either grow or diminish; generally, they cannot stand still. All MNCs, of course, began as small national companies, evolving from national companies to MNCs to achieve growth. Expansion outside the home country was usually done in order to gain or sustain a growth pattern: to expand their sources of raw materials or to expand the market for their products. This growth must occur within legal frameworks established by nation states.

On the assumption that an MNC desires to expand into a different country than where it currently operates, it must receive permission from the authorities in that nation. Why should the host nation grant such a permit? What is the quid pro quo for that nation-state to allow an MNC to conduct operations within its boundary? One of the most important elements is the capital which the MNC intends to invest in that country. Capital, of course, is what is required for the creation of jobs; therefore, when an MNC moves into a host country and invests capital, it is creating jobs for the citizenry of that country. Normally, MNCs who move into host countries also bring technology. It may be in the form of an improvement on available technology in the host country, or it may be new technology not previously available. This is particularly true when MNCs move into developing countries. Technology generally means better, improved products at somewhat lower prices, and it is usually accompanied by significant training and development programs for nationals, with subsequent skill upgrading for them. In addition, MNCs often bring in new and innovative techniques for the production of products and for the management of operations. Introduction of more efficient methodology, in turn, generally leads to lower prices of the products to the consumer. This was recognized by the 20 "Eminent Persons" selected by the United Nations to examine "The Impact of Multinational Corporations on the Development Process and on International Relations." In their report published in 1974, the Eminent Persons agreed that

Multinational corporations have distinct capabilities which can be put to the service of development. Their ability to tap financial, physical and human resources around the world and to combine them in economically feasible and commercially profitable activities, together with their capacity to develop and apply new technology and skills, to translate resources into output and to integrate product and financial markets throughout the world, has proved to be outstanding.¹

The ILO, in a study of MNCs in the field of employment and training, indicated the following:

From the point of view of employment creation, multinational investments in industrialised countries have aroused little attention. The number of jobs made available by multinational

¹United Nations, Department of Economic and Social Affairs, The Impact of Multinational Corporations on Development and on International Relations (New York: UN, 1974), p. 28.

companies in 1970 was, however, estimated at 13 to 14 million for all market economy countries and 2 million of these were created in developing countries; it follows that in the industrialised countries, the multinational companies have made a remarkable contribution to employment by creating or maintaining something like 11 to 12 million jobs.

This explains why in the industrialised countries opinions expressed on foreign investment are largely favourable, at least regarding employment. The few reservations made relate to the quality and stability of the employment created.²

The report went on to discuss the aspect of takeover of national firms by MNCs and concluded the following:

When investment is through a takeover of a local firm, employment is at first maintained or occasionally reduced, mainly at executive level, but in the long run the investment leads to increased employment. All in all, foreign takeovers are considered very beneficial, for they have strengthened the firm concerned, especially if they were in difficulties before being taken over. Since national firms were unwilling or unable to absorb them, some businesses would have closed down but for foreign investors.³

I would contend that MNCs, when they move into host countries, do the following: they effectively spread capital investment from the home country to the host country; they create jobs in the host countries; they increase the tax base for local and national authorities in these host countries; they obey the laws of the host country and, because they tend to be long-term planners, they are generally good public citizens in the host nation; they tend to spread technology between nations; and, in general, they effect positive social change. The concern expressed by academicians and union leaders concerning MNCs tends to be in the direction that, somehow, MNCs are not in accord with the objectives of local workers or their unions. This usually pertains to paying low wages, providing insufficient benefits, and failure to provide acceptable working conditions for workers in host countries.

Morgan and Blanpain discussed this issue in their OECD study: "On the question of comparability of wages and salaries with those paid by domestic employers, it would appear that multinational enterprises tend to adapt to the local situation, but sometimes offer better remuneration.

²International Labour Office. The Impact of Multinational Enterprises on Employment and Training (Geneva: ILO, 1976), p. 18.

³ Ibid.

As regards working conditions, these appear to be similar to, or sometimes more favourable than those of local employers."⁴

A British trade union leader, in an ICFTU publication, said the following:

In developing countries with their awesome employment problems, the multinational corporations in many cases are given an unqualified welcome as bringers of investment and jobs which are urgently needed. There is no doubt that this is often the case and that they do make accelerated economic development possible. But it must be remembered that this is not their primary purpose—if it happens, it happens as a by-product because it pays a multinational enterprise to invest in the developing country concerned.⁵

That statement was by Cyril Plant, general secretary of the British IRS Federation.

Trade Unions

I think it might be well to take a look at the history of trade unions, just as we have looked at the evolvement of MNCs. Unions have evolved not unlike corporations. They normally form at a plant location where workers band together to confront what is generally a more powerful management, often the entrepreneur of the enterprise. Unions, again like corporations, don't stand still—either they grow or they tend to shrink and/or disappear. Therefore, most unions have grown from a federation of employees in a single plant to a workers' organization covering employees of multiple plant locations, to company-wide unions to industry-wide unions, and often federating with other unions into national organizations. A union's primary objective, of course, is to represent its constituents: the workers. They have, at each level, attempted to match or exceed the power of the economic unit to which they are opposed: plant entrepreneurs, corporations, MNCs, or, in the case of public employees, local, state, or national governments.

I mentioned earlier that MNCs are, in fact, economic entities, while unions are really political entities. A union is an amalgamation of a group of workers banded together in order to achieve economic and social improvements through confrontation with an employer. Their

⁴ Alun Morgan and Roger Blanpain, The Industrial Relations and Employment Impacts of Multinational Enterprises: An Inquiry into the Issues (Paris: OECD, 1977), pp. 39-40.

⁵Cyril Plant, "Multinationals and Social Policy," *Free Labour World* (July-August 1974), p. 9.

leaders are elected through a democratic process and generally must survive political challenges during their tenure in office.

For the sake of understanding these inherent differences, let's compare the management of a national company who desires to enter the international market versus the leaders of a national union who have similar aspirations. Both the company and the union are located in country X. In the case of the national company, a decision is made to invest in a new plant for the manufacture of its product in country Y. It must first evaluate certain risks: taxation policy in country Y, remittance limitations, requirements for designated local partners, and potentiality for future nationalization and/or expropriation. These are all potential risks inherent in the decision by any company who chooses to operate in any other country. In our example, the company proceeds to establish a subsidiary company in country Y, transfers capital and some personnel from the home country to the host country, and, with government permission, becomes an economic entity in that country. The subsidiary must, of course, adhere to all the laws of country Y, and this new multinational company must accept the risks of future political actions of that country.

Let's now look at a major union which represents workers in the same industry as the company contemplating an investment in country Y. The union's options are much more restricted than those of the company, primarily because it is a political rather than an economic entity. Country Y welcomed the MNC from country X for the positive economic impact it might have within its boundaries: new jobs, new technology, an expanded tax base, contracting opportunities for local businesses, and perhaps increased foreign earnings.

What could the union from country X offer? Certainly, the techniques of effective union organizing, collective bargaining skills, and the experience in developing contract language may be needed if country Y is a developing country. The real question, however, is whether workers want a collective association with foreign leadership and whether the needs of the workers in their national environment will be compatible with the needs of workers in a foreign country.

Also, an apparent question is, what's the quid pro quo from the national government's point of view? The MNC would bring capital and/ or technology, both of which are seen to coincide with the economic goals of the nation. The union may have different goals, such as increased wages, higher benefits, and better working conditions which, although socially desirable, may not coincide with national economic goals. Consequently, the options of the union in country X are much more limited than are those of the corporation. Their best option tends to be some form of affiliation with a union in country Y. They will then be able to exchange information on wages, working conditions, contract language, etc. They may also develop common bargaining goals for their respective constituencies and mutual support agreements.

The history of collective bargaining in most countries of the world has been similar. First, workers have organized to confront employers with collective demands. Second, worker organizations, i.e., unions, have affiliated and/or merged with other unions representing like jobs or for all workers in a single company or industry. Third, because of conflict or potential conflict (strikes or lockouts) governments have, over time, developed a body of law regulating behavior of employers and unions in the collective bargaining process. Labor laws, since they have tended to evolve over time, are based on the political, social, and economic development of that particular country and, consequently, vary considerably between nations.

Differences between OECD countries can be seen from a recent report by Morgan and Blanpain:

It is also necessary to recognise that broadly, there are two main legal approaches: the *continental* approach whereby collective industrial action is permitted, unless enumerated as wrongful; and the traditional *Anglo-Saxon* approach, which protects industrial action against common law liability only in case of "industrial disputes"; if there is no immunity the industrial action may be unlawful.

The different national legal solutions to the problem of drawing the line between what industrial action is legal and what is not, show a baffling diversity. This can be illustrated by some examples. In Germany, only the economic strike is legal: The Federal Labour Court has introduced a purely economic concept of the freedom to strike. Strikes must be "socially adequate"; the employer must be able to respond to the demands his employees make and the strike action must thus be aimed at meaningful collective bargaining. In Germany also, "workers" as such, cannot strike; the freedom to strike belongs to the trade union. This is certainly not the case in France, Italy or Belgium. Political strikes (whatever they are) are unlawful, e.g., in France, Germany and probably in Belgium, but acceptable in Sweden, if they have a temporary, rather than permanent character. Sporadic strikes are of doubtful legality in Germany, probably legal in France and Italy. Sit-ins are evidently unlawful in all countries while wild-cat strikes are illegal in Sweden and Germany but not in France, nor in Belgium, Italy and the United Kingdom.⁶

Although there is a small body of international law, it tends to be restricted to the trade and commerce area. Labor law has evolved country by country and remains today on that basis. There is no multinational labor law. In addition to establishing rules of behavior in the collective bargaining process, these laws also protect the rights of third parties, the workers themselves, and the general public. What we have today, then, is the internationalization of corporations, the international affiliation of unions with like interests, and the absolute sovereignty of a group of nations with no integration of their labor laws, nor any apparent willingness on the part of governments to subordinate national objectives to accommodate bargaining goals of unions in different countries.

Prospects for Multinational Bargaining

What are the prospects, then, of multinational bargaining? I would submit that trade unions normally have the goal of obtaining common wage patterns, benefit programs, and working conditions. Nation-states normally take no exception to these goals for workers within that nation. However, where pressure for uniformity across national boundaries impinges on an economic, social, or political goal of the nation-state, then the government itself will take action to assure that its own goals take precedence.

Let me give you a simple example to illustrate this point. Let's assume that unions in two industrialized countries agree to coordinate bargaining with a major MNC operating in the two countries. The unions agree on a major wage increase as the highest priority issue in both countries. Let's assume, however, that one of these countries has an inflationary rate double that of the other country—not an uncommon phenomenon in today's world. If the country with the high inflation rate sees a high wage settlement as exacerbating its own economic goal of reducing inflation, it may well take action that would thwart the bargaining goals of the two affiliated unions.

In today's society, the sovereignty of nations is inviolable. It is that sovereignty, in my opinion, that will prohibit true multinational bargaining. The organization which comes closest to merging national goals is the European Community. The EC is a group of nations, geographically close, with the aim of developing a common economic policy, common

⁶ Morgan and Blanpain, p. 34.

social policies, and ultimately a political union. However, since each country in the community is a sovereign nation, the EC's goals are often thwarted. Inflation rates in the U.K. and Italy are five to six times that of West Germany. There are major differences in unemployment rates between member states, while wages, benefits, and working conditions for workers in member countries vary widely.

Unions within the EC countries have formed strong alliances and have often agreed on common goals; however, because of the economic differences cited above, it has not been possible, even within the EC, to coordinate bargaining effectively across national boundaries.

In conclusion, I would submit that there will not be effective multinational bargaining in the near future, not because of the intransigency of MNCs, but rather because of differing economic, social, and political goals of nations. The greatest impediment to multinational bargaining is the sovereignty of the nation-state. Genuine multinational bargaining will take place in Europe when the European Community becomes the sovereign state of Europe.

DISCUSSION

GERALD P. HOLMES U.S. Department of Labor*

One common perspective that emerges from all three papers is their agreement that multinational collective bargaining is not imminent. It is also clear that its possibilities are limited inherently by the fact that collective bargaining is not practiced in large areas in this world.

If nonetheless there is the impression in some quarters that multinational bargaining is about to come into its own, the fault does not lie with those practitioners among the trade unions who are closest to these developments. I have found that the most sound appraisals of the potential for multinational bargaining are found among general secretaries and staff members of International Trade Secretariats who attempt to deal with companies across national boundaries. These officials, with one or two exceptions to prove the rule, have most realistic views of the limits and obstacles that lie in the path of genuine international collective bargaining.

While multinational collective bargaining still lies in the future, a trend toward uniformity in agreements is developing as a result of the information explosion. Trade unions, with the aid of computers, store and exchange information comparing agreements with the same employer in different countries. A union in Australia can point out to the company that a safety practice, for instance, it is not willing to agree to, is something that the company put into effect in the Netherlands some vears ago. Another potential source of information is likely to result from worker participation in enterprises. While data gained as a result of such participation are no doubt privileged information subject to legal restraints as regards dissemination, nonetheless it seems inevitable that a by-product of participation will be further trade union insights into MNC management practices and procedures and how to deal with them. Finally, economic interdependence imposes a certain relationship between bargaining in one country and another. Some years ago the Swedish metalworkers were constrained in their wage demands by the

 $^{^{\}bullet}$ Opinions expressed in these comments do not necessarily represent the views of the U.S. Department of Labor.

fact that just previous to the opening of negotiations the German metalworkers had settled for a percentage increase below what the Swedish workers had intended to demand.

As regards comments about the role of Third World countries, on balance I believe they will come down on the side of the companies rather than in support of union attempts to develop multinational bargaining capacity. Not only do many of these countries want to attract transnational companies, but their attitudes toward workers at home often are such that they should not be expected to take action that would strengthen the role of trade union organizations.

Nothing has been said about communist labor organizations. Their exclusion can be properly explained by the basic fact that they are not *bona fide* trade union organizations. Nevertheless, the Prague-based World Federation of Trade Unions and some of its affiliates do play a role in the UN complex, and a hypocritical one it is. While trying to attract transnational companies to their countries with promises of new markets, low wages, and a docile, strike-free labor force, the communists inveigh in the UN and other international fora the specter of these same companies as ruthless, uncontrolled capitalist exploiters. Their rhetoric does nothing to help genuine trade union organizations trying to represent their workers vis-à-vis multinational companies at the international level.

Although multinational bargaining is still some time away, I suspect it will first succeed within small geographic confines and such political/ economic units as the European Economic Community, on the one hand, and the International Trade Secretariats and/or the European Trade Union Confederation, on the other. In the meantime, international trade union organizations can be expected to continue efforts to improve procedures for dealing with MNCs across national boundaries.

DISCUSSION

ROGER BLANPAIN University of Leuven, Belgium

I have been asked to lead the discussion, along with Mr. Holmes, with particular emphasis on the OECD Guidelines for multinationals. I will focus on some of the main points of the Windmuller-Baderschneider paper and reflect on the experience gained in the Badger case.

The Need for Guidelines

Guidelines in general, and in the OECD in particular, are welcomed by governments, international business, and the (international) trade union movement.

Trade unions need guidelines to compensate for their relative weakness at the international level, due to ideological diversity, probable organizational conflict, uncertain financial support, and, above all, possible conflicts of interest among the unions themselves. The most important factor is the latter—conflict among different unions fighting for the same jobs within the framework of a shrinking world economy in crisis and a new division of labor between North and South. Being weak at the bargaining table, the trade union movement pressures international organizations to adopt measures to control multinational enterprises (MNEs) as a means for building trade union strength.

Many multinationals, weary of what they think to be unjustified and often conflicting criticism and consequently not always sure themselves of what course of action is indicated from the overall societal point of view, support the idea of guidelines which, if lived up to, lift their conduct above the level of undue criticism. Their support is based on the conditions that the guidelines are constructive, that they recognize the positive contribution of multinational enterprises, that they are consistent with international law, and that they do not discriminate between multinational and national enterprises.

Smaller, and even larger *countries*, fear the possible abuses of multinationals because "in the facilities they have to allocate their functions (such as production, research, financing, and export) geographically, to distribute costs and profits between affiliates and to respond with greater freedom than domestic enterprises to policy objectives of home and host countries."¹ "The common aim of the Member countries is to encourage the positive contributions which multinational enterprises can make to economic and social progress and to minimize and resolve the difficulties to which their operations may give rise."²

On their own, smaller and even larger countries cannot do much. They know that unilateral national measures will frighten MNEs away, and they need investment. So they strive for international rules. At the same time most countries, even those with strong trade-union movements, do not want to harm their own multinationals by hard and fast rules. On the other hand most, especially countries in which multinationals are based, will admit that cross-border investment plays a vital role in world development and should continue to do so.

The Guidelines of OECD and the declaration of principles of the ILO try to balance those different aims and expectations and are consequently endorsed, although not always with great enthusiasm, by the three parties involved.

No Teeth for the Guidelines: Their Voluntary Character

The Guidelines are voluntary and are not legally enforceable. That is the only way they can be, at least in the beginning. On the voluntary character of the Guidelines, Theodore Vogelaar, Special Consultant to OECD's Secretary General on International Investment and Multinational Enterprises, rightly observes, "It is not so much a matter of principle as of judicial necessity. . . . In our democracies the power to bind citizens and corporations is reserved to Parliaments who may act, of course, by ratifying and giving effect to international treaties or conventions. In the case of a mandatory code covering items like disclosure of information, taxation, company law, social- and antitrust laws, providing for separate obligations for multinational enterprises as distinct from others, the legislative work involved would be a tremendous, lifetime, undertaking requiring utmost care and precision. In addition, questions of uniform interpretation and comparable enforcement would arise. In the present state of our diffused world of 146 countries, yes even amongst OECD's 24 parallel-orientated, free countries, any attempt to establish a binding code is, I am afraid, doomed to remain illusory."3

However, the Guidelines are "morally" binding, sanctioned by public

¹T. Vogelaar, Special Consultant to OECD's Secretary General on International Investment and Multinational Enterprises, Speech, December 13, 1976.

² OECD Guidelines, Introduction, 2.

³ Vogelaar, Speech.

opinion. Whether or not they are lived up to does not depend on their legal enforceability but on the (political) will of the partners involved, especially the concerned governments, to comply with them. It is especially for this reason that the OECD Guidelines may prove to have more impact than other principles of conduct which were or are negotiated in the framework of the UN, the ILO, and even the European Economic Community (EEC).

The EEC simply may not be large enough to develop and uphold effectively a set of rules for parent companies which are located outside its territories. The UN and the ILO—especially since the U.S. left lack the right climate to make the Guidelines work, and this situation has a major bearing on reality. International guidelines can work only if governments want to cooperate closely in making them work. There is no doubt that the government members of OECD want the Guidelines to be meaningful and useful and to cooperate with each other toward that end. Such a relationship is evidently easier between countries which share, to a certain extent, common political, economic, and social views. This cooperation within the OECD does not mean that there is no difference of opinion on a certain number of matters and that a lot of further discussion between governments is needed to straighten out those differences. The Badger case has shown that a great number of governments share a common view.⁴

On January 14, 1977, the 250 employees of the Antwerp office were dismissed, without term of notice. The company knew that the assets of its Belgian subsidiary, which was declared bankrupt by the Commercial Court of Antwerp, were not sufficient to pay the compensation for terminating the contract of the employees without respecting the legally required term of notice. Headquarters, however, refused to supplement the assets of its Belgian affiliate, on the grounds of the theory of limited responsibility for the Belgian corporation.

Then began a series of events which led to the introduction of this case by the international unions before OECD and a discussion of the relevant Guidelines for multinational enterprises in OECD between the governments, this at the request of the Belgian government. The outcome of the OECD discussion led to negotiations between the Badger headquarters and the Belgian trade unions under the active chairmanship of Professor M. Eyskens, Belgian Secretary of State for Regional Economy. These negotiations led to an agreement by which the Badger Co., Inc. agreed to supplement the assets of Badger Belgium NV by the amount necessary to pay for the liabilities of Badger Belgium to its employees. The *amounts of the liabilities* due under Belgian law in this case have been exaggerated; they were not 250 million Belgian francs as has been reported, but 125 million Belgian francs. Let's point out that Belgian law only requires a term of notice during which the employee is supposed to continue working. Compensation, equal to the remuneration corresponding to the length of notice, is due only when no notice is given.

⁴ The Badger Company, Inc., an international engineering firm involved in the construction of processing plants for the chemical, petroleum, and pharmaceutical industries, with headquarters in Massachusetts, has subsidiaries and facilities in 11 countries, has 2000 employees, and is part of Raytheon, which itself controls 14 companies and has some 40,000 employees.

Most governments also accept the fact that the Guidelines may place obligations on multinationals that go beyond what is strictly required by law.

The Addressees of the Guidelines: The Co-Responsibility

The question of whether the Guidelines are addressed to and should, therefore, be respected by both the parent and the subsidiary company, in accordance with the responsibility of each, was at the core of the debate in the Badger case.

The Belgian representative at the OECD meeting of March 30, 1977, Secretary of State for Regional Economy, Professor M. Eyskens, asked his colleagues: "Is it consistent with the Guidelines that a 100% owned and fully-controlled subsidiary of a foreign company ceases operations without having given to its employees the legally required notice, which must allow the employees the opportunity to look for new jobs; [and] without the affiliate disposing of financial means necessary to pay the severance indemnities which are legally due if no term of notice is given, and without the assets to pay the indemnification which is legally due in the case of a closing down of an enterprise?"

The Belgian government's view was that the parent company must assist the local entity in complying with its legal obligations. This view was based on the following principles which are laid down in the Guidelines:

1. The entities of a multinational enterprise located in various countries are subject to the laws of these countries. (Introduction, 7)

2. Enterprises should within the framework of law, regulations and prevailing labour relations and employment practices, in each of the countries in which they operate, . . . in the case of the closure of an entity involving collective lay-offs or dismissals, provide reasonable notice of such changes to representatives of their employees, and where appropriate to the relevant governmental authorities so as to mitigate to the maximum effect practicable adverse effects. (Employment and Industrial Relations, 6)

3. The Guidelines are addressed to the various entities within the multinational enterprise (parent companies and/or local en-

Badger headquarters knew many months before January 14, 1977, that they were going to dispose of their Belgian subsidiary. If they had given notice in due time, no indemnity would have been due. For a full discussion of the Badger case, see R. Blanpain, *The Badger Case and the OECD Guidelines for Multinational Enterprises* (Deventer, The Netherlands: Kluwer, 1977).

tities) according to the actual distribution of responsibilities among them or the understanding that they will cooperate and provide assistance to one another as necessary to facilitate observance of the Guidelines. The word "enterprise" as used in these Guidelines refers to these various entities in accordance with their responsibilities. (Introduction, 8)

The Secretary of State pointed out that this was not only the point of view of the Belgian government, but also of the trade unions and of the employers' associations and the leading multinationals operating in Belgium.

The outcome of the overall discussion in the Badger case was that many countries accept that to the extent that a decision to close down an entity was the responsibility of headquarters, headquarters should be responsible for securing observance of the relevant Guidelines. Undoubtedly this does constitute an important exception to the rule of limited responsibility.

The Exchange of Views on the Application of the Guidelines Within OECD

The OECD declaration of June 1976 provides for a periodic invitation to business and to the unions to express their views on matters related to the Guidelines and foresees that an exchange of views between governments can take place periodically or on the request of a member country. It is within that framework that the unions (TUAC) introduced the Badger case and that the Belgian government asked for an exchange of views among the governments.

These exchanges of views evoke a number of problems of both procedure and substance. A group of questions relates to the problem of whether and how cases or issues can be introduced before the OECD by governments, business, and unions; how to ascertain the facts of cases presented; how to respond to questions by governments, business, and unions; under what conditions individual companies can be invited to express their views. And how should the public at large be informed about the outcome of the discussions? A way to do it may be regular publication in the OECD Observer, as was done by the OECD secretariat after the Badger case.

A most important role is evidently reserved for the IME committee itself, where, as indicated, only governments are represented. This committee, so the Decision of the Council on Inter-Governmental Consultation Procedures on the Guidelines for Multinational Enterprises reads, "shall periodically or at the request of a member country hold an exchange of views on matters related to the Guidelines and the experience gained in their application." The committee certainly does not want to assume the role of a quasi-court judging individual cases, and the abovementioned decision does not allow the committee to "reach conclusions on the conduct of individual enterprises." But this does not alter the fact that, at the OECD meeting of March 31, 1977, when questions of principles were discussed, all members of the committee, briefed by the unions and informed by the Belgian memorandum and undoubtedly by the press, had the Badger case in their minds. Questions of principle will always be related to facts, and the way in which the discussion evolves may indicate whether a certain behavior coincides with the Guidelines or not. The IME committee concluded that discussions cannot focus on the merits of a case, but the committee had, on the other hand, to be informed about the facts to be able to see whether the principles and related Guidelines are involved in the subject for discussion. M. Eyskens, in his press conference of March 31, called the outcome of the discussion a clear hint for Badger.

These questions are still in debate, also within the framework of the possible *review of the Guidelines* which is to take place in 1979. No quick developments are to be expected; things will move slowly and developments depend greatly on the political will of the governments, who undoubtedly want the Guidelines to be more than a scrap of paper.

The Role of the International Trade Union Movement

The international trade unions played an important role in the Badger case, not at the bargaining table, but by presenting the case to OECD and contributing to political pressure. The American AFL-CIO played a crucial role in convincing the American government not to veto the discussion of the Badger case in the OECD committee, but the AFL-CIO's concern was seeing to it that the Badger case did not develop into an anti-American multinational campaign.

IV. INDUSTRIAL CONFLICT IN COMPARATIVE PERSPECTIVE

Industrial Conflict and Consensus in the United States and Western Europe: A Comparative Analysis^{*}

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Union-management conflict in the United States has tended to be at a persistently higher level than in other comparable democratic, highly industrialized societies. This is true despite the apparent paradox that whereas the American labor movement identifies itself with capitalism, the labor movements in those other comparable societies tend to identify themselves as socialistic, committed in varying degrees to significant change in the structure of their societies. One might normally expect that labor movements committed to more far-reaching social and economic change would be more conflict-prone.

It seems useful to begin the analysis and exploration of this paradox by establishing some of the parameters of this paper. As far as countries are concerned, the paper is confined to the United States and the countries of Western Europe, largely excluding the European Latin "tier" (France and Italy), and for similar comparative purposes one could also take in Australia and New Zealand.

[•] A first version of this paper was presented to the Seminar on Comparative Labor Movements in Washington, D.C., in January 1976 and to the West European Studies Seminar of the University of Wisconsin in March 1976. A fuller version, including references, will appear in the volume of papers, edited by E. M. Kassalow and Benjamin Martin, from the *Conference on Contemporary International Labor Problems* held in Madison, Wisconsin, in December 1977 (to be published by the Carnegie Endowment for International Peace). Author's address: Congressional Research Service, Library of Congress, Washington, DC 20540.

The paper deals with union-management [employer] conflict in the post-World War II era. Individual worker manifestations of conflict or dissatisfaction such as quits, absenteeism, or sickness or injury rates are important, but our concentration is on "collective" labor-management conflict, notably strikes.

Table 1 suggests that in terms of work-time lost because of strikes or lockouts, the level of industrial conflict is much higher in the United States than in the other countries under comparison here. Moreover, as we shall indicate below, even those "raw" figures in a sense underestimate how much higher strike incidence is in the U.S. than in the other countries, with the exception of Canada.

TABLE 1

Industrial Disputes, Selected Countries, 1965–74 (Days Lost per 1000 People Employed) and Rates of Unionization^a

Country	Days Lost in Strikes, 1965–74	Percentage of Unionization of Nonagricultural Wage and Salary Employees
Australia	913	55%
Belgium	334	70
Canada	1644	37
Denmark	511	65
Federal Republic of Germany	50	39
Great Britain	743	50
Japan	243	35
Netherlands	65	39-40
Norway	60	63
Sweden	46	82-83
Switzerland	1	37
United States	1305	28-29

Source: For strikes, International Labour Office and Department of Employment Gazette (Great Britain), December 1975. Data are generally based on manufacturing, construction, and transport industries, although local utilities are included in a few countries. Statistical collections vary from country to country and small differences may not be significant. Strikes and lockouts are included.

^a Definitions as to what constitutes fully paid-up union membership and how to estimate employment vary somewhat among countries, so that very small differences between countries should not be given too much weight. In a few countries there are agricultural workers' unions with moderate size membership, but most of these unions are quite small (these unions are included in the membership figures). For the U.S., union membership figures include those employee associations, such as the National Education Association, which the U.S. Bureau of Labor Statistics includes in its directory of national unions and employee associations. The union membership data are generally based on 1974, 1975, and 1976 reports, as available, including estimates by the author.

As a preliminary it seems useful to set aside the Canadian statistics for the main line of this paper. Industrial relations in Canada have been considerably influenced by the fact that a number of U.S. unions and many U.S.-based companies operate in that country, and these companies and unions have often taken their direction from the U.S. In some respects Canadian labor relations law is also like that in the U.S., especially as regards recognition procedures which, as will be indicated below, have a special relation to labor-conflict-producing tendencies.

Even the statistics in Table 1 tend to understate the level of worktime lost because of strikes in the U.S. when compared with other countries. The rate of unionization in the U.S. is significantly lower than that in the other countries. The relative time lost due to strikes in the U.S. would, therefore, be even higher if one took into account the higher unionization figures in Europe. The higher the unionization figure, everything else being equal, the higher the potential time lost from strikes. Moreover, for most of continental Western Europe, collective bargaining agreements often cover entire industries and millions of workers who are not union members, with the consequence, again, that the potential for time lost from strikes is higher. This would be true because in most of these countries, a strike call by union leaders in most industries would be largely "accepted" and followed by most of the nonunionized employees. (The practice of an employer's operating in the face of an officially called strike has tended to wither in most West European countries in the past few decades.) In the U.S., with the prevalence of unionsecurity clauses (especially the union shop), particularly in the private sector, the number of nonunion employees is smaller, and the potential strike impact of unions is much closer to their actual size.

One or two more macro-observations are useful as regards Table 1. The period covered is 10 years, but an additional 10 years back in time would not significantly change these relativities. Again, the differences between the U.S. and Canada, on the one hand, and the other countries are so substantial that they cannot be seriously attributed to differences between countries in definition of strikes or the ways in which strike statistics are collected. Finally, it is also recognized that the disaggregation of strike data is a very useful exercise and might reveal, for example, that in terms of *number of strikes*, as opposed to mandays lost from strikes, the U.S. is less of a "leader" (with the implication of the longer duration of U.S. strikes, etc.) when compared to some other countries.

The qualifications can be endless, but one more should be added. A closer examination of the statistics also seems to indicate a fairly high strike incidence in Australia and Great Britain. When linked with Canada and the U.S., this seems to suggest a kind of Anglo-American syndrome of labor-conflict propensity. A number of the elements cited below which produce greater industrial conflict as opposed to *continental* Western Europe would apply in the British case (and to a lesser extent in Australia), but an examination of strike statistics for both the U.S. and Great Britain in the past two decades seems to suggest a persistently higher level of conflict in the former country.

Explaining the Higher Strike Activity in the U.S.

In general, it is customary in making intercountry labor comparisons to characterize the European labor movements as being socialistic. (I am aware that in many countries the European labor movements are pluralistic with important Catholic and Protestant federations, but in all the countries we are dealing with the main line of labor development has been along a socialist "axis.") While it is true that this "socialism" seems less pronounced and traditional (certainly less "revolutionary") today than it appeared to be before World War II, it is a mistake to overlook this difference between the labor movement in the U.S. and those in Europe.

The U.S. is almost unique in having a labor movement which explicitly (and ideologically) accepts the capitalist system. In varying degrees, almost all of the major European movements still are part of labor complexes that are committed to change which would eventuate in (what they call) a socialist society. Part of this pattern of labor development is the typically close association of European unions with political parties and a greater direct commitment to (and reliance on) political-governmental action. Practically speaking, this socialism might end up as not much more than a more fully developed, publicly operated, welfare state and a greater acceptance of economic planning than is true of U.S. labor, but it remains an essential difference. It helps color and explain such domestic European union demands as co-determination and worker sharing in capital assets, which seem so remote from U.S. union interests, as well as differences in international matters such as the International Labor Organization and the International Confederation of Free Trade Unions.

European Socialist Unions Less Strike-Prone Than U.S. Unions

Of more immediate concern for this paper is the paradox that the socialist labor unions of Western Europe, generally, operate within union-management structures which produce fewer strikes than do the capitalism-accepting unions in the U.S. The very socialism of the European movements, and with this their close relation to socialist and labor parties, is one factor that has led them to greater reliance upon legislation as one means (along with union bargaining) to advance their conditions. This is in some contrast with the almost exclusive reliance on collective bargaining by American unions to protect and advance their wages, hours, and related working conditions.

U.S. Greater Reliance on Bargaining Raises Conflict Potential

The much greater reliance on bargaining by U.S. unions makes the union-management process and the collective agreements produced by the process a more complex and conflict-prone affair. Such critical issues as health insurance, paid vacations and holidays, protection against layoffs, and others are just about exclusively the province of collective bargaining in the private sector in the U.S. In Western Europe (Great Britain is something of an exception), these matters are to a great extent the province of legislative protection. As a consequence, the collective bargaining stakes are higher in the U.S., the collective agreement is more complex, and union-management conflict (including strikes) is more likely to occur than in Europe.

If there were some way to measure the level or degree of political conflict which these same U.S.-type bargaining issues provoke in European parliaments, it is possible that the total level of "conflict" would be as high, or higher, in Europe than in the U.S. For example, the enactment of a new collective bargaining law in Sweden, which will affect and redefine issues such as managerial prerogatives over work assignments, the order of layoffs, or the introduction of new machineryissues which would have been exclusively the subject of bargaining between particular unions and employers in the U.S.-took several years and considerable political debate and disagreement to complete. The German Federation of Trade Unions-DGB, and the German Social Democratic Party, were involved in a more than 20-year political-legislative struggle with other parties and employers to extend co-determination from the coal and steel industry to the rest of the private sector. The political-legislative process, by its nature in modern democratic societies, rarely leads to open conflict and a breaking-off of relations, such as a union-management strike represents, but the conflict involved is not to be underestimated.

European Union Coverage Has Wider Scope Than U.S.

The greater dependence on legislation for substantive benefits suggests another aspect of union-management relations that influences the conflict level. The tendency of European unions (and correspondingly, also employers) has been to build more inclusive bands of bargaining and benefit structures. Benefits, even under collective bargaining agreements, are generally aimed at industry-wide coverage, and as such tend to settle nearer to the ability to pay of marginal producers. In much of the U.S., unions tend to aim at the better-off producers (at least in their leadoff efforts), and the bargained benefits cut more deeply into enterprise returns. In turn, this is likely to provoke sharper resistance from such firms (who tend to be protected in European-type bargaining), with the greater prospect of labor conflict.

The prevailing European system of bargaining along a broader industry front (sometimes a regional-industry front) tends to elevate bargaining responsibility to the national (or regional) union and employer-association level—and the stakes of such professional bargainers are in a sense less immediate than tends to be the case of individual employers and local union groups. This contrasts with the U.S. where individual firms usually face off directly against local unions, and where each concession gained by the unions is almost personally and directly felt as a loss of personal authority by management negotiators.

The very size and compass of industry- (or region-) wide bargaining, so common in Europe, may lead to greater inhibitions among the bargaining "partners" about allowing negotiations to break down since the character of a resulting strike could embrace so many firms and workers in Western Europe.

U.S. Job-Control Unionism More Conflict-Prone

It should also be added that this broad structure of bargaining tends to put much less emphasis upon job control than is true of most bargaining in the U.S. Job-control bargaining in the U.S. also helps account for the higher level of employer resistance and conflict.

The upsurge in strikes in a number of European countries in 1968–71 was triggered in most of them in part only by a push for certain benefits and job-control rights at the plant or enterprise level. To the extent that European unions come to greater concentration on plant and job-control matters in the future, it is possible that strike levels may rise somewhat and come closer to those in the United States. Such a push is likely to meet with greater resistance on the part of many employers than does much of industry-wide bargaining, but this tendency is not likely to replace the overriding importance of the wider bargaining structures and consensual-tending controls (when compared to the U.S.) of the bargaining systems prevalent in Europe.

Role of Employer Associations in Europe

Why this tendency toward wider bargaining, and related to it the greater role of employer associations in Western Europe, with wider implications as regards the incidence of strikes and conflict? To begin with, the role of collective groups in economic life has traditionally been larger in West European countries with their mercantilist backgrounds. Traditionally, there has been much less emphasis placed upon competition between firms and, therefore, fewer inhibitions on cooperation between firms in dealing with unions or on other economic and social matters.

The socialist orientation of the union movements has inclined them to look for wider, if less demanding, bands of protection and agreement structures, advancing all the workers in an industry even if this meant only moderate bargaining gains. As an ILO study of collective bargaining notes on this point, "Regarding workers and employers as the embodiment of distrust and basically conflicting forces, the unions emphasized the importance of dealing with employers through massive class action in which an industry as a whole, or a territorial subdivision of it, constitutes the appropriate [bargaining] arena." This contrasts with the more exclusively membership-only, single-employer, or plant-oriented thrust of most U.S. unions.

To bring this closer to the subject of industrial conflict, it is useful to suggest some generalizations about European employers' associations. In most West European countries these bodies (at least most of those associations that engage in collective bargaining) were established in the late 19th century or early 20th century as a counterforce to the rising union movements. At that stage it is fair to say that European employers were probably as resistant to unionism as their American counterparts.

In several countries these associations took the path of trying to deflect the growing union thrust away from individual enterprises toward an industry level. This had some significant long-run effects. As previously noted, negotiations at the industry level were, in a sense, less of a direct challenge to managerial plant prerogatives, and this tended to lower conflict potential.

Union Recognition an Easier Process in Europe

Of great importance was the subtle kind of change most of these employer associations underwent in a relatively few years as regards their attitudes toward union recognition. Indeed, associations once established to deal with unions, even for bitter defensive reasons, come to have a stake in seeing that comparable employers elsewhere in the country do not have the advantage of operating in less favorable conditions, for the workers, than those provided under the union-employer association contract, since this would give them a competitive edge.

The tendency of employers' associations to accept unionism has, in most of post-World War II Europe, led to the point where, with only rare exceptions, in middle-sized or larger firms there are no serious struggles over union recognition. The overwhelming majority of such firms find it expedient (in several countries just about mandatory) to join their respective employers' associations, and this usually extends union recognition automatically in their plants. Disputes over union recognition are relatively rare, and in a disproportionate number of the few instances among larger firms where they have occurred, they have tended to involve U.S. multinational firms' subsidiaries. The managers of these subsidiaries under home-American influence, have sometimes found it difficult to adapt to such a low-key system of recognition.

Union-Recognition Struggle Helps Breed Adversary Relationships in U.S.

It is useful to contrast the general European experience with the typical recognition struggle in the U.S. Here a would-be union in an unorganized plant must win an election contest to gain recognition rights. To a very significant extent, this contest has become one between the union or unions, on the one hand, and the employer. In a real sense a conflict situation is the midwife of almost all new American unions.

It is little wonder, in the face of this recognition struggle, that unions and management typically "square off" as adversaries from the day the union begins to organize. This process, as well as past labor-management history and tradition, sets them into fixed adversary positions even if the union wins the election and they begin negotiations. The general resistance of U.S. employers to unionizing efforts simply has no serious counterpart in Western Europe today.

The existence of growing numbers of specialized law firms whose trademark is keeping unions out of an employer's plant (or destroying them if they come in) is something which is simply unknown outside of America, in most other democratic industrialized countries.

The taking of a clear adversary position in labor-management relations is, of course, also typical of American unions which, to repeat, almost of necessity are born in struggle. I was struck by a report prepared by Sydney Roger of the University of California's Institute of Industrial Relations. He chaperoned a team of San Francisco longshoremen who, with the support of the Ford Foundation, undertook a work-study visit to the docks in Rotterdam, Netherlands. There they found a far more cooperative work atmosphere, greater job security, and greater community respect for the Dutch longshoremen as compared to their own status in San Francisco, where automation was apparently creating considerable job insecurity. The "outstanding contrast between the two" industrial relations outlines was that the Dutch was "cooperative," while in San Francisco it was "adversary." The American unionists seemed uncomfortable in the nonadversary culture, and spoke constantly to the Dutch workers "of their militancy, their freedom and independence, their control of the job, and above all of their fighting tradition..."

Some Additional Factors

It remains to list a few other factors—economic and social as against industrial relations factors—which tend to limit union-management conflict in Western Europe as compared to the U.S. European economies are to a much greater degree dependent upon international trade, with as much as 20 or 30 percent (more in some cases) of gross national product flowing through foreign trade channels, in contrast to 6 or 7 percent in the U.S. An awareness of foreign competition is likely to create a sense of joint constraint on bargaining partners. It was such a sense of constraint more than anything else that led the steel companies and the steel union in the United States to their experimental negotiating agreement which has eliminated large-scale strikes in that industry, for the time-being at least. On the other hand, joint concern over foriegn competition has had no influence on reducing tension or improving cooperation between the textile unions and most of the major companies in that industry in the U.S.

Finally, I have already made reference to a wider commitment to the welfare state and planning in Western Europe. This, too, probably results in greater constraints on union-management conflict. When in the pursuit of sustained full employment and economic growth a state is led to employ a variety of income, tax, manpower, and welfare-planning policies, it almost inevitably brings pressure upon unions and employers in pursuit of labor-management stability. The growing use of the so-called "social contract" device in several European countries to effect income, inflation, and employment tradeoffs between governments, unions, and employers is an important illustration.

Over and beyond these broad social and economic forces, however,

it is the conclusion of this paper that more purely industrial-relations elements—the structure of bargaining and the lesser struggle over union recognition in Europe, the different tradition of unions and employers, the larger role of European employers' associations, the greater direct activities of the European state in regulating the substance of wages, benefits, and working conditions—also tend to produce a lower level of industrial conflict in Europe than in the United States.

The prevalence of greater conflict-proneness in U.S. labor relations is largely taken for granted. In a future where problems of foreign competition might have more significance, or interest in work humanization and improving productivity could be more important, this conflictproneness might come to be viewed in a different light.

Interpreting Industrial Conflict: The Case of Japan

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There are many forms of overt industrial conflict-complementary to, or substitutable for, one another. The work stoppage, an unoualified proxy for the whole of industrial conflict, is only one form. In Japan, since the Second World War, trends in the level and patterns of industrial conflict show considerably more overt conflict than popularly believed. If overt conflict is but a small part of latent conflict, industrial relations in Japan have been anything but harmonious. Probably the popular belief emerged from stereotyping Japanese social relationships as consensual. Japanese "culture" values harmony and order, so goes the stereotype: therefore, any information on industrial conflict in Japan should show how orderly and harmonious employment relationships in Japan are—the cause becomes the effect. Such a simplistic conclusion is unwarranted and merely perpetuates stereotyping. At least, the stereotype should be corrected by comparing the volume for various forms of overt conflict over time with the conflict experiences of other industrialized countries.

Not too much can be said about international comparisons of industrial conflict. One mammoth problem is the measurement of conflict in all of its forms for countries that constitute relevant comparisons; e.g., industrialized market economies. Even the ILO collects data on only a few indicators of work stoppages from member governments. Between crude statistics on work stoppages and the overly gross depiction of "culture" of a country, there is little to go by for the analysis of the meaning and reality of industrial conflict.

The paucity of efforts for measurement reflects the poverty of conceptualization about conflict. A first useful step is to turn to Dunlop's concept of industrial relations *systems* which possesses key analytical elements, if appropriately "dynamized," for evaluating industrial conflict at a national level. Dunlop slots these elements into four major groups of constraints on actors in industrial relations: markets (or budgets), technological requirements, distribution of political power in the wider society, and degree of shared ideology (or consensus) among the actors. These "determine" the output of rules that regulate or guide the behavior of the actors, including manifestation of conflict.

Short of the state of equilibrium, conflict must be *latent* in any relationship in a dynamic setting because of the risk that "unfairness" may develop from changes in the constraints on the relationship. The stipulation of standing rules of negotiation in case "unfairness" does develop is clearly desirable. The machinery which implements these rules puts off, or resolves entirely, the necessity of *latent* conflict becoming *overt*. The failure of the machinery is followed by a contest of power in the sense that one attempts to pressure one's opponent into accepting one's terms. Strategies and tactics deployed by both parties in the course of this contest can be expected to vary. A temporary suspension of the relationship may be one of them.

Industrial conflict is conceived of in collective or interorganizational terms; i.e., as conflict between employer or management and group(s) of workers, informally or formally organized. The possibility of conflict in an employment relationship taking either individual or collective form indicates that the individual worker desirous of correcting an "injustice" has the choice either to go it alone or to work for common goals through association with other workers. If the latter is chosen, collective bargaining takes the place of individual bargaining and collective disputes may accompany collective bargaining in resolving the issues. Most important in the process is that the organizations, far more so than the individual, develop strategies and amass resources to compel concessions. Disagreements on the sharing of the joint product may give rise to overt conflict. To all this, one may add conflict arising from the "human side" of organizations; i.e., how the style of management affects the sensibilities of workers jealous of safeguarding their human dignity.

We should always assume the existence of, and try to understand the nature of, *latent* conflict in employment relationships. For this, we offer five areas for observation as a minimum framework for the analysis of industrial conflict: (1) how efficient labor markets are in general, (2) how well firms manage their internal labor markets, (3) how satisfactory relative shares in the firm's gains are to labor and management, (4) how enriching (or diminishing) work life in the firm is to workers by comparison to their aspirations for decency and dignity, and (5) how effective arrangements, procedures, or machineries are that are designed to identify problems arising from disequilibrium and to solve them through negotiations. Collective bargaining is a central feature of this last area.

The work stoppage is the most popularly used indicator for the comparison of industrial conflict among countries. From the time series of mandays lost per 1,000 workers, Japan occupies a mid-point in the rank order among advanced market economies: Italy (highest), the U.S., Canada, the U.K., France, *Japan*, Norway, Sweden, and the Netherlands (lowest).

Let us dispose of the "cultural" explanation. Countries well known for industrial democracy are associated with lower "strike volume" than other private-enterprise countries. Extent of industrial democracy may even be considered an effective explanatory variable for international differences in "strike volume." One might conclude that, since industrial democracy is less extensive in the United States than in Sweden, the "strike volume" is higher in the U.S. than in Sweden. But as Japan is also in the sample, by that token one may have to admit that Japan's industrial democracy is stronger than that of the U.S. Many no doubt would find their intuition at odds with this kind of comparative observation.

Analysis of industrial conflict is far more complex than reliance on a single variable such as the strike. The strike is one of many collective forms of industrial conflict. The rather "respectable" strike record of Japan is perhaps because Japan, not to be outdone by Western countries, has concentrated all industrial conflict in this one form, while other countries have allowed all kinds of collective conflict besides strikes. One is in for a disappointment, however, because collective forms of conflict other than strikes are just as richly developed in Japan as elsewhere. In official statistics, "industrial disputes" are first classified into (1) those not accompanied by "dispute tactics" but settled with the interventions of third parties, and (2) those accompanied by dispute tactics. The disputes in the second category are then enumerated under several headings including strikes and lockouts. Mandays lost through work stoppages are calculated on the basis of work stoppages lasting more than half a workshift (at least four hours). In addition, there are strikes lasting for shorter periods, slowdowns, sickouts, leave-taking, and diverse forms of conflict like rallies and picketing. These statistics refer strictly to disputes having actual impact on the pace and volume of work due to disagreements between employers and workers over wages and working conditions. They exclude stoppages solely for political purposes. The "strike volume" alone therefore underestimates production losses due to

industrial disputes and underrates the crisis atmospheres or intensities of conflict.

What distinguishes Japanese practices is not especially qualitative or cultural, but quantitative on the common spectrum of labor market types ranging from unstructured, individualistic, competition in open labor markets to the highly structured internal labor markets, together with highly unionized workers, of large-scale firms. The organized sector of Japan perhaps shows a higher degree of elaboration of internal labor markets than do other countries. What is striking about the Japanese industrial scene is the degree of synchronization of the type and strategy of unionism with the objective conditions of the labor markets which evolve with changes in technological requirements. Once the rules of the internal labor markets are so firmly established as to offer the near certainty of career prospects and to remove the question of employment security, one remaining major bargaining issue that gives rise to overt conflict is the pricing of jobs in the internal labor market. Indeed, only when the issue has been employment security for unionized workers have strikes tended to be of long duration.

The determination of the rate of pay increase was for a long while the principal conflict area between labor and management, but until recently the conflict arising from bargaining over wages was always resolved in ways that made both parties better off. With the passing of the economic miracle of Japan in recent years, labor-management relations in Japan have acquired new complexities which are fraught with greater potential conflict. Much depends on how the aggregate demand and the conditions of specific product markets affect various firms and how the firms transmit these market signals to the adjustment of the internal labor markets. It is possible that in many firms, the workforce may have to be reduced further and jobs more drastically restructured than what has been effected so far.

Wage and salary earners in Japan increased substantially from fewer than 14 million persons in the late 1940s to about 37 million in the mid-1970s. The growth of labor union membership roughly keeps pace with wage and salary earners. The ratio has been about 35 percent. Since the early 1950s, the number of disputes has clearly increased more rapidly than paid employment or union membership. The ratio of the number of disputes to the number of wage and salary earners, which may be called "frequency of disputes," has therefore increased markedly over time. From this point of view, one may say that Japan has increasingly become a country of industrial conflict. In contrast, the time series of mandays lost through disputes does not show a steady upward trend. Japan thus appears also to be a country of steady industrial peace. The Japanese themselves tend to attach more weight to the increasing frequency of disputes, while foreigners watching Japan tend to pay more attention to the apparent stability of mandays lost. Both, of course, are right.

It has been pointed out that individual and collective forms of conflict may be complementary to, or substitutable for, each other. One of the major forms of individual conflict is personnel turnover. Mandays lost through disputes and labor turnover rates in Japan appear to be inversely correlated. One possible line of interpretation is that greater commitment to the firm by workers as indicated by decreasing labor turnover may generate a greater desire on the part of workers to seek improvements within the firm without leaving it for elsewhere. In other words, committed workers do not "exit," but "voice" dissatisfaction in search for improvements, to mimic Hirschman's theory of "loyalty."¹ The association of a stronger attachment to the firm and a higher possibility of conflict with it sounds paradoxical, but because Japanese workers are so attached or "loyal" to their employers as to have a relationship of lifetime commitment, they also have a high likelihood of conflict with their employers!

The relative movements of individual mobility and organized conflict place intellectual history about Japanese industrial relations in proper perspective. Abegglen's formulation of the theory of lifetime commitment occurred against the backdrop of sharply falling labor turnover rates during the 1950s.² The stabilization of employment relationships obviously was the trend of the times. But it was also during this period that the Spring Offensive was invented. It now appears to have been unfortunate that the theory of employment stabilization was not accompanied by a theory of industrial conflict. When individual mobility was a feasible "exit" from unsatisfactory conditions of employment, workers had reduced need for organized conflict with their employers who, reading the signs of the times, were also disposed toward readier concessions to worker demands. The spread of *Shuntō* readily indicated the capability of the unions to mobilize worker dissatisfaction within enterprises.

Generally, separation rates are higher and mandays lost fewer in smaller establishments than in large. At the same time, workers in larger private establishments and in the public sector are far more extensively organized than are those in small. Almost 700 mandays lost per 1,000

¹ Albert O. Hirschman, Exit, Voice and Loyalty (Cambridge, Mass.: Harvard University Press, 1970).

² James G. Abegglen, The Japanese Factory (New York: Free Press, 1958).

workers in larger establishments exceed the record of most years in the U.S. since 1950. Furthermore, the rate of participation in strike activities (as measured by the ratio of strikers to all workers) is rather high—10 percent. The situation of larger establishments in Japan certainly fits the description that strikes have been "astonishingly" widespread among these establishments. And yet, these were the workers with whom many associate the label of "lifetime commitment." These workers, who supposedly enjoy greater job security, higher wages and benefits, and better working conditions than workers in smaller enterprises, are strongly attached to their firms and therefore always ready to pick quarrels with managements regarding how the conditions of workplaces can be improved. This is even more so in the public sector where the *right* to strike has been denied since the late 1940s.

If we take into account forms of disputes not accompanied by strikes or lockouts, the participation rate among the workers of larger establishments rises significantly above 25 percent and may be as high as 50 percent. That more than a quarter of workers, or possibly one-half, in a well-established sector of the economy were engaged in one form or another of industrial conflict in a year would not fail to catch the attention of the press and surprise the public. Presumably, numbers of strikes rather than strike duration are a sufficient demonstration of organized strength. The Japanese public itself would tend to see behind all this the spectre of one big bang—a general strike, semblances of which have been threatened off and on with enough realism to worry the government, employers, and general public.

However one evaluates the state of industrial conflict in Japan, one must at least recognize that the present state is a consequence of efforts often involving painful decisions and adaptations on all sides—employers, workers, unions, government, and the general public. The Japanese system has not been entirely free of bitterly fought test cases verging upon barbarous violence (which may be defined as confrontations of the parties involved endangering their own physical safety to an extent that justifies the intervention of the police). The successes and failures of these test cases more or less determined the perimeters of the configuration of industrial conflict beyond which someone or some group would rather risk everything—life or fortune—than compromise.

The source of pressures on the industrial relations system are mainly government policy on the one hand and, on the other, the degree of consensus among the industrial relations actors themselves reacting to the wider social context. Admittedly, these forces deserve fuller analysis than we give here, but their importance is probably equal to, if not greater than, the influence of markets and technology. In conceiving how political systems work, there is the conventional choice of applying either the notion of "democratic pluralism" or of "ruling class." In the former, groups of both public and private spheres are likely to be in conflict, but the conflict is mediated and resolved by a "neutral" government to which each interest group has equal access and which fashions a policy outcome that reflects the relative voting strengths of the interests actively seeking favor. In the "ruling class" approach, a relatively small elite commands all the resources and ignores or represses any challenge to its power and authority. With regard to industrial conflict, these competing concepts of the political system have very different outcomes. In the "democratic pluralism" model, one would expect the government to make and enforce rules about relations between labor and management that would channel their behavior into mutually acceptable, largely peaceful, patterns. In the early stages before these rules are adopted and institutionalized, one may expect a high degree of overt conflict among the industrial actors, but once the rules are established by the democratic political procedures, the frequency and intensity of overt industrial conflict would taper down and level off-a "maturing" process and "the withering away of the strike." In the "ruling class" model, overt conflict would be suppressed, if necessary by military force, giving rise in all likelihood to class struggle on the part of workers and other alienated groups. Industrial conflict, in this scenario, at first would remain low and then rise over time to a crescendo ending with complete defeat of one class or the other.

Postwar Japan does not appear to fit either of these political models, although elements of truth may be discerned in each. Japanese industrial conflict in the postwar period, with and without strike activity, has followed neither pattern, but has exhibited ups and downs, and the substitution of one form of conflict for another in rough alternating sequence. This suggests that the Japanese political system lies somewhere between the "democratic pluralism" and "ruling class" types. Some analysts have labeled this model as "establishment orchestration of econopolitical life."³ In this depiction, pluralism holds only in minor matters (of which government policy toward less critical industrial relations issues may be a part), but in major issues (such as basic economic and political arrangements) power holders lead the public by engaging in a variety of reassuring symbolic actions to gain wide support or acquiescence for the status quo. In this conceptualization, admittedly too briefly stated here,

³Kenneth M. Dolbeare and Murray J. Edelman, American Politics: Policies, Power and Change, 3rd ed. (Lexington, Mass.: D.C. Heath and Co., 1977), pp. 437-54.

over long periods of time the general public is quiescent toward political policy and receives constant psychological assurances that what is done is in their best interests. Group outbursts of protest are likely to occur only as groups see and experience sharp deprivations in their expectations either absolutely or in relation to other groups. Industrial conflict, then, becomes part and parcel of social conflict in general, and under the constraint of the political arrangement will rise and fall as the latter itself rises and falls. It is of interest to note in this connection that the recent climb in industrial conflict in Japan since the late 1960s occurred within the context of a rapid growth of formal and informal protest movements led by "citizen" or "resident" groups against rapidly growing pollution, inflation, urban congestion, and the like.

Until recently there has been little serious check on the political dominance of the conservatives in Japan's political process of "establishment orchestration." Propped up initially by Allied Occupation approval, they have remained in power for almost 30 years. At the same time, the opposition—socialists, communists, and other left-of-center parties to which the national labor confederations have been affiliated—has remained highly divided and unable to challenge even the malapportioned representation in the National Diet that heavily favors maintenance in power of the well-financed and efficiently organized factions of Liberal Democrats despite a steady slippage in their popular support at the polls. Opposition parties appear to be content to play only the role of opposition without serious efforts to bid for dominance.

On the other hand, there has nevertheless been implanted the legitimation of conflict among the industrial relations actors as part of a general revolution in social values throughout Japan in the postwar period. While neither the Allied Occupation nor the government for long was to tolerate an unbridled use of strike or other disruptive action, the reforms of the Allied Occupation left a strong acceptance of conflict as a legitimate form of behavior in industry. This legitimation of conflict has been reinforced by continuous resort to overt dispute action, often as symbolic behavior. Short walkouts and other demonstrations in part serve as constant reminders to management, government, and the public that organized labor possesses the right, gained after decades of repression, to make demands for redress of widely felt grievances. No doubt, this is an important "ritualistic" aspect of *Shuntō* itself in serving as a highly visible gesture to the entire population of the right of protest possessed by labor.

Conflict accompanying demands for fairness as a major strand of Japanese social values runs counter to the popular image of Japan as an

ordered and peaceful society. It has perhaps been to the political and economic advantage of the establishment to stress almost exclusively the latter theme, especially to convey the impression abroad of how smoothly Japan has been able to recover from wartime devastation and rise to build the third largest economy of the world and to become a dependable ally of the West. However, just as this image of harmony was being dreamed up about Japan, it was equally justifiable to depict Japan as a society gripped by increasing conflict and complex contradictions. We would argue that industrial conflict has become as much a part of the Japanese ethos shared by the industrial relations actors as it has in other industrialized market economies, and that Japan does not stand apart as a unique case of harmony and consensus.

Canadian Strike Activity: Union Centralization and National Diversity

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Scholars and policy-makers have noted the great rise in levels of strike activity in Canada since the mid-sixties. The number of mandays lost per thousand workers due to strikes in Canada is second only to Italy among western industrialized countries.¹ The increased reliance on the strike to settle labor-management disputes has been identified as a symptom of the unhealthy nature of the collective bargaining system in Canada² and has been used as a basis for suggesting changes to alleviate this problem. This essay examines two approaches used to explain recent Canadian strike activity, and considers the utility of the solution generally proposed—centralization—by analyzing the 1975 strike by the Canadian Union of Postal Workers (CUPW).

Canadian Strike Activity: Explanations and a Solution

THE "NATIONAL CONSENSUS" APPROACH

One perspective explaining strike activity assumes that Canada is a single integrated economic system. This approach allows researchers to examine measures of strike frequency, duration, size and mandays lost per worker for the country as a whole, drawing conclusions about the trends in strike activity and the impact of economic conditions on these trends.

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¹ Stuart Jamieson, "The Third Wave Reconsidered—Labour Unrest and Industrial Conflict in Canada, 1960–1975," paper presented at the meetings of the Canadian Industrial Relations Institute, Fredricton, New Brunswick, June 1977. Richard Hyman, Strikes (London: Fontana Press, 1972).

² See, for example, fn. 1 in Douglas A. Smith, "The Impact of Inflation on Strike Activity in Canada," *Relations Industrielles* 31, No. 1 (1976), pp. 139–45.

Jamieson's early work on industrial conflict³ depicted strikes as occurring in three long waves of 20 to 25 years each. This phenomenon was explained in terms of its correspondence with the expansionary phase of the business cycle as well as other changes in the economic, legal, political, and social setting of the time.

Econometric models have been built to examine changing strike rates. Generally, the explanatory variables reflect changes in the business cycle including measures of unemployment and rates of change in the GNP, consumer price index, corporate profits, and wages across industries.⁴ The conclusions suggest that some measures of activity such as number of strikes are responsive to national economic activity while others, including size and duration as well as total time lost due to strikes, require further explanation.⁵ In fact, Walsh questions the ability of the business cycle approach to explain time lost and attributes increased conflict to the "youthfulness and higher education of the labor force."⁶ He suggests that the Canadian collective bargaining system has been weakened by its inability to deal with complex issues such as *technological change* and *worker alienation*.

THE "NATIONAL DIVERSITY" APPROACH

An alternate approach to Canada's industrial conflict assumes "national diversity" based on ethnicity, religion, language, and regional development patterns.⁷ Any real understanding of Canadian strike activity must be based upon data disaggregated to the level of relevant economic units, particularly provinces or regions. Arguments regarding industrial relations invariably discuss the jurisdiction of provincial governments in labor relations and its fragmenting and decentralizing influence on

⁵ The coefficient of determination (R^2) tends to drop from the .80 to .90 range down to .40 to .50. Moreover, in most instances, although the overall regression equation attains a significance, the independent variables alone do not.

⁶ Walsh, "Economic Conditions . . . ," p. 54.

⁷ See, for example, John Porter, *The Vertical Mosaic: An Analysis of Social Class and Power in Canada* (Toronto: University of Toronto Press, 1965).

³ Stuart Jamieson, *Times of Trouble: Labour Unrest and Industrial Conflict in Canada, 1900–1966, Study No. 22, Task Force of Labour Relations (Ottawa: Queen's Printer, 1968).*

⁴ See the following studies of economic impact of Canadian strike activity: John Vanderkamp, "Economic Activity and Strikes in Canada," *Industrial Relations* 9 (February 1970), pp. 215-30; Douglas Smith, "The Determinants of Strike Activity in Canada," *Relations Industrielles* 27, No. 4 (1972), pp. 663-78; William Walsh, "Economic Conditions and Strike Activity in Canada," *Industrial Relations* 14 (February 1975), pp. 45-54; Smith, "The Impact . . ."; and Jean-Michel Cousineau and Robert Lacroix, "Economic Activity, Inflation, and Strikes," *Relations Industrielles* 31, No. 3 (1976), pp. 341-58.

collective bargaining.⁸ Moreover, provinces differ in their economic, industrial, and political bases. Traditional East-West cleavages and the political nature of industrial relations in Quebec have also been introduced as decentralizing pressures.⁹

Jamieson's recent reexamination of the "third wave" of Canadian industrial conflict is representative of this approach.¹⁰ His argument rests on the interaction between local diversity and rapid economic, social, and political change. Analyzing trends in strike activity in British Columbia, Ontario, and Quebec, he shows that diverse regional patterns exist in the magnitude, intensity, and timing of industrial conflict across provinces. The differences are attributed to unique structures of specialized industries and markets, differences in degree of provincial government intervention, and bargaining structures (e.g., B.C. unions are more centralized) in each province.

Finally, the role of U.S. domination in regional Canadian markets, through direct capital investments and U.S.-based international unions, are identified as sources of decentralization. When these factors plus bilingualism and biculturalism are considered, Canada's recent wave of strike activity may be attributable to historical, cultural, political, and industry differences which lead to decentralization of collective bargaining and the multiplication of industrial disputes.

A SOLUTION

While the national consensus and diversity perspectives differ on explanatory principles, both agree on a solution. Despite Jamieson's interprovincial, interindustry diversity analysis, he comes to a rather simple conclusion.

There seems to be much to be gained, . . . from organizing to carry out more broadly based industry-wide or market wide collective bargaining with unions on a provincial, regional or in some cases national scale, in place of the highly fragmented and localized system that . . . seems to perpetuate a chaotic wage structure and an inordinately high frequency and magnitude of strikes.¹¹

⁸ Stuart Jamieson, Industrial Relations in Canada (Toronto: Macmillan, 1973, pp. 116-42.

⁹ George Haythorne, "Canada: Postwar Changes and Current Ferment," in Worker Militancy and its Consequences, 1965–1975, ed. Solomon Barkin (New York: Praeger Publishers, 1975).

¹⁰ Jamieson, "The Third Wave"

¹¹ Jamieson, "The Third Wave . . . ," p. 13.

The strategy of centralization is generally supported by policy-makers, the labor movement, and academicians alike. Recently, a report on the construction industry in B. C. recommended further centralization of collective bargaining to solve the industry strike problem.¹² Ronald Lang of the Canadian Labour Congress (CLC) has stressed the vital importance of centralization to the power and role of unions in society.¹³

Some union constitutions contain clauses which permit national and regional bodies to merge locals in an attempt to consolidate control and reduce the decentralized nature of bargaining. The executive board of the Canadian Union of Postal Workers (CUPW) has the authority to merge locals for the "best interest of the union" (Art. IV, sec. 4.12), and an internal movement for local bargaining rights resulted in a constitutional resolution that the CUPW opposes the idea of Regional Contract Bargaining.¹⁴ Delegate selection for national conventions is based upon election in area council meetings where attendance is apportioned by size of locals, assuring dominance of large cities and regional rather than local interests. Unions in the private sector, subject to domination by U.S. internationals, are also subject to U.S. constitutions which provide for centralized control of locals (e.g., Teamsters, Steelworkers, Machinists, Carpenters). Thus, centralization is an operative policy with consensus across the major actors in the Canadian industrial relations system.

Concern with union structure and its effects on the functioning of unions as organizations is a traditional academic issue. One of the few conclusions researchers on strikes have stated with confidence is that centralized control of unions is associated with decreasing strike activity.¹⁵

Centralization in the Canadian Industrial Relations System: Impact on Canadian Strike Activity

For the strategy of a *centralized Canadian labor movement* to actually reduce strike activity, central control over collective bargaining

¹² See Joe Rose, "A Note on Industrial Conflict in British Columbia's Construction Industry," *Relations Industrielles* 31, No. 2 (1976), pp. 309–15.

¹³ Ronald Lang, "Labours' Manifesto for Canada: A New Independence?" in *Proceedings of the Twenty-Ninth Annual Winter Meeting, Industrial Relations Research Association*, eds. James L. Stern and Barbara D. Dennis (Madison, Wis.: IRRA, 1977), pp. 91–99.

¹⁴ Canadian Union of Postal Workers, National Constitution, amended June 1974. ¹⁵ Arnold Tannenbaum, "Unions," in Handbook of Organizations, ed. James March (Chicago: Rand McNally, 1965). Myron Roomkin, "Union Structure, Internal Control, and Strike Activity," Industrial and Labor Relations Review, vol. 29 (January 1976), pp. 198–217.

must be appropriate for the bargaining structure of employers as well as the social organization of Canada. Will a union administration located in Ottawa, Toronto, Montreal, or Quebec City reduce the high level of strike activity? Is the current decentralization of bargaining only the result of multinational corporate domination, or does it reflect real divisions of Canadian social structure?

Canada's industrial structure differs widely by province and a comparison of the distribution of employment from the 1961 census to 1971 reflects changes consistent with center-periphery tensions. Political control which flows from Ottawa and the Ontario-Quebec area once paralleled the flow of economic wealth as well. During the 1961 to 1971 period, the proportion of the population employed in manufacturing declined in Ontario and Quebec but expanded in every other province. Economic resources are flowing into the West and economic wealth is accumulating, but the center of political power remains the same. Thus, major East-West tensions increase as the old center seeks to maintain control over provinces set on ending its hegemony. Relative patterns of growth and decline, differing industrial structures, and traditions produce dissimilar approaches to industrial relations problems. The industrial structures suggest that foreign markets, technological changes, and work alienation will tend to have differential effects across provinces.

Beyond the fundamental cleavages in Canadian society, other factors promote resistance to centralized control. The geographical and size distribution of Canadian cities may increase the resistance of locals to central control of collective bargaining. Western Canada and northern areas of Ontario and Quebec are characterized by great distances between towns which reduce the orientation of small towns to metropolitan centers. Geographic isolation makes the provision of localized services by national offices more difficult. Moreover, where unions develop regional structures to provide local services, they may reinforce the very cleavages which they seek to overcome through centralized administration.

Furthermore, the BNA Act of confederation places limits upon the federal government resulting in provincial autonomy over industrial relations law and the maintenance of interprovincial differences. As a result, employees covered by provincial statutes will have their perceived need for decentralized control of bargaining reinforced.

This brief discussion hints at the evidence which argues that pressure to centralize the control of bargaining runs directly into the social and economic cleavages which divide Canada and are becoming acute in the face of rapid economic change. Although successful legislation may ultimately reduce the level of strike activity, in the short run, this strategy runs counter to needs for decentralized control and may actually increase conflict. These issues were illustrated clearly in the CUPW's 1975 postal strike.

THE POSTAL STRIKE: AN EXAMPLE

Approximately 10 percent of the labor force comes under the jurisdiction of federal labor relations statutes, which severely limits the possibility of examining the impact of existing centralization on industrial conflict in Canada. A public-sector union, the CUPW, is chosen because it is federal and free from the direct domination of a U.S.-based international, which permits an illustration of difficulties involved in centralization of Canadian labor unions. The CUPW has a national contract with the post office and has engaged in a variety of job actions and strikes during the last few years. The most notable event was the six-week strike occurring from October to December 1975. The strike generated thousands of news stories, public debate, and, in the end, acceptance by the union membership of a contract against the recommendation of the national union leadership. The diversity of interests within the union that precluded any national consensus may reflect the real cleavages in Canadian social, economic, and political life, which suggest that attempts at centralization will meet stiff resistance.

Though analysis of a strike might focus upon a variety of parties and events, a brief examination of internal union politics and events illustrates the point. The analysis is based upon a preliminary examination of the content of approximately 5,000 newspaper articles from 160 Canadian cities covering CUPW-related events for 1975, and upon internal union documents.

The 1975 postal strike had its staging set well in advance of the event. Rivalry with the Letter Carriers Union of Canada may have contributed as much to the length of the strike as did the technological change, wage and hours, and casual labor issues which seem to be at its core. The mandate of the negotiating team was set at the 1974 convention whose debate reveals critical issues and internal union differences. Regional directors agreed that the proposed merger between postal unions was no longer viable and that the critical issue in upcoming negotiations was the impact of the post office's proposed automation of letter sorting in 24 major locations.

At the same time the director from the West complained that the 1½ million square miles of territory in his region made adequate coverage impossible and that the national executive board should force mergers of small locals. The Quebec district sought increased activism against the employer, while Ontario expressed fears of the effects of automation.

The convention mandated that no contract could be ratified which did not include an agreement from the post office to negotiate the effects of technological change. The national executive board then produced an educational document designed to acquaint members with the potential threat of automation.

Negotiations opened in April 1975 with the technological change issue preeminent in union rhetoric but largely ignored in the news. The media coverage focused upon wage demands and relegated the union's demand for crown corporation status for the postal service to a relatively minor position. As a crown corporation, the post office would be covered by the Canadian Labour Code and required to bargain over technological change, but as a public employer, it was not.

Early in April, a backlog of mail in Montreal led to the appointment of 150 casual laborers who were escorted from the post office by CUPW members. Postmaster General Bryce MacKasey suspended nearly 500 workers for one day and opened a dispute which continued through negotiations, the strike, and beyond; 39 union members were fired. By mid-May the backlog, resulting from a slowdown aimed at new postal codes designed for the automated equipment, reached 25 million pieces of mail. MacKasey again threatened to hire casuals and CUPW members began to book off sick. The "MacKasey flu" struck all across Canada, but important areas, notably Toronto and parts of the West, seemed to be resistant to the disease. The militance of the French postal workers in Montreal was not really supported in Toronto (39 percent) and even less so in Edmonton and Calgary; on the other hand, the Vancouver local gave strong support. Interestingly, the "sickout" in large cities was not accompanied by attacks of flu in a large number of surrounding towns.

As the negotiations bogged down, job actions including "work to rule" were employed. The bargaining broke off, there was a conciliation board hearing, a strong strike mandate, and the strike began sometime around October 14. The events that followed highlight the real differences in Canada which work against central control.

The original union issue of the right to negotiate technological change disappeared from public view and was replaced by a demand for a 71 percent wage increase. The public dispute became symbolic, political, and a clash of personalities. In fact, the clause providing grievances and arbitration of technological change effects was negotiated before the strike began and initialed on October 17. However, the issue of the fired workers in Montreal became the *cause celebre* of the Montreal local. The presence of their local president, Marcel Perrault, on the negotiating team and a number of national officers whose original base in the union came from Montreal and Ottawa meant that the militance of the Quebec workers was a compelling force in negotiations. The strong support for Montreal from Vancouver weakened as the locals in British Columbia either worked out their differences with management or recognized that the technological change issue would not greatly affect them. Workers began breaking ranks with the union leaders in early November in all regions except Quebec. The largest number of picket-crossings occurred in Toronto, but a number of small towns reopened post offices.

Pressure from western provinces and Toronto ultimately forced a vote on the government's last offer which was the same one it had made on wages and hours before the strike. Against the recommendation of the national office, the contract was accepted by a narrow margin (reported in the press as 52–48 percent). Support for the contract came from British Columbia (though Vancouver narrowly opposed it), Alberta, Toronto, and Ottawa with opposition concentrated in Quebec City, Montreal, and St. John's.

The union's internal politics (as well as national political games) probably increased the length of the strike and becomes relevant to the issue of Canada's high rate of mandays lost per worker in doing so. The CUPW played out the center-periphery conflict long identified as East against West. The center represented by the national officers and Quebec operated as the political dominant within the union. However, the periphery no longer acted as a submissive follower of the political lead. Technological change was not as great a threat to the West since local accommodation seemed within reach in many places. The strike had been personally costly and the periphery challenged the center's political control. In this case, the defection of Toronto from Montreal may have provided the margin for the successful challenge, and a brief investigation might suggest that the Francophone-Anglophone conflict was a contributor to this internal split. During interviews with union officers in 1976, the belief that the resistance to the strike in Toronto represented such a political move was suggested.

In terms of the issue of centralized control, the analogy between larger economic and cultural conflict and intraunion conflict is reasonably clear. Political domination has emanated from Ottawa and is often identified with the interests of Montreal and Toronto,¹⁶ but the economic vitality and growth of the country resides in the western prov-

¹⁶ Haythorne, "Canada: Postwar Changes . . . ," p. 326.

inces. There is continual tension between the political center which was once also the economic center and the other provinces which seek to maintain autonomy and accumulate the benefits of economic growth. French-English conflict also represents pressure over the issue of control and autonomy.

We are not arguing that the Canadian labor movement is wrong in its belief that centralized control over collective bargaining will strengthen the movement and increase the power of labor. However, the current strategy of union leaders in Ottawa, Toronto, and Montreal to consolidate their control parallels precisely the center-periphery and French-English conflicts which currently dominate Canada's social, political, and economic life. Until those conflicts are played out, the labor movement's attempts to centralize control may be expected to supplement rather than reduce the current level of mandays lost due to strikes. In fact, the labor movement provides an arena in which to play out the conflict.

DISCUSSION*

EILEEN BARKAS HOFFMAN Federal Mediation and Conciliation Service

Two fundamental problems confront any international comparison of industrial conflict and since Professors Levine and Taira spend a good deal of time analyzing them in their paper, I will discuss it first. They note the problem of measurement of industrial conflict: "Between crude statistics on work stoppages and the overly gross depiction of 'culture' of a country, there is virtually nothing to go by for the analysis of the meaning and reality of industrial conflict."

While work stoppages (including their size, duration, frequency, and industry affected) are the best available measure of industrial conflict, Levine and Taira note that they are defined somewhat differently in each country. The best strike measure, called strike "volume" or severity, is the number of days lost per thousand nonagricultural wage and salary earners. Other indices of industrial conflict—chronic absenteeism, high labor turnover, sabotage, and political unrest—have never been recorded with any regularity.

According to Levine and Taira, this lack of adequate measurement reflects "the poverty of conceptualization about the nature of conflict." The authors expand upon Dunlop's concept of industrial relations systems and its four national dimensions (market, technology, consensus, and political power distribution) by widening the scope of the market and technology variables. They present their own theory: conflict is basically *latent* in all employment relationships and can become *overt* by assuming many complimentary or substitutable forms by individuals or groups.

The authors next look at international comparisons of strike volume and find Japan occupying a mid-point position. Indeed, since the end of World War II, industrial relations have been anything but harmonious and consensual in Japan. They conclude:

We would argue that industrial conflict has become as much a part of the Japanese ethos shared by industrial relations actors,

[•] The opinions expressed are those of the author and do not reflect those of either the FMCS or the United States government.

as it has in other industrial market economies, and that Japan does not stand apart as a unique case of harmony and consensus compared to other nations.

Levine and Taira have made a valuable contribution to the literature on Japanese labor relations by discrediting several cultural stereotypes held by researchers as well as journalists and by applying neutral tests to look at strike and other labor market data on their own merit. This approach enables the authors to reevaluate the role of the life-time employment theory in explaining Japanese labor harmony. They point to the origins of the Spring Labor Offensives during the same period. With job security resolved—at least until the mid-1970s and the Middle East oil crisis and recession—wages became the principal area for industrial conflict. They also indicate how labor turnover can be a substitute for strike activity.

This carefully documented and well-written paper requires only three minor criticisms. First, while the authors note a widening gap between all disputes and those accompanied by work stoppages, they do not elaborate upon the dispute tactics, machinery, and laws devised to contain or resolve this conflict. Second, strikes play a somewhat different role in Japan since many occur during the negotiation process rather than as a result of stalemate as in the U.S., but there is no attention to this difference. And third, there should have been more exacting analysis of the impact of political power and social consensus factors since the authors maintain their influence is equal to, if not greater than, market variables. Query: how would a change from the conservative government affect labor relations?

U.S. and Western Europe

Professor Kassalow's paper comparing industrial conflict and consensus in the United States and Western Europe proposes a two-part thesis: first, that the United States has a persistently higher strike rate than other comparable, industrialized and democratic societies; and, second, that this is true "in spite of the apparent paradox that whereas the American labor movement identifies itself with capitalism, the other labor movements . . . tend to identify themselves as socialistic, committed in varying degrees to significant change in the structure of their societies."

I can only accept Kassalow's first proposition with some modifications. That the U.S. has been more strike-prone than other comparable societies cannot be challenged; however, recent strike data from the International Labor Office indicates that Canada, Australia, Ireland, and Finland must also be placed on the high side of the strike spectrum.¹ Kassalow's brief mention of an Anglo-American strike syndrome should also be explored more fully. His strike table also contains union membership data, but there should be greater explanation of their source. Kassalow maintains that "the higher the unionization figure, everything else being equal, the higher the potential time lost from strikes." However, analysis of his table indicates that the relationship between percentage unionized and days lost per thousand workers is, at best, minimal (a product moment correlation of -.2).

While Kassalow lists several key industrial relations features to explain the U.S. strike-prone behavior vs. that of Western Europe, he does not rank them. He seems to stress an antiunion atmosphere in the U.S. which makes union recognition an uphill fight. This very recognition struggle and representation-election process help to breed the adversary relationship. I would also underscore the importance of industrywide, highly disciplined multiemployer bargaining which sets industry minimums to explain Western Europe's lower strike rates and point to the resistance offered in decentralized plantwide bargaining which sets the actual terms and conditions of employment in the United States.

I also have trouble with Kassalow's second proposition since I do not see the situation as paradoxical. Rather, it can be explained by the high acceptance of labor unions within many Western European countries as well as their sharing of political power through participation in labor parties and governments. The change envisioned by such social partners becomes a consultative, economic and political process.

Kassalow has made an important contribution in this paper through his concept of political-industrial conflict which, alas, eludes measure-

¹ See "Canada and Italy Head Strike Table," *ILO News* (press release), December 12, 1977. Among countries listed in table, "Rates of Days Lost in Industrial Disputes (Per Thousand Workers)," 1976 in descending order: Canada—2270, Italy—2200, Australia—1490, Finland—1310, U.S.—*1190*, New Zealand—940, Ireland—840, France—420, Denmark—390, U.K.—300, Japan—150, West Germany—40, Sweden—10, Netherlands—10.

And for slightly different results because the base is nonagricultural wage and salary earners is the Division of Foreign Labor Statistics and Trade, Office of Productivity and Technology, Bureau of Labor Statistics, U.S. Department of Labor, listing of "Days Lost Per Thousand Wage Earners and Salaried Employees in Nonagricultural Industries," 1976, (preliminary data, to appear in forthcoming Handbook of Labor Statistics) in descending order: Italy—1575, Canada—1368, Australia—786, U.S.—487, New Zealand—460, France—306, U.K.—149, Japan—88, West Germany—26, Switzerland—8, Netherlands—4.

ment today.² He writes: "If there were some way to measure the level or degree of political conflict which these same type bargaining issues provoke in European parliaments, it is possible that the total level of 'conflict' would be as high or higher in Europe than in the United States." Western Europe's experience with wage and price controls is one example of such actual and potential conflict.

Conclusion

Both papers point out the problems of looking only at strike data and then note other dimensions they see as significant: political conflict (Kassalow) and labor turnover (Levine and Taira). Both papers ask for a reexamination of cultural biases. Levine and Taira ask that Japan be compared not just with the U.S. but along a continuum with other industrialized countries so that other features—and not just East vs. West —can be analyzed. Concerning the U.S., Kassalow says that "the prevalence of greater conflict proneness . . . is largely taken for granted." Although strikes may be considered in this country to be a by-product of the collective bargaining system, they are not taken for granted. They are often seen as breakdowns in the bargaining process. Research and efforts to improve labor-management relations have long been underway. Yet, as the authors maintained at the outset, strikes are just one, albeit important, barometer of industrial conflict.

² A recent international study of strike activity reveals that industrial conflict does not drop off during the tenure of governments controlled by Labor or Socialist parties. See Douglas A. Hibbs, Jr., "Industrial Conflict in Advanced Societies," *American Political Science Review*, vol. 70 (December 1976), pp. 1055–58.

DISCUSSION

ROY J. ADAMS McMaster University

The chairman has asked me to concentrate on the papers by Kassalow and by Stern and Anderson. I'll begin with the latter. Frankly, I believe that it misses the mark in several regards.

First of all, Stern and Anderson's statement about the "great rise in levels of strike activity in Canada since the mid-sixties" is very misleading. There has, in fact, been a rise in the volume of strikes since that period, but in long-run perspective the years preceding the rise were ones of unusually low strike activity. Despite a great deal of political concern about strikes in Canada during the past decade, current levels are not out of line with historical trends.

Actually, it is not clear from their paper whether Stern and Anderson wish to explain fluctuations over time or the high level of strikes in Canada. If one wishes to address variation over time, such factors as inflation, unemployment, and rates of change in profits and wages do a pretty good job of explaining the majority of the variance. Special factors such as the drive of the industrial unions to establish themselves in the late 1930s and 1940s, and the acceleration of technological change in the 1960s may help to fill out the picture. Perhaps (although I'm not convinced) Stern and Anderson's changing power balance thesis is one of these special factors in the 1970s.

If Stern and Anderson wish to explain levels of Canadian conflict relative to other countries, then they add very little to our understanding. Moreover, they do not demonstrate from their paper that they fully understand the nature of the centralization/decentralization issue.

The specific form of decentralized bargaining that exists in Canada (and the U.S. in large measure) has a logic of its own which suggests a high level of conflict. Much of this logic is brought out by Kassalow.

To begin with, an enormous number of agreements must be settled every year. In Canada there are about 20,000 collective agreements currently in effect. Bargaining takes place in a hothouse atmosphere and the bargainers must settle an incredible number of issues in a short period of time. For example, in the transit negotiations which took place in Toronto a few years ago, negotiations began with 142 issues on the table. Union demands ranged all the way from a 40 percent wage increase to a proposal whereby maintenance mechanics would be provided with new overalls containing screw-driver pockets. All of these issues had to be evaluated, discussed, and resolved in the few months allotted to bargaining.

Because of decentralization, much bargaining in North America is less professional than one might hope. A few years ago a student came into my office. Her husband had recently been appointed head of industrial relations at a small company. She asked me if I could recommend a basic textbook since her husband knew practically nothing about personnel and industrial relations. Nor is the situation much better on the opposite side of the bargaining table. The union pros—the staff representatives and business agents—who are supposed to provide expert assistance to local unions, are often less than adequately prepared for their immense responsibilities.

Finally, and most importantly, there is little respect or trust by either side for the other in a large number of situations. The bargainers in North America are, by and large, power-brokers. The name of the game is bludgeon the other guy into submission. Reason, logic, ethics, and social responsibility play only a small part in many negotiations. So, when strikes do occur, they are likely to be long and drawn out.

One interesting, but incredible, aspect about this situation is that most North American "experts" assume that this is simply the nature of collective bargaining. However, those who will take the time to familiarize themselves with industrial relations in Northern Europe will discover how unique, in fact, it is.

Stern and Anderson's analysis, and their example of the postal workers, seems to imply that the only way to overcome problems of decentralization is to shift the entire structure and process upward to the national level. But this is hardly the case. The possibilities for the design of bargaining structures are almost limitless. One may, for example, bargain for basic wages and conditions at the industry level and for plant issues at the local level. This form is not uncommon in North America. The Europeans, however, have been far more creative. Many issues, as Kassalow notes, which are subject to local negotiations in North America are handled by legislation in Europe. Other issues, such as health and safety, vocational training, and redundancy, are often negotiated at the national level between union and employer federations. Industrywide bargaining over basic wages and supplements is the rule. By handling these issues at a high level, there is a more even and equitable distribution of conditions of employment and heat is taken off plant negotiations. However, local negotiation does take place over a considerable range of issues including hours, job evaluation, piece-rate schemes, job design, recruitment and selection, job classification and transfers. In some cases wage increases, over and above the industry rates, are negotiated. In short, centralization/decentralization is not a matter of either/or, but rather one of handling the appropriate issue at the appropriate level. There remains a great deal of work to be done on the design of bargaining structures.

I find Stern and Anderson's conclusion that "The labor movement's attempts to centralize control may be expected to supplement rather than reduce the current level of mandays lost due to strikes" to be intriguing. It is an assertion which should be tested. One rather unique case is hardly enough to warrant belief.

Nor do I find the case to be convincing evidence for their central proposition that Canada's high conflict levels are closely related to a power struggle between center and periphery. The postal workers problem of achieving solidarity over a devisive issue is nothing new or unique to Canada. It is a basic problem which unions everywhere have run into at one time or another.

Everett Kassalow's explanation for the low levels of strike activity in Europe as compared to North America is much more satisfactory. The general propositions which emerge from his paper seem to be the following: (a) if trade unions are fully accepted as legitimate and valuable societal institutions, and (b) if both employers and unions are well organized and accept responsibility for the consequences of their actions on the public welfare, and (c) if you have a negotiating structure whereby issues are appropriately distributed between levels of the industrial relations system and between the political and industrial relations arenas, then you are more likely to get low levels of industrial conflict.

We have a large conflict problem in North America because too much is loaded on small, inefficient bargaining units where the parties facing each other are not "social partners" as the Europeans call them, but are rather hardened adversaries. On this point Kassalow and I agree; on the reasons for it we differ, at least in degree of emphasis.

I believe that the principal reason for the North American situation is the nature of our legislation which fragments the bargaining system, explicitly permits employers to completely exclude unions where they have not achieved a majority, and implicitly grants to employers a right to denigrate and fight unions on every front. Most employers accept responsibility for nothing other than making a profit, and most unions, in reaction, accept responsibility for nothing other than the welfare of their individual members.

Kassalow believes that this situation is largely the result of what might be called the "triumph of capitalism in North America." I believe that it is due more to the triumph of ignorance. Certainly employers have lobbied (successfully to a large extent) to maintain their power and prerogatives. Why not? What group in history ever magnanimously gave up power? It is a triumph of ignorance because the public, the Congress or Parliament, and the unions do not realize how bad off they are. Our legislation fosters conflict, negates the possibility of meaningful cooperation, encourages irresponsibility, and denies to the majority of citizens the fundamental right to be represented in organizational decision-making. There are lots of proposals around for altering the legislation in minor ways, but no one is demanding that it be scrapped altogether. Until it is, however, we shall continue to have very high levels of industrial conflict.

V. REFORMING THE NATIONAL LABOR RELATIONS ACT

Reforming The National Labor Relations Act

JOHN H. FANNING Chairman, National Labor Relations Board

Most of you, I am told, are not lawyers and that gives me a good deal of pleasure. I have, in the over 20 years I have been privileged to serve as a Board member and chairman, participated in more than a few sessions similar to this. Historically, and for sound ethical and legal reasons, Board members have attempted to refrain from engaging, with academics and practitioners, in public debates about specific Board decisions and, more so, particular policy issues that arise under the National Labor Relations Act from time to time. That can be, I assure you, a frustrating posture at times. Lawyers tend to be convinced, probably by virtue of the legal training to which they are exposed in our law schools, that not only is Eternal Truth determinable, but that it is a determination particularly well left to them. As in foxholes there is seldom if ever nonbelief; before the bar there is seldom if ever uncertainty.

Having said that, I can tell you I have chosen once again to remain above the fray and to limit my remarks to the NLRB Task Force and certain aspects of the pending Labor Reform Act, confident, you now realize, that if Professor Murphy, Dean St. Antoine, Mr. Siegel, or Mr. Gold, lawyers all, choose in their presentations to discuss particular Board decisions, in those instances where they express disagreements with my vote, the facts are probably not as they would have you believe; and in those where they do agree, they are only demonstrating the qualities of perception and brilliance which have made them the legal giants they are.

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The Chairman's Task Force on the National Labor Relations Board was established to study the Board's rules, regulations, and procedures —the entire case-handling machinery of the agency in both the representation and ULP area, in the belief that outside experts, working with the full cooperation of the agency, could take a fresh look at how we do things and suggest ways for the Board to streamline its case-handling processes.

Composed of representatives from labor, management, academia, the public, and top-level, but nonvoting, agency officials, the Task Force was a select group, highly experienced not only in the general field of labor relations, but also in practice before the Board.

Members held their first meeting on January 6, 1976, and during the two years in which it has functioned, the Task Force has met on seven occasions, usually for two days once each quarter, but with its studies continuing during the intervals. In addition to an exhaustive review and evaluation of existing procedures from investigation through Board decision and court enforcement of an unfair labor practice charge, from filing of petition through the postelection process in representation cases, the Task Force was given full opportunity to make recommendations on how agency case-handling mechanisms might be improved.

Structurally, the Task Force was divided into three committees, each of which was assigned to study a specific phase of our case-handling procedures. Committee I, chaired by Professor Murphy, handled representation proceedings; Committee II, chaired by Dean St. Antoine, unfair labor practice proceedings from charge through hearing; and Commitee III, chaired by Professor Christensen, posthearing through compliance. Each committee initially reported to the Task Force, and the reports which ultimately issued represent recommendations of the Task Force as a whole.

Just over a year ago, the Task Force issued its Interim Report and Recommendations, consisting of 69 recommendations. During its second year of operation, the Task Force issued a supplemental report, consisting of 17 additional recommendations.

Upon issuance of the Task Force's Interim Report, notice of its availability was published in the *Federal Register*. Interested parties were also advised that the Board was interested in obtaining their views with respect to the recommendations. Thirty-nine parties, including employers, unions, scholars in the field of labor relations, and members of the general public, responded to this invitation. On April 12 and 15, 1977, the Board met in open session to act upon the first Task Force Report.

By way of an overview, the Board voted to adopt 12 recommenda-

tions, to reject 10, and to table an additional 12, with most of the latter involving personnel-related matters which required legislative or Civil Service action and were outside our immediate control. Many of the remaining recommendations came within the responsibility of the General Counsel, who is responsible for the day-to-day supervision of the Board's regional offices, and these were mainly "noted" or "noted with approval," and referred to the General Counsel.

Time does not permit me to discuss individual recommendations in any detail or the reasons why the Board decided to adopt or reject any particular proposal. If the volume and nature of the responses from outside parties are any criteria, however, without question the most "controversial" suggestion to come from the Task Force was the so-called vote-and-impound recommendation. Although the Board grants requests for review in a representation case only about 25 percent of the time, parties could not be certain whether their case was one of the 25 percent, and therefore whether the scheduled election was going to take place, until they were officially advised that the request for review had been denied. As you know, of course, postponement of the scheduled election one or two days before the election may be disconcerting to everyone concerned-the employees, the union, and the employer. For one thing, postponing the election may require the parties to repeat their preelection campaign if the request for review is granted and an election ordered sometime in the future. In addition to the expense of conducting the campaign for a second time, postponement has an unsettling effect on the employer's business operation. In essence, the Task Force recommended that the Board favor certainty insofar as the scheduling of the election was concerned and, accordingly, except where the Board would find it specifically inappropriate to do so, conduct the election at the time scheduled by the Regional Director and impound the ballots, whether or not the Board granted the request for review.

Since its adoption, effective August 15, 1977, and through November 30, 1977, the Board has granted a request for review, conducted elections, and impounded the ballots on 13 occasions, notwithstanding that review had been granted. On nine other occasions, there were reasons which the Board felt made it impractical to conduct the election, and the scheduled election was stayed when review was granted. All parties seem to have now accepted the new procedure, and I am not aware that it has caused any particular problems from an administrative standpoint.

Another Task Force recommendation, designed to expedite the processing of representation cases, urged the Board to adopt on an experimental basis a procedure whereby challenged ballots would be cast in duplicate, with the original, in an envelope bearing the voter's name, being segregated, while a carbon copy (without the voter's name, but identifiable as a challenge) would be deposited in the ballot box.

The advantages of this recommendation are obvious, of course, in that the need to conduct a time-consuming investigation of what could turn out to be nondeterminative challenges would be eliminated. Although the interests of expedition militate in favor of this recommendation, a number of technical problems, particularly with respect to preserving the secrecy of the ballot, have thus far prevented the Board from implementing this recommendation. In this regard, of course, the Board wishes to guard against the possibility that time saved at one end in resolving challenges might be lost on the other end as a result of an increase in the filing of objections alleging that the secrecy of the ballot has been impaired.

Two Task Force recommendations that were rejected may also merit comment. One urged the Board to apply the same standards in judging "objective considerations" in processing RM or management representation petitions under the U.S. $Gupsum^1$ doctrine and in an unfair labor practice context as a defense to an 8(a)(5) allegation. However, the Task Force's mandate was limited to a study of the Board's operation from a procedural standpoint, and the Board accordingly rejected this recommendation because it involved a matter of substantive law. Another was one which urged that only lawyers serve as representation case hearing officers. In most of the Board's field offices, approximately half of the professional employees are field examiners, most of whom do not have a law degree. We feel some of our very best hearing officers are field examiners, who are very well trained in respect to Board policies and procedures, and are quite knowledgeable in the law. Because adoption of this recommendation would deprive field examiners of the benefits they (and we) derive from a function which they perform ably, and would place additional burdens on our attorneys in the field, the Board rejected this recommendation. The Board and the General Counsel did agree with the Task Force that all hearing officers-whether field examiners or attorneys-might benefit from greater training opportunities, and the General Counsel has recently developed and begun using a video-tape mock representation case hearing, designed to provide the agency's field employees with examples of the procedural and substantive problems they might expect to encounter during the course of an actual representation case hearing. This tape is available also for

¹ United States Gypsum Company, 157 NLRB 652 (1966).

rental or purchase by the public, with a copy in each regional office and in Washington.

The Board's procedures in the unfair labor practice area were also subjected to a searching examination by the Task Force. Procedures utilized by the agency during both the investigatory stages, including advice and appeals, and during the formal stages before an administrative law judge, the Board, and the courts, were carefully scrutinized. Again, the Task Force made many valuable suggestions.

There is little doubt—at least in my mind—that pretrial discovery was the most controversial issue considered by the Task Force in connection with the processing of unfair labor practice cases. Just how controversial discovery is can be seen from the inability of the Task Force to arrive at a clear-cut consensus on the issue. But, although no definitive conclusions were reached, the in-depth discussion did serve to clear the air and focus attention on the complexity of the issues involved, and that, in itself, was beneficial.

The recommendations contained in the Task Force's second Report are presently under active consideration by the Board, so there is not much I can say on the matter. Most involve recommendations from Committee III on how to improve our enforcement procedure and the way we handle cases whose disposition is delayed by external consideration-in agency parlance, "iced cases"-and those whose targeted issuance date has passed-"overdue cases." Whether or not the Board adopts all or some of the recommendations in the Task Force's second Report, its two-year study of our procedures has resulted in many positive contributions, and the agency has benefited greatly from its efforts. And the single most important Task Force contribution may well have been to confirm what those of us within the agency have long believedthat although we are not perfect, although there is always room for improvement, the NLRB is a very well-run, highly efficient government agency. The Task Force itself has acknowledged that. In transmitting its Interim Report and Recommendations in November 1976, it made the following observation: "Although we have identified various areas in which we believe the Board's procedures could be improved, we have come away from our endeavors with a healthier respect than ever for the efficiency and fairness of one of the federal government's most effective agencies." Considering the caliber of the Task Force membershipand keeping in mind that the Task Force members were completely independent and able to look at the Board's procedures from the perspective that only independence can provide-the Task Force's comment is indeed high praise.

I am also convinced it is well deserved praise. The agency has kept pace with a caseload that has more than tripled since I came to the Board in 1957. In fact, the agency is actually processing three times as many cases in less time than it did 20 years ago. The fundamental question is, I suppose, how long the agency can continue, indeed how long it can be asked to continue, that kind of performance. And while a variety of explanations can properly be offered for the upward spiral in case intake we have witnessed, one surely is the degree to which the statute's stated policies are honored, by some, only in the breach.

It is not, despite attempts to characterize it so, an isolated or insignificant problem. The strategy of resistance not only prolongs, solely out of desire to prolong, the statutory process-thereby hampering the speed with which disputes of less dubious origins can be resolved-but also instills itself, by vice of the competitive advantage it offers, among those otherwise disposed to abide by the statute's guarantees-thereby bringing more disputants into our processes. And at the very same time that a calculated course of delay contributes to an expanding caseload. it also thrives in it, so that its threat is not limited merely to casehandling machinery but, more importantly, the statutory scheme of things itself. Almost by definition, the focus of the strategy is on the organization and pre-first contract settings, where the agency's role of encouraging the practice and procedure of collective bargaining is most vital. They are also the settings in which procedural delay is most available and remedial demands are least imposing. The organizational and pre-first contract relationship is, therefore, the logical focus of the Labor Reform Act, as a brief description of its procedural and remedial highlights will serve to demonstrate.

Procedurally, the Reform Act requires, with two exceptions, that all Board elections be conducted within 50 days of petition-filing. Where an election case presents issues of novelty or complexity, an additional 25 days are permitted, and, in those instances where the election petition is supported by the authorization cards of at least 50 percent of the employees in a bargaining unit plainly appropriate under a Board rule, the election must be conducted within 25 days from the date of filing the so-called quick-election provision. In this connection, the proposed legislation mandates that the Board utilize its rule-making authority to set forth those units considered by the Board to be plainly appropriate, thus facilitating quick-election petitions. Another noteworthy aspect of the legislation is its provision that Board certifications can be overturned where the court concludes the Board acted in excess of its statutory powers, in violation of the Constitution, or in an arbitrary or capricious fashion, thus eliminating the possibility that simple differences in perception between the Board and a reviewing court—for example, whether or not certain voters are statutory employees or supervisors—can nullify an election victory.

Three procedural modifications involve internal Board processes, all designed to accelerate the case-handling mechanism. Board size is expanded from five to seven members. The vast majority of Board decisions are, as you may know, decisions of three-member panels. There are five panels currently and, with expansion, there would be seven, thus enabling the Board to take up panel cases more expeditiously. The legislation also directs the Board to establish a summary affirmance procedure. Numerous Board decisions hinge solely on the question of credibility, and while the exact details of the procedure have not, for obvious reasons, been considered by the Board, a summary procedure for such cases should enable the Board to dispose of a considerable number of cases more promptly than is now possible. The final reform in this area requires the aggrieved party to file its own petition for Circuit Court of Appeals review of a Board order within 30 days of entry. Failure to file within such time would preclude the respondent, or the charging party, from attacking a subsequent Board petition for enforcement of the order.

On the remedial front, the legislation provides, in essence, authority for the remedy the Board considered outside its power in Ex-Cell-O Corporation²-the so-called make-whole remedy for violations of Section 8(a)(5) of the Act. Even the *Ex-Cell-O* majority, of which I was a part, conceded a straight cease-and-desist order for refusals to bargain did not adequately compensate employees for the effects of a sometimes prolonged refusal to engage in good-faith bargaining. The Labor Reform Act enables the Board to require the offending employer, under a formula set out in the legislation, to reimburse employees for wage losses stemming from initial contract refusals to bargain in good faith. The legislation also entitles individuals who suffer discriminatory loss of employment during organizational campaigns, or in the period preceding execution of a first contract, to double back pay. While the original House bill eliminated deduction of interim earnings from the double back-pay computation, as passed by the House the deduction is restored. Significantly, the Board is further required to seek a court injunction of such discharges. Finally, the legislation, in an effort to deter repeated violations of the statute, authorizes the debarment of the recidivist, willful violator from eligibility for federal contracts.

Although this is by no means a complete description of the Labor ² 185 NLRB 107 (1970). Reform Act, it is a description of its main components. The provisions described are also those which have engendered the greatest discussion. Any legislation, especially that which seeks to amend the premier statute governing the relations of such strong contending forces as labor and management, is bound to spark debate, and, more often than not, controversy. The debate may well encompass subjects as diverse as the wording of a particular provision and the propriety of drawing a qualitative distinction between procedure and substance. Due regard for a Board member's role as an instrument of policy, and not advocate of it, suggests, I believe, that that kind of debate go on without him. But the debate may equally encompass subjects as diverse as whether what is sought to be redressed is of sufficient impact to warrant legislative consideration and whether the agency chosen to administer the legislation considers itself equal to the task.

To the extent, then, that the Labor Reform Act arises out of a legislative perception that the strategy of resistance more than minimally hinders the Act's effective administration, I believe the perception is a sound one. And to the extent the debate about this legislation, in those instances where its focus is the agency itself, questions our capacity to carry out the reforms I have described, there is, I am convinced, little to debate.

Between those two judgments there is ample room for the lively debate which has so long typified American labor relations. I am sure you will see that in the presentations and commentaries that will follow. I look forward to that and, even more, I look forward to what surely will be an exciting and adventurous period at the Board, as "Reforming the National Labor Relations Act" becomes reality.

Reforming the National Labor Relations Act

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It has been my privilege and pleasure the last two years to serve as a member and Committee chairman of the special Task Force on NLRB Procedure. The Task Force had 26 members, nine of whom were nonvoting representatives of the agency who served a resource and advisory function. The Task Force was divided into three committees, each with an equal number of management and labor attorneys and each chaired by a labor law professor. One of the committees dealt with representation cases: the other two with unfair labor practice cases. The mandate was to recommend procedural or administrative changes to improve the overall efficiency of the agency. It did not include recommending amendments to the statute or to the substantive law set forth in Board and court decisions. In November 1976 the Task Force adopted an Interim Report with 69 recommendations. There were less than a handful of dissenting votes, a remarkable fact considering the partisan nature of the subject matter. In April 1977 the Board acted on the Task Force report, adopting some of the recommendations, rejecting some, and tabling others for further consideration. In November 1977 the Task Force submitted some additional recommendations not yet acted on by the Board.

Since I was the chairman of the Task Force Committee dealing with representation cases, my remarks this morning are confined to that area. R cases, as they are called, are overshadowed in the litigation and in the academic commentary by C, or unfair labor practice, cases which present more dramatic conflict situations. But those who think that R cases are somehow less important are simply naive. The representation process is the fundamental basis on which the whole system of collective bargaining is grounded. Before the NLRA was enacted in 1935, there was no formal, legally sanctioned method for a union to establish a bargaining relationship, and this was probably the principal source of labor disputes. One of the great innovations of American labor law was the

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representation election through which workers decide whether they wish to be represented by a union and then according to a union winning such an election certification as the legal bargaining representative.

Just last March, at an impressive ceremony in Washington, the Board celebrated the casting of the 30 millionth vote in some 300,000 representation elections since 1935, elections in which about 90 percent of the eligible employees actually voted. This is surely a tangible manifestation of industrial democracy at its best. It is true, unfortunately, that the commission of unfair labor practices by employees and unions in many cases prevents the normal and intended operation of the election system. But, that aside, there are numerous problems and difficulties which are inherent in the representation process. By and large, the Board has done a highly commendable job of dealing with these matters. partially perhaps because in R cases the Board is much more insulated from judicial review and supervision than is true in C cases where court decisions create more confusion than they dispel. It is worth emphasis that, when we speak of reforming the Labor Act in the R case area, we are not talking about correcting failures but about making improvements to procedures which are concededly successful to a very large extent in the great majority of cases. My modest goal this morning is to identify several of the principal trouble spots and comment briefly on proposals for improvement.

Unit Determination

Once a petition seeking an election has been filed by a union, it is desirable that the election be held as promptly as possible in order to minimize the unsettling frictions and tensions created by the election campaign. One of the criticisms levied against the representation process by unions is the delay caused by pre-election hearings. Numerous matters must be established before an election can take place. In about 80 percent of the cases the parties agree on these matters and the election takes place promptly on the basis of a consent election agreement. If the parties can not agree, as they do not in the other 20 percent, the statute requires a hearing so that the Regional Director can decide the disputed issues, subject to possible review by the Board.

The principal issue which is disputed is the unit in which the election will be held and for which bargaining will take place if the union wins the election. The statute empowers the Board to decide "in each case" what the unit "appropriate" for collective bargaining shall be, but it gives the Board very little guidance on how to go about deciding. Over the years the Board has identified many factors which may be considered, all of which are subsumed under the general standard that the employees in the unit must have "community of interest" with each other. Under the statute and the Board's decision, it is possible to have more than one appropriate unit, and it is not even necessary that the Board determine the most appropriate unit, although this is what it tries to do in most cases. Unit determination may be especially difficult when the coverage of the statute is extended to new areas such as higher education and health-care institutions. In many cases there is no clear precedent for the employment pattern, and this encourages or necessitates resort to the hearing process. The question is whether there is a better way to do it.

The Task Force agreed with the conclusion reached by the Committee I chaired that there were many aspects of the representation process in which it was possible for the Board to adopt relatively firm and inflexible rules governing subjects which now are determined through a case-by-case decisional process, and thus to reduce the delay caused by litigation of issues. One of the matters the Task Force identified as suitable for more specificity through rule-making was unit determinations. These recommendations of the Task Force were tabled by the Board. One of the provisions in the labor reform bill adopted by the House states that "The Board shall, to the fullest extent practicable, exercise its authority . . . to promulgate rules declaring certain units to be appropriate for the purposes of collective bargaining." If that language becomes law, the Board will not be able to table it. Time precludes discussion of the units which might be defined by rule-making, but whatever they might be, at least a fair test will be given the proposition that unit determination can be made more specific and definite than it is now and that many hearings can be eliminated.

Speedup in Holding Elections

For the 80 percent of the elections which are held pursuant to a consent agreement, the median time from the filing of the petition to the holding of the election is 45 days. Actually, the Board could hold a consent election sooner, but the parties also agree on the election date and the 45 days includes time for campaigning. For the 20 percent of the elections in which a pre-election hearing is held, the median time between petition and election is 75 days. It is emphasized that this is a median figure and, as the Task Force Report states, "It is probably true that a few 'horror' cases in excess of the median are responsible for most of the criticism of the delay in obtaining an election." The Task Force concluded, however, that the median figure of 75 days could be reduced.

It noted that some spokesmen had suggested an outside mandatory limit, but concluded that, given the statutory hearing requirement, an absolute figure was unrealistic. The Task Force approach to acceleration of the election date was through changes in the time and method of processing the case.

The House bill is more rigorous. It mandates certain time periods for the holding of elections. If the union can show that a majority of the employees in a unit appropriate under a Board rule or decision have designated the union as their representative, then the Board must hold the election in not more than 25 days. Thus, if the union already has a majority, presumably evidenced by authorization cards, and the unit is clearly appropriate under Board rulings, the hearing would be dispensed with, the time for campaigning limited, and the election accelerated to the fullest extent possible. In all other cases the Board is mandated to hold the election in not more than 50 days after the filing of the petition, except for cases which present issues of "exceptional novelty or complexity" when the maximum time would be 75 days.

In some cases elections have been postponed for substantial periods while the Board wrestled with legal questions raised in the proceedings. This is frustrating to the parties who have geared their campaigns to the election date. The Task Force recommended that the Board develop a procedure under which the election would be held as originally scheduled, and the ballots impounded and counted after the legal issues are resolved. This procedure would register the employees' choice at the time when interest and momentum in both the union and employer camps are at their peak. The Board adopted this recommendation, and although the procedure undeniably contains some difficulties I do not have time to mention, I am happy to say that the Board has already applied the vote-and-impound technique in about a dozen cases. The House bill contains a provision which would require the Board to issue regulations governing the holding of elections in cases in which an appeal has not been decided prior to the date of the election. This is the precise situation to which the vote-and-impound procedure is directed.

Union Access to Employer Property

In the period just before the Board election, both union and employer typically will engage in extensive propaganda campaigns aimed at influencing the employees who will vote. The most convenient time and place to campaign is at the place of business while the employees are there. Presently the law permits the employer, because he owns the property and runs the enterprise, to impose on his employees campaigning limits by which he himself is not bound. Thus, employers may validly prohibit employees from engaging in union solicitation during working time and from the distribution of union literature in working areas, thus confining them to their free time during lunch hour and break periods and to nonworking areas.

One practice of employers which is particularly vexatious to unions is the so-called "captive audience" antiunion speech made by the employer to his employees on company time. In the early 1940s the Board in *Clark Brothers*¹ held such speeches to be unfair labor practices. In the late forties the Board changed the law and held in *Bonwit Teller*² that noncoercive captive-audience speeches were permissible, but it was an unfair labor practice for the employer to deny the union equal time. In the early 1950s the Board changed its mind again, this time holding in *Livingston Shirt*³ that neither the speech nor the denial of equal time was an unfair labor practice. That is still the general rule.

In the Task Force R-case committee the union members offered broad proposals for opening up employer property and facilities to union access, but the employer representatives would not agree. As a result the Task Force made no recommendations on the subject. The House bill requires the Board to adopt a rule providing that if an employer addresses employees on its premises during working time, the employees shall be assured an equal opportunity to obtain in an equivalent manner information from the union. This does not necessarily mean a return to Bonwit-Teller, however. The House bill does not provide, as it might have, that it is an unfair labor practice for an employer to deny a union equal time to reply to a captive-audience speech. It simply directs the Board to issue a rule on the subject. Conceivably the Board could hold that employer violation of the rule is an unfair labor practice, but it seems to me more likely that violation would merely be the basis for setting the election result aside if the union lost. Aside from the captiveaudience situation, the House bill does not deal with the area of union access which has other aspects I do not have time to mention.

Postelection Proceedings

One of the principal criticisms of the representation process is the delay in passing upon challenges made at the balloting or objections filed after the election. Challenges involve the eligibility of an employee to vote, and objections involve alleged misconduct which affected the

¹70 NLRB 802 (1946).

²96 NLRB 608 (1951).

³107 NLRB 400 (1953).

election result. Postelection proceedings are necessary in only about 15 percent of the elections. But the delays in resolving the issues, and thus in finalizing the election, can be considerable. In some cases the Regional Director proceeds by investigating, with a median time of 41 days; in other cases a hearing is held, with a median time of 58 days. If the issues go to the Board for final decision, another 87 median days are required. Thus, in many cases the time-lag after the election before the result is finalized is five to six months.

The R-case committee of the Task Force submitted a detailed outline of a modified postelection procedure to accelerate the disposition of objections. The Task Force unanimously recommended it to the Board. The Board rejected the recommendation for the reason that it was substantive and not procedural, and thus beyond the scope of the Task Force's authority. I must confess that I do not understand the basis for the Board's conclusion.

The House bill addresses itself to the problem only by the admonitory provision that the Board shall "move expeditiously" to resolve any issues raised by challenges or objections. Of course, the Board already has the power to do that. Although the Board did not see fit to adopt the detailed and specific proposal of the Task Force, that recommendation and the provision in the House bill together reflect the widespread belief that the Board can and should improve its postelection procedures.

One of the ways in which the Board's procedures in all cases could be streamlined is by curtailing or narrowing the use of legal briefs. It should not surprise you to learn that a Task Force consisting of lawyers was unable to agree on any recommendation on this subject.

The Policing of Campaign Propaganda

My final remarks center on an important aspect of the representation process not dealt with by either the Task Force or the House bill. It is the extent to which the Board should police the use of speech and propaganda of the parties in the period just before the Board election. In 1947 Congress concluded that the Board had been too restrictive of employer speech. Accordingly, Section 8(c) of the Taft-Hartley amendments provided that the expression of views, arguments, and opinion should not constitute or be evidence of an unfair labor practice, unless they contained a threat of force or reprisal or a promise of benefit. Such speech is called coercive, and there has never been any doubt that its use may be the basis for setting aside an election.

In its General Shoe⁴ decision in 1948, the Board held 3-2 that its

⁴77 NLRB 124 (1948).

elections should be conducted under what it called "laboratory conditions" and set aside an election in which the company president had delivered to groups of employees in his own office a strong antiunion speech. Although the speech was not coercive and therefore not an unfair labor practice, the Board held that the president's *conduct* went far beyond the accepted manner of conducting campaigns and thus interfered with the "laboratory conditions." Section 8(c), the Board said, applied only to unfair labor practice cases under Section 8 of the statute and did not limit the Board's power over representation cases under Section 9. But note that it was *not* the *content* of the speech, but the *manner* in which it was delivered, that the Board found objectionable.

In later cases, however, the Board expanded the General Shoe doctrine and held that speech which was not coercive could interfere with "laboratory conditions" and be the basis for setting aside an election because of the content of speech. The two leading cases are Hollywood Ceramics,⁵ involving misrepresentation of comparative wage rates by a union, and Sewell Mfg. Co.,⁶ in which an employer used racial propaganda. The misrepresentation cases have been much more numerous than the racial propaganda cases, and the Board's decisions have been much criticized by dissenting Board members, the courts, and academic commentators.

Just last April, in a case called *Shopping Kart*,⁷ the Board by 3–2 decision overruled *Hollywood Ceramics* and announced that it would no longer set elections aside because of misrepresentation. The Board majority disagreed with the assumption that misleading campaign propaganda interferes with employees' freedom of choice. They said employees should be viewed as mature individuals who are capable of recognizing campaign propaganda for what it is and discounting it.

It should be of special interest to members of the IRRA that the Board majority found support for its result in a recent empirical study⁸ of NLRB elections based on over 1,000 employee interviews and covering 31 elections in five states. This study heavily discounted the effect that pre-election campaigning has on employees and recommended that the Board stop setting elections aside on the basis of campaign propaganda by either party.

It must be recognized that the Shopping Kart decision has only a

⁵140 NLRB 221 (1962).

⁶138 NLRB 66 (1962).

⁷94 LRRM 1705 (1977).

⁸ Getman, Goldberg, and Herman, Union Representation Elections: Law and Reality (New York: Russell Sage Foundation, 1976).

precarious hold on life. As noted, it was a 3-2 decision. One of the three is no longer on the Board, and one concurred specially in the result with an enigmatic qualification. One of the dissenters, John Fanning, is now the prestigious Chairman of the Board. In any event, the majority opinion does not address itself to the propriety of setting aside elections under Section 9 because of noncoercive speech which is not an unfair labor practice because it is protected by Section 8(c).

It is to that practice that I direct my final comment. In many speech cases under the First Amendment, the Supreme Court has distinguished between time, place, and manner regulations of the exercise of speech rights, and regulation of the substantive content of the speech. Time, place, and manner regulations are permissible if they are carefully tailored to protect important public interests. Regulations of content, however, are generally prohibited as constituting censorship. There is no doubt that under Section 9 the Board can properly regulate the time, place, and manner of campaigning. But I remain unconvinced of the need and desirability of the Board's regulation of the content of propaganda beyond the line drawn by Congress between coercive and noncoercive speech. That practice to me is inconsistent with the language and purpose of the statute, and with free speech principles generally. The concept of "laboratory conditions" is itself artificial, fictional, and inconsistent with the robust and free-wheeling rhetoric we have long expected and tolerated in labor disputes in this country. In my judgment, there is no compelling public interest which requires the Labor Board to police its elections as though they were sheltered workshops. Congress should amend the law to prohibit the Board from setting aside elections because of noncoercive speech.

Proposed Labor Reform: ''Brave New World'' or ''Looking Backward''?

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By now it is a commonplace in the labor relations community that there are two significant deficiencies in the administration of the National Labor Relations Act. Neither is a matter of substantive law in the usual sense. The first is the inordinate delay in securing a remedy in contested cases, and the second is the inadequacy of the remedy in certain critical situations. I should like to examine a few key recommendations of the NLRB Task Force, and a few key provisions of the proposed Labor Reform Act, in light of those two central concerns.

In my assessment I shall also take into account two other factors I consider of similar importance. These include the need to maintain and enhance the acceptability of Labor Board decisions, and the need to ensure the full freedom of employee choice and genuine neutrality toward union and employer interests in view of today's industrial realities. If I were to offer one general criticism of H.R. 8410, the Labor Reform bill, it is that, for all its virtues, it is out of date before it is passed. It provides long-overdue solutions to the worst of yesterday's labor relations problems, which may not be typical today, and it does so in terms that are overly explicit and thus likely to hamper the flexibility of future Board decision-making. At the same time, it fails to acknowledge some of the changing patterns of more progressive labor relations, and so fails to provide a legal framework for tomorrow's probable industrial developments.

Having said all this, I must salute the practical savvy of the bill's drafters and sponsors. They were trying to create the smallest possible target by concentrating on the problems of delay and the most urgently needed remedies, especially in situations involving unorganized employers, rather than on substantive regulation that would shift the balance of collective bargaining power as between unions and organized employers. Here they succeeded so admirably that I am at a total loss to explain the outpouring of inflated rhetoric from some organized em-

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ployers and their trade associations in opposition to the bill. On balance, H.R. 8410 is a good bill, a reasonable bill, a generally fair bill. If the Senate and the subsequent Conference cannot improve it, the least Congress can do is to pass it.

As NLRB Chairman Fanning indicates, the most controversial issue considered by the Task Force regarding unfair labor practice procedure was pretrial discovery. It was so controversial, in fact, that it actually generated little controversy. There was quiet acceptance by most union and management representatives that accord on broad recommendations was impossible. The best that could be achieved was a comprehensive statement of the pros and cons of discovery, together with some suggestions for its use in relatively limited circumstances. These included greater specificity in complaints, advance disclosure of the names of outside experts, advance exchange of documentary evidence not revealing the names of individual employees, and the identification of the positions of the parties at a pretrial conference on the day of the hearing.

The principal arguments in favor of discovery are that it will speed up the process, encourage settlements, and be fairer to respondents by minimizing the burden of preparing a case while being in the dark about the General Counsel's line of attack. On the other hand, discovery engenders fears of reprisal against individual employees and of witness tampering. Many think discovery is too formal for NLRB proceedings, unduly burdensome and expensive, and time-consuming. I suspect the concerns about employee fear may be somewhat exaggerated, but I am troubled about the potential for abuse and delay. The quagmire produced by discovery in the federal courts should be instructive.

I shall leave most comments on union representation elections to my colleague Bill Murphy. I must say, however, that I am a bit skeptical about some of the House bill's shorter time-limits. As passed by the House, the bill improved on the initial proposal by extending the time for holding an election in supposed "union majority" situations from two weeks to 25 days after a petition is filed. But an employer may still have only one week to campaign from the date the election is ordered. Every month or so I get a call from a small employer in a place like Paw Paw, Michigan, plaintively inquiring if I know of a labor lawyer who can help him out now that a union has sought or obtained an election. While recognizing the need for expediting the election process, I prefer the more flexible approach of the Task Force, which stresses tight time targets but with exceptions for good cause shown.

The House bill tackles delay at the Board and reviewing court levels

in three ways. The first is to expand the Board from five to seven members, thus enabling more panels to operate. I have reservations about this proposal. A smaller membership makes for greater ease and uniformity in administration. This may be especially important in view of H.R. 8410's new charge to the Board to exercise its rule-making power to define appropriate units, to set guidelines for union access to employer's premises, and so on. Providing for summary affirmances by the Board of administrative law judges' decisions is, however, a step in the right direction. So is the requirement that an aggrieved party must file a petition for court review within 30 days of the entry of the Board's order.

More attention should be directed to delay at the ALJ stage. The average decision takes about three months. H.R. 8410 ignores the problem. The Task Force urged additional staff support, shorter opinions, and more production. I applaud these suggestions, but I think more could be expected from the ALJs even without extra assistance. No full-time arbitrator worth his salt would be satisfied with the current ALJ average production of 13 or 14 decisions a year.

Under the House bill, a whole series of novel remedies is prescribed for unfair labor practices in organizing campaigns or first-contract negotiations and for repeated violations of the law. I have one basic objection to this approach. While it may be good political tactics to confine stiff new sanctions to the most egregious offenders, such specificity will inevitably tend to curtail the NLRB's existing power to fashion innovative remedies in other situations. Sometimes it is the long-organized employer that turns rogue. At least it should be declared that the newly spelled-out remedies are illustrative only, and do not impair the Board's authority to issue similar (or different) affirmative orders in appropriate circumstances.

H.R. 8410 authorizes a form of the "make-whole" remedy for employer refusals to bargain which a 3-2 majority held beyond the Board's power in *Ex-Cell-O Corporation*, 185 NLRB 107 (1970). Most disinterested persons have recognized the inadequacy of the traditional ceaseand-desist order in such cases. It amounts to little more than a pious exhortation to go and sin no more. In the meantime, the employees have lost the benefit of collective bargaining for one or two years or longer. The new legislative remedy would be restricted to organizing or initial contract situations. It would apparently not be restricted, however, to situations in which an employer has only "frivolous" objections to a union's certification. Hence, an employer that "tests" a Board certification in the only way now available—by refusing to bargain and thus inviting an 8(a)(5) charge—would also seem subject to a possible make-whole remedy. That is not as unfair as it may sound. Customarily a litigant who, in good faith, "stands on his rights" only to learn later from a court that he hasn't any, must pay the price for resisting the other party's valid claim. Someone has to lose in these cases, and it's better to have it the employer that guessed wrong than the employees whose rights have been sustained.

The purpose of the "make-whole" remedy, of course, is to restore the employees to where they would have been if the employer had not engaged in its unlawful refusal to bargain. It is, in essence, a damage remedy reflecting the employees' lost opportunity to secure contractual benefits. Relief in antitrust cases is analogous. The make-whole remedy is not, as some employers charge, a contract imposed on the parties by the Board. On the other hand, I have sympathy for employers who object that it is unfair to measure the loss to employees of small employers by the standard of major collective bargaining settlements, involving much larger companies. Moreover, on a technical note, I cannot understand the mathematics of the bill's formula for relief. As I read it, in the event of a protracted refusal to bargain, it sounds as if the employees could wind up owing the employer money.

An employee who is discriminatorily discharged during an organizing effort is entitled, under H.R. 8410, to double back pay. The House bill would have provided for no mitigation on the basis of the employee's outside earnings, but on the floor an amendment was accepted covering compensation actually received. I think the floor change went in the wrong direction. "Double back pay" smacks of punitive damages. Compensation, not penalty, has long been considered the theme of the NLRA, and I think that theme should ordinarily be preserved. At the same time, back pay *without* mitigation would be the simplest possible standard to apply, would not breach the nonpunitive principle, and would accomplish about the same thing as the House bill as passed.

Employees discriminatorily discharged in organizing drives or firstcontract negotiations also get the benefit, under H.R. 8410, of Section 10(1)'s mandatory injunction provisions. The principle here is surely laudatory. I only hope the NLRB has the personnel to make it work.

"Willful" violators of a final Board or court order are subject to an H.R. 8410 provision for blacklisting from federal contracts for a period of three years. Again, I am uneasy about the punitive implications of this remedy, and even more uneasy about the deleterious effects it may have on the very employees it is purportedly designed to help. I understand, however, that a similar scheme for dealing with wage and hour offenders has proved reasonably effective, and so perhaps my theoretical misgivings are unfounded.

Somewhat paradoxically, I regret that neither the NLRB nor the Congress has seen fit to pay much heed to the use of contempt as a remedial device. Contempt, of course, has even more punitive overtones than blacklisting and double back pay. But at least it can be nicely tailored to flagrant individual situations, and does not rely on broadly inclusive categorizations. A few months in jail once had a sobering effect on some high-level antitrust offenders in the electrical industry. A similar experience might prove therapeutic for some of the executives of recalcitrant textile manufacturers.

In addition to reducing delay and improving remedies. I have suggested that labor law reform should encompass enhancing the acceptability of NLRB decisions. The House bill's increase in the term of Board members from five to seven years is a modest but positive contribution to that end. I should have preferred terms of at least nine years. After more than 40 years of swinging pendulums, I feel it's about time for a little more stability and continuity in our labor relations law. Longer tenure would promote that. It would also downplay the political element or the appearance of the political element in Board decisionmaking. Ugly rumors have occasionally emanated from the Labor Board about switched votes in key cases following presidential elections. Even if those are untrue, the appearance of such political considerations tends to discredit the Board and to reduce the acceptability and finality of its decisions. Board members are in a precarious stance. They make few friends where they are, they rarely if ever advance their careers upon leaving the Board, and, with the exception of the redoubtable John Fanning, they seldom get reappointed. The least we can do is keep them in their august roles long enough to make it all worthwhile. I think we would also make their decisions substantially more acceptable, in the bargain.

Lastly, I have stressed the need for full freedom of employee choice and the evenhanded regulation of employer and union conduct. To achieve those goals in today's industrial setting, options must be available for movement in several quite different directions. Some of those options are recognized by H.R. 8410, but some are not. The provision for permitting union access to employer premises to respond to captiveaudience speeches is an example of a sound response to an industrial reality. In the case of a large employer, especially one located in a metropolitan area, the plant is the natural forum for employee discussion. A union is seriously handicapped if confined to handbills, home visits, and the like. On the other hand, the one-week period following the direction of an election in "majority union" cases may be unrealistically short for some employers. Even if the union has a card majority, the employer still understandably feels entitled to a chance to talk his employees out of it. He needs time to find a lawyer, arrange an appointment, put together his arguments, and make his pitch. All this may sound like a dream world to some hardened combat veterans, but that's the way my employer out in Paw Paw sees it.

More broadly, H.R. 8410 is deficient because it is so intent on seeking to right ancient wrongs that it overlooks future possibilities. Let me cite just one example. There are today in this country both large and small companies whose employees, by their own free choice, are unorganized. Whether they have been beguiled by wily, duplicitous employers is not for me to say. At least insofar as any of us can be said to exercise free choice, they have exercised it. Moreover, many of these employees are in highly technical fields, and their numbers are bound to grow. Now, even though they are not unionized, their employers do not wish to ignore them. Indeed, companies often wish to solicit their views in a systematic way. Inevitably, the employer or some worker will come up with the idea of a "representative committee." The company is even happy to provide an office and a typewriter. We have this sort of thing all over the country. And of course nearly every one of these arrangements is, under the wooden logic of the applicable NLRB decisions, a violation of Section 8(a)(2) of the Labor Act. As some federal courts of appeals have realized, however, Section 8(a)(2) was aimed at quite different targets, at the shabby "company unions" of the 1930s and at the employer who gave aid and comfort to his favorite as between two or more competing unions. If, in the contemporary situation I have described, the employees chose freely and knowingly and the committee or other body acts truly on their behalf and for their benefit, no reason exists for objection save ideology. Should the weight of precedent be too heavy to permit validating such arrangements, the law should be changed.

In a scant seven years, provided we all survive 1984, we shall be celebrating the Fiftieth Anniversary of the Wagner Act. The abuses we are discussing now were supposedly treated then, and the remedies currently proposed are thus long, long past due. Indeed, in some respects it is a sorry spectacle to see us all here today earnestly analyzing a set of procedures and remedies, nearly all of which, under just a mildly generous reading of the Wagner Act, the NLRB could long since have adopted on its own. But if H.R. 8410 is necessary to rout out the last of the intractables in certain benighted industries, it should certainly be passed, with or without modifications of the type I have proposed. And then we must start thinking about the kind of law that will be needed to regulate the more enlightened labor relations of the next half century.

DISCUSSION

JAY S. SIEGEL Chairman, Section of Labor Relations Law, American Bar Association *

Putting aside my labor lawyer's hat and donning that of a social scientist and IRRA member for over ten years, I have deep concern about the proposals to reform the National Labor Relations Act. I am disappointed because all three of the papers presented have either ignored outright or lightly brushed aside the question of whether or not any reform should be undertaken. No one has questioned whether there is sufficient evidence to justify a major revision of the basic labor statute in this country. Put simply, is this reform necessary?

The real issue is whether there is a need for reform. Walter Lippman wrote many years ago that in a democracy, legislation is supposed to be based upon need. Does the public interest, as opposed to the special interest of organized labor, require an entire revision of Sections 9 and 10, the major substantive parts of the Act? The very nature of H.R. 8410, the House-passed proposal, suggests that the Board has been totally ineffective in its 42-year existence. There is, however, substantial authority to the contrary.

President Carter, in his "reform" message to the Congress, said, "While a great majority of employers and unions have abided by the labor laws, a few have unfairly abused the procedures and practices under which the Board must operate." Secretary of Labor Marshall commented before the House and Senate Committees that the Act has been "a basically sound law under which our labor relations policies have been administered for over forty years." Chairman Fanning, in his speech to the 1977 Annual Meeting of the American Bar Association in Chicago, observed that under the Board's direction, "The Rule of Law has replaced the law of the jungle." These authorities, all attesting to the fundamental success of the National Labor Relations Act, offer a serious challenge to the assumptions underlying H.R. 8410 and pose the basic question, which I again ask: Is this reform necessary?

[•] Mr. Siegel is an attorney in Hartford, Conn. The views expressed herein are personal and do not reflect those of either the Section or the Association.

Professor Murphy notes in his paper that the 30-Million Voter NLRB celebration last year was a "tangible manifestation of industrial democracy at its best." That hardly sounds as if the Labor Board has been a failure. Dean St. Antoine, perhaps more than the other two speakers this morning, attempts to confront some of the underlying concepts of reform. He is correct that H.R. 8410 attempts to right matters that were wrong years ago. It is an outmoded bill more suited to 1937 than 1977. The labor union movement in this country continues to be "square" while employers and the rest of the nation have become "cool."

What are the justifications for labor law reform? Two essential reasons are offered—delay and ineffective remedies. The first ground, delay, involves the claim that the Board moves too slowly in deciding cases. As social scientists, this assumption should not be accepted without specific empirical evidence to support it. Where is the independent verification? Let's look at the record, as Al Smith used to say here in New York.

The General Counsel of the Board has just released figures for fiscal year 1977. Nine out of every ten unfair labor practice charges filed with the agency last year were disposed of without a trial in six weeks or less. Three out of four election petitions resulted in voluntary election agreements and the votes counted within 40 days from the date the union first filed at the Board. These are not the figures of the National Association of Manufacturers or the U.S. Chamber of Commerce; they are official government data from the office of the chief administrator of the Act. I submit this is substantial empirical evidence negating a need for wholesale revision of the Labor Act at this time.

What about the one in ten unfair labor practice case or the one in four election proceeding that is beyond the median results. Many of these involve novel issues or policy questions. The Board, like any other adjudicatory body, needs time to decide such difficult cases, and I suggest there is nothing wrong here. In such instances, faster is not better. Thus, in establishing an absolute maximum time for decisions in election cases, H.R. 8410 does the Board a disservice.

Further, accelerated election votes in only 25 days, as proposed, in the average case would take the entire 15 days out of the employer's end of the campaign. The union may have been organizing for months before filing with the Labor Board. The present median of 40 days for the vote after the union files with the Board is a fair period for both sides to campaign and the employees to vote on an informed basis.

The other major ground raised by proponents of reform is a claim of ineffective remedies. The Act, the unions claim, has no teeth in it. It is hard to keep a straight face at an argument that the Labor Board has been a paper tiger for 42 years. Contrary to these urgings, the Board does have an effective arsenal of weapons.

Back payment and reinstatement have been effective remedies for years. Many of you who are arbitrators know that from your own experience. Add to that such things as injunctions and court contempt proceedings and you have strong medicine for recalcitrants. Dean St. Antoine correctly pointed out that contempt is a major enforcement weapon at the disposal of the NLRB. If it and other measures have not been fully used, the fault lies with the Board and the General Counsel, not with the statute. There are effective remedies under the Act.

Somone no doubt will ask, what about J. P. Stevens? Stevens, I concede, appears to be a unique situation. But the Stevens Company is not above the law. Ask John Mitchell or Robert Haldeman or the man writing his memoirs in San Clemente who is above the law. If Stevens is a willful violator, it can be dealt with under the existing statutes in a determined effort by the agency. The General Counsel has recently asked for a broad injunction against the company because he feels it is an appropriate remedy under the present Act in the light of the Stevens record. Keep in mind that the average-size employer in Board cases is not that of J. P. Stevens. The average case involves 50 employees or less, and it is the small employer in this country who is going to bear the brunt of so-called labor law reform.

What is really needed in the area of administration of the National Labor Relations Act? Unlike Dean St. Antoine, I am not willing to accept H.R. 8410 as the "only bill in town." I think we need some fine tuning of the Board's procedures. Professor Murphy said it best when he observed: "When we speak of reforming the Labor Act," referring to the representation case areas, "we are not talking about correcting failures but about improvements to procedures which are concededly successful to a large extent in the majority of cases." The Board's problems are operational and it needs managerial help. The Task Force approach discussed by Chairman Fanning in his paper is the correct path to resolving what are essentially "in-house" difficulties. Calling in knowl-edgeable people who continually deal with the agency and asking them for their views and suggestions is the proper approach.

Under Walter Lippman's concept, the need for labor law reform simply does not exist. Bernard Samoff, a long-standing IRRA member and former NLRB Regional Director, delivered a paper in 1973 to this assembly in which he quoted then Senior Board Member John Fanning's views on the Board and the Act: "What I do suggest is the system now in operation has shown itself remarkably adaptable and expandable and one should think carefully before changing it."

General Counsel John Irving, in his inaugural address in 1975, said the agency does "the finest job of *any* law enforcement agency *anywhere* in government." Chairman Fanning, in recent months, has concurred, saying the Board is the most efficient regulatory body. Yet the cries on Capitol Hill and 16th Street are all urging rewrite of the nation's labor law. Remember ERISA? That law was the panacea for the nation's pension ills. We all know what has happened since then. Will history repeat itself in the labor-management field?

VI. THE ROLE OF WAGE DIFFERENTIALS IN INFLATION

Wage Indexation and Wage Differentials

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Wage indexation covering the entire workforce was implemented in Australia in early 1975 in response to a wage-induced inflationary spiral then underway. The purpose of this paper is to identify the key role of wage differentials in determining the nature of this "wages policy," including the form of indexation, and its degree of success in moderating inflation.

Wage differentials, broadly defined to include relativities (wages for the same occupation across industries), have a number of important functions, including that of allocation of persons between occupations, industries, and regions, and they "lie at the very heart of the concept of equity as applied to wage determination."1 Under normal economic circumstances, with low to modest inflation, a stable set of relationships comprising the wage structure would be conducive to serving those ends.

In periods of high inflation, however, the wage structure will become more prone to distortions and disturbances, because labor market conditions will not be uniform, and workforce groups will have differing capabilities to respond to inflation. Further, fiscal and monetary policies will impact diverse groups and their labor market conditions differently. The key issue for analysis would be the consequences of these disturbances on labor allocation and industrial relations.²

Author's address: School of Business, University of Kansas, Lawrence, KS 66045. ¹ Derek Robinson, "Differentials and Incomes Policy," Industrial Relations Journal, vol. 4 (Spring 1973), p. 7.

² Daniel J. B. Mitchell and Ross E. Azevedo, Wage-Price Controls and Labor Market Distortions (Los Angeles: Institute of Industrial Relations, University of California, 1976).

A somewhat different situation emerges, however, where the policy response to high inflation involves the implementation of wage indexation. In the Australian context, one fundamental dilemma that did arise was whether the existing wage differentials could be modified to facilitate an early economic recovery, or whether they were to be adhered to "at all costs," to ensure a continuation of orderly wage fixation that the indexation system hoped to achieve relative to the wage "jungle" previously existing.

This paper will not embrace all the considerations involved in the introduction of wage indexation in Australia, nor will it identify all the consequences that have arisen from this experience. Rather, a brief scenario of the economic and industrial relations background will be outlined, to be followed by an indication of the key considerations involved in the introduction of the wage-indexation system. The paper will then focus on the nature of that system and the significant role of wage differentials in this regard, and lastly will identify some economic and industrial relations consequences of this strategy.

The Economic and Industrial Background

The deterioration in economic conditions in Australia during the 12-month period preceding the introduction of wage indexation (April 1975) can be gauged from the selected data contained in Table 1. The unemployment rate rose from 1.7 percent in March 1974, which was consistent with the average rate for the 1968–73 period, to 4.2 percent in March 1975. The annual inflation rate accelerated from 13.6 percent for the year ending March 1974, to 17.6 percent for the year ending March 1975. Similarly, the company profit share declined from 16.5 percent in March 1974 (which is near the previous five-year average of 17.5 percent), to 13.3 percent in March 1975. The most explosive movement at this time, however, occurred in relation to wages; for example, average weekly earnings increased 33.3 percent during the 12-month period to March 1975 compared to 16.9 percent for the 12 months ending March 1974.

Pitchford contends that the inflation of 1970–74 was initially induced by external factors, then exacerbated by a failure to offset these effects through appropriate monetary and exchange-rate policies and by expansionary fiscal and permissive wages policies.³ Whatever causal role can be attributed to wage-push prior to 1974, there was a clear consensus by March 1975 that a price-expectations-fueled wage-price spiral was

³ John D. Pitchford, "Inflation in Australia," in Worldwide Inflation, eds. Lawrence B. Krause and Walter S. Salant (Washington: Brookings Institution, 1977), p. 385.

Quarter	Unempl. Rate ^a (%)	Company Profit – Share ^{a, b}	% Change Ave. Weekly Earnings (ord. time) ^a		% Change in CPI		National Wage
			A٩	B¢	A٩	B¢	National Wage Case Awards
1974-March	1.7	16.5	3.0	16.3	2.4	13.6	
-June	1.8	14.1	7.7	18.6	4.1	14.4	
-Sept.	2.4	12.4	10.3	25.5	5.1	16.0	
-Dec.	3.3	13.5	6.9	30.8	3.8	16.3	
1975–March	4.2	13.3	4.2	32.4	3.6	17.6	3.6%
-June	4.4	14.8	2.9	26.5	3.5	16.9	3.5%
-Sept.	4.5	12.9	3.9	19.1	0.8	12.1	— (deferred Dec. Qtr.)
-Dec.	4.6	12.7	3.7	15.6	5.6	14.0	6.4%
1976–March	4.3	13.9	2.3	13.5	3.0	13.4	3% to \$125 p. wk., \$3.80 above
–June	4.3	14.2	5.1	16.0	2.5	12.3	2.5% to \$98 p. wk., \$2.50 to \$166, 1.5% above
-Sept.	4.8	14.4	3.4	15.4	$2.0 \\ 2.2$	13.9	2.15% to \$50 p. wk, \$2.10 to \$100, 1.5% above 2.2%
-Dec.	4.3	14.3	1.5	12.8	6.0ª	14.4	\$5.70ª
1977–March	4.6	14.9	2.0	12.5	2.3	13.6	1.9% to \$200 p. wk., \$3.80 above
-June	4.0 5.4	14.9	3.4	10.7	$2.3 \\ 2.4$	13.4	2.0%

TABLE 1 Selected Australian Economic Data 1974-77, and National Wage Case Decisions

Data Sources: Series of the Australian Bureau of Statistics-Employment and Unemployment, Quarterly Estimates of National Income and Expenditure, Average Weekly Earnings, Consumer Price Index, and the various decisions of the Australian Conciliation and Arbitration Commission.

^a Quarterly data seasonally adjusted.
^b Gross operating surplus of trading enterprise companies to gross nonfarm product at factor cost.
^c A is increase on previous quarter; B is increase on corresponding quarter in previous year.
^d 3.2 percentage points of the 6 percent increase in inflation was due to the introduction of a health insurance levy (Medibank). The Commission awarded a flat amount of \$2.90 to cover this.

well under way, and that a clear breakdown in the orderly system of wage fixation that had prevailed for many years under the constraining auspices of the Australian Conciliation and Arbitration Commission (hereinafter called the Commission) had occurred by 1974.

The Australian arbitration system is extremely complex. Under the Constitution, federal government powers are restricted to conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one state, with the primary power to set wages and other conditions of employment being reserved to the constituent states (S.51). Partly due to this, there evolved over the past 80 years the unique Australian approach of industrial dispute settlement through compulsory arbitration, so that de facto the wages of most Australian workers have been largely determined by the rulings of the Commission and corresponding state bodies. However, while an award by these tribunals constitutes a legally binding minimum for that worker. there is nothing to prevent above-award wages being obtained directly through collective bargaining and then being registered with the tribunals as "consent" awards, or for over-award payments (wage drift) being made by employers in response to tight labor market conditions outside the ambit of the tribunals.

In essence, while the federal government has control over fiscal, monetary, and external-balance policies, the important wage element of the economic management arsenal is largely in the hands of the Commission. But this pertains only to the extent that this body is able to induce the other tribunals to conform to its approach to wage issues, and can secure predominant union and employer acceptance of this "leadership" role. Most important of all, the Commission's relative stress on industrial relations aspects, its primary mandate under the enabling legislation, will largely determine the consistency of its wages strategem vis-à-vis the thrust of the federal government's economic management.⁴

The Australian economic performance of the 1960s was one of 1.5 percent unemployment and 2.3 percent inflation, on average, reflecting in part the basic consistency of the Commission's "wages policy" with the economic management of that period. However, the early 1970s saw the demise of the preeminence of the Commission's national wage case decisions, through which general "across-the-board" wage adjustments occurred, and a significant increase in importance of the other elements

⁴ For an enlightening discussion of these issues and other aspects raised subsequently in this paper concerning the force of equity, see J. E. Isaac, "Wage Determination and Economic Policy," The Giblin Memorial Lecture, ANZAAS, September 1977.

of wage movement, namely, consent awards arising from industry-level negotiations and over-award payments negotiated at the company or plant level. This occurred in a context of increasing union militancy over the right to strike and associated industrial relations issues, growing employer disenchantment with arbitration, rising inflation, and tight labor markets.⁵

The Policy Issue

In this industrial relations and economic environment, two distinct but interrelated issues arose, namely, whether wage indexation should be embraced in principle or not, and if so, whether a full or partial form of indexation should be adopted.

Concerning the first issue, one view was that primary reliance should be placed on depressed economic conditions to ultimately moderate wage claims, and outcomes, to more realistic levels. The counterargument to this strategy questioned whether the impact of this approach could surmount the "expectations" effect on wage claims at such high rates of inflation, even with draconian levels of unemployment (for Australia); whether the inflationary spiral might already be out of hand by the time this approach took effect; and whether, given the uneven impact of unemployment, large wage increases might not have been procurable in some industries in any case and then be passed on through the entrenched principle of comparative wage justice.

The proponents of the alternative strategy, wage indexation, argued that its effect would be first to moderate, then stabilize, and potentially decelerate the rate of inflation primarily by removing the "expectations" element of future price movements from wage demands, by institutionalizing a lag in wage change to price change, and by promoting a more "responsible" industrial relations climate through which to restrict nonindexation wage movements.

Opponents of this strategy stressed that at best the stabilized outcome could be a "locking in" at an unacceptably high rate of inflation. At worst, it could generate a continuing escalation of the rate, if nonindexation wage increases did occur in addition to indexation movements, or where nonwage-induced price increases (through, for example, a commodities prices boom or a discrete surge in import prices) were incorporated rapidly into wages, and hence costs and prices, through indexation based on the Consumer Price Index. As well, potential eco-

⁵ A full account of these developments can be found in Anne R. Braun, "Compulsory Arbitration as a Form of Incomes Policy: The Australian Case," International Monetary Fund Staff Papers, vol. 21 (March 1974), pp. 170–216.

nomic consequences could include a sustained secular reduction in the profit share as real wages continued above trend, unfavorable employment effects, and potentially an inflationary devaluation of the Australian currency.

On the one hand, there is some basis for arguing that indexation will defuse a spiral in times of high inflation, all else equal, and this was an urgent and perhaps overriding objective in the Australian circumstances. This can be illustrated through the wage adjustment equation

$$W_t = f(x) + \alpha P_t^{\bullet}$$

where W_t is the rate of change in wages, f(x) is a function of excess demand for labor, and P_t^e is the expected rate of change of prices. For a given value of α (the wage response to expected price change), wage indexation would be inflationary, anti-inflationary, or inflation neutral, all else equal, depending on whether actual inflation P^a exceeds, falls short of, or equals the expected inflation rate, respectively. If workers have been overestimating the future rate of inflation, and incorporating the same in wage claims, as appeared to be the case in the Australian situation where actual wage outcomes reached twice the rate of inflation, then indexation would be anti-inflationary, at least initially, and then inflation-neutral (when $P^a = P^a$). Furthermore, the anti-inflationary effect of partial indexation would be greater than for full-percentage indexation.⁶

This ceteris paribus condition is crucial to the indexation argument, in particular that wage increases outside indexation be virtually nonexistent. If the required degree of wage restraint outside indexation was not forthcoming, indexation would become an extra layer to national, industry, and over-award movements rather than a substitute tier for them all. The Commission recognized this, first in designing an indexation package virtually precluding any modification to the wage structure, and second by awarding full-percentage indexation quarterly to all awards, for the first year of implementation, despite the force of strong economic arguments to the contrary.

The Implementation of Wage Indexation

The Commission introduced a wage indexation system in April 1975, and has continued it, on the basis of substantial compliance with eight

⁶See a broader discussion of this issue in Morris Goldstein, "Wage Indexation, Inflation, and the Labor Market," *International Monetary Fund Staff Papers*, vol. 22 (November 1975), pp. 680–713.

principles it developed, to the present. These principles provide basically for the adjustment of all award wages according to movements in the Consumer Price Index, on a quarterly basis, and through a form of indexation to be determined in the light of circumstances and the submissions of the parties; for a Commission review of an annual adjustment based on productivity (though none has occurred as yet); and for no other wage increases other than adjustments to reflect changes in work-value, catch-up of community movements, and anomalies, all of which were strictly defined and severely constrained in scope.⁷

In essence, the Commission "put the lid" on any but the most necessary modifications to existing differentials and relativities, whatever they might be and however much the existing rapid inflation might have affected "normal" relationships. Only the very extreme distortions were to be corrected through the exceptions clauses. It recognized that, given the strength of the force of equity in Australian industrial relations, any leakage giving rise to new relationships would, through the principle of comparative wage justice, undermine the "fragile" package it had developed. Niland has noted that under arbitration, as compared with collective bargaining, "orbits of coercive comparison" become both wider and institutionalized, and Isaac observes that "economic forces in the labor market are constrained by powerful normative forces, and distortions of conventional relativities produce strong corrective pressures in the name of 'fairness,' a high level of unemployment notwithstanding."⁸

Similarly, the Commission saw the importance of establishing equity in the form of wage adjustment. Hence, the Commission rejected less than full-percentage indexation in the initial period of implementation, partly on the potential consequences of disrupting relativities and partly because "there is undoubted merit on grounds of equity and industrial relations for ensuring that real wages are maintained unless evidence can be adduced of consequential adverse economic effects." ⁹

The determinations of the Commission can be seen in sequence in the last column of Table 1. In relation to the four quarters of 1975, the Commission awarded full-percentage indexation. Since then, apparently feeling more secure from an industrial relations perspective in the light

⁷ Australian Conciliation and Arbitration Commission, National Wage Case—May 1976, Appendix 1.

⁸ John Niland, "The Case for More Collective Bargaining in Australia," *Journal of Industrial Relations*, vol. 18 (December 1976), p. 380; and Isaac, p. 17, respectively.

⁹ Australian Conciliation and Arbitration Commission, National Wage Case-April 1975, p. 12.

of substantial compliance and commitment to the indexation package, the Commission has acceded to the demands of the economic situation and has awarded partial indexation of a plateau form (that is, awarding flat-money-amount movements above some "threshold" level) in four of the six remaining quarters (to date).

The Commission has clearly felt that indexation would survive only if the strong equity notions that pervade the wage structure were not disturbed. It consistently repeated its objective of full-percentage indexation, and on the two more recent occasions that it reverted to full indexation, it did so on the basis of a clear concern for the consequences (industrial relations, not labor market) of unduly compressing relativities.

On the other hand, the continuing stagnation of the Australian economy from early 1975 onwards placed increasing pressure on the Commission to contribute toward establishing appropriate conditions for an economic recovery by constraining money-wage movements still further. The indexation system did halt the wage-price spiral, and did stabilize the inflation rate below the previously existing levels, but nevertheless at a rate (13-14 percent) too high for confidence. The unemployment rate has continued at historically high levels, and employment growth has been negligible. The abnormally high real-wage level arising from the preindexation wage movements, and sustained initially by full-percentage indexation, could only have had an unfavorable effect on employment, directly by inducing employer rationality with respect to workforce levels, and indirectly by affecting business profitability and investment (which have continued to be subdued). Relatively high real wages also inevitably led to devaluation of the currency in December 1976, creating the further dilemma of resulting inflationary pressures being transmitted through indexation, and the potential scope for further devaluations if indexation sustains the rate of inflation at comparatively high levels.

Conclusions

Australia responded to a deteriorating inflationary situation through a centralized "voluntary" incomes policy in the form of wage indexation. Certainly in the Australian context, the "success" of this strategy depended entirely on the commitment of the various parties to it, which, in turn, has depended on the paramountcy of important notions of equity with respect to the wage structure and wage movements. In essence, compliance has required that wage differentials and relativities be disturbed as little as possible, if at all, and this factor has been the predominant consideration in the Commission's deliberations and awards.

It is too early to identify labor market distortions arising from this characteristic. With respect to industrial relations, however, two interesting questions can be raised. First, to what extent will post-indexation industrial relations be destabilized when a "rush" of deferred wagestructure adjustments is released through the system? And second, if wage indexation is itself a response to a situation created by a "deficient" industrial relations system in the first instance, does its "band-aid" continuance have the effect of deferring or putting aside a basic reform of that system?

From a broader perspective, indexation did defuse an inflationary spiral, by removing "expectations" from wage demands, but at the "price" of institutionalizing the rate of inflation at still unacceptable levels from the perspective of an economic recovery. This is perhaps as much a political as an economic issue, however, for although the Australian recession has persisted into its third year, it appears doubtful the alternative approach based on a tradeoff between inflation and unemployment could have halted the spiral and stabilized economic conditions more favorably than did wage indexation.

Wage Leadership and Patterns of Wage Settlement in Construction

DAVID E. SHULENBURGER University of Kansas

In his survey of construction wage stabilization, Mills states a widely held belief that "there are economic and institutional peculiarities in construction which require special treatment in periods of direct wage controls." ¹ This belief has been translated into action by the establishment of separate construction wage control units in the World War II, Korean War, and early 1970s time periods.

Judging from their criteria and procedures utilized, each of the three wage control boards/committees apparently believed a primary institutional peculiarity of the industry requiring attention to be the propensity of construction wages to increase sharply when historical patterns of wage settlements were disturbed. Each board thus took pains to ensure that historical relationships among construction units were undisturbed when deciding whether to approve a given settlement. Indeed, the formal criteria under which the Construction Industry Stabilization Committee operated dictated that historial relationships be preserved.² Such attention to patterns is consistent with Dunlop's contour theory of wage determination. Interestingly, contour theory as an explanation of wage determination has received little empirical verification.

Recent literature on wage-wage inflation is also based upon a broad interpretation of contour theory. As Mitchell has shown, however, mere demonstration that wage changes in industry X are a close correlate of wage changes in industry Y or in all industries does not lead to the conclusion that wage changes in one industry lead to wage changes in other industries.³

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¹ D. Q. Mills, "Construction Wage Stabilization: A Historical Perspective," Industrial Relations, vol. 11 (October 1972), p. 364.

² D. E. Shulenburger, "Prior Identification of 'Key' Wage Determining Units," *Industrial Relations*, vol. 16 (February 1977), p. 72.

³D. J. B. Mitchell, "Issues in Full-Employment Policy Wage Determination," Proceedings of the 1977 Annual Spring Meeting, Industrial Relations Research Association (Madison, Wis.: The Association, 1977), pp. 483–88.

This paper will test the prevalence of contour-like wage behavior in five construction industry crafts during the 1960–71 time period. If contour-like behavior cannot be found, then the wage-wage inflation assumptions which have governed formal attempts to control wages in the construction industry may not be justified.

The method used here resembles that of Eckstein and Wilson's pioneering attempt to discern patterns of wage settlements in American industry. First, the time period is broken into wage rounds; key wagedetermining units are identified; a wage model is estimated for the key units; finally, the marginal impact of key wages upon nonkey wages is examined. This procedure departs from theirs in that employment in the key unit as defined here represents a small fraction of the relevant employment universe instead of the 52 percent represented by the keys in their study. Additional differences arise from the explicit recognition here that key settlements must precede nonkey settlements and in the presence of sufficient degrees of freedom to permit valid statistical interpretation of the results. Within a contour, a wage round is the time period from the key unit's negotiation date until its contract expires and it negotiates again.

When the 1961-71 construction industry negotiation-date data for the entire U.S. (from the Bureau of National Affairs) were factor-analyzed, in the first two factors a three-year bargaining round emerged, which accounted for slightly less than 50 percent of the variance in negotiation dates. The first factor, which accounted for 25 percent of the matrix's variance, had large positive factor loadings on 1963, 1966, and 1969 and large negative loadings on 1962, 1965, 1968, and 1971. The second factor, accounting for 20 percent of the variance, had strong negative loadings on 1961, 1964, 1967, and 1970. Thus, from the matrix's simple structure, a three-year pattern emerges. While a slight majority of the variance in dates remains unexplained, the central tendency of the data indicates that three-year bargaining rounds describe far more of the data's variance than does any other organization of the data.

Determination of Contour Membership

Locals of five specialty construction crafts are included in the sample to be analyzed here (Plumber, Plasterer, Painter, Electrician, and Iron Worker), only one job classification per craft is to be examined, and only locals engaged in the building sector of the construction industry are included in the sample. Thus a minimum of five separate wage contours (one contour per craft) exists in the sample. That minimum figure can be equal to the actual number of contours only if the contour for each craft is nationwide in scope. Contours which are intercraft in composition may also exist.

The method utilized in this study to define contour membership from historical wage relationships is Johnson's Hierarchical Cluster Analysis, which is particularly well suited to finding existing interrelationships within data sets that consist of single observations, each of which describes the relevant characteristic of the subject being studied.⁴ In the present case, the single observation is the negotiated increase in compensation (wages plus fringes) in a given year; the relevant object, an individual local of a craft union. (The analysis was repeated using percentage change in wages and fringes as the contour-defining variable. Factor analysis of the results indicated that largely similar clusters resulted; thus the absolute wage change variable was utilized.) Pearson product moment correlations of negotiated compensation changes among subject building trade locals over the 1960–71 time period provide a suitable similarity matrix.

The criterion used to accept the set of clusters of a given intracluster minimum diameter as an accurate reflection of the data's interrelationships is as follows: if intercorrelation of the cluster is equal to or greater than .6, then the cluster is interpreted as though it were a contour. The criterion is not altogether arbitrary, as the best available study of building trade wage-determination which used both disaggregate wage data and market-forces-type independent variables was able to explain 33 percent of the variance in negotiated wage change.⁵ ($R^2 = 33\%$, therefore R = .574.) Assuming that this study accurately reflected the ability of market forces to explain disaggregate wage change in the construction industry, any error generated by the criterion tends to cause the unwarranted acceptance of the marginalist hypothesis, i.e., construction industry wage determination is a function of market forces alone.

The craft makeup of the resulting clusters was factor-analyzed revealing that there are five independent factors, each corresponding to an individual craft, each accounting for approximately equal amounts of the variation in the data. The implication of this finding is clear. Insofar as these five construction crafts are concerned, wage contours are almost exclusively intracraft in composition.

As an operational rule, locals which consistently conclude negotiations earlier than other contour members are, by definition, key units. In

⁴ Stephen S. Johnson, "Hierarchical Clustering Schemes," *Psychometrika*, vol. 32 (Spring 1967), pp. 250–54.

⁵ D. Q. Mills, Industrial Relations and Manpower in Construction (Cambridge, Mass.: M.I.T. Press, 1972), p. 72.

a minority of contours, however, the application of this criterion is impossible, as multiple members of the cluster negotiate in the first period of the wage round.

When multiple members of the contour have wage patterns and negotiation dates which are identical to that of the key, the absolute level of wages is utilized as a criterion, the presumption being that the unit with the highest wage level is the key unit. All units thus designated as key also negotiated contracts during the first period of the wage round in which negotiations occurred. In approximately one-third of the contours, the key city is selected in this manner. In approximately 20 cases (out of 390), neither the negotiation-date criterion nor the high wage one is sufficient to choose the key local. In such instances, a criterion of city size is imposed to select the key unit. The rationale behind this relates to the greater visibility and, therefore, saliency which is associated in the minds of individuals with events which happen in larger cities. Each unit selected in this manner also negotiated in the earliest period of the wage round in which negotiations occurred.

Estimation of the Wage Change Equation

In order to determine the impact of key wage change upon nonkey wage change, it is first necessary to isolate the nonassociative factors which determine wage change and estimate their parameters. This is done here through the use of the OLS regression technique by fitting the model Key Wage Change = F(Market Forces, Union Power Factors, Cost-of-Living Levels and Changes, Craft Specific Factors). Having fitted the model for key units, adding the variable "key wage change" and estimating the parameters for nonkey locals permits inferences to be drawn about contour-like wage behavior.

Admittedly this method incorporates a bias toward Type II error. Key units are drawn from a population in which wage change was intercorrelated at the .6 level or greater, thereby insuring that association exists between the key and nonkey wage behavior. If the beta coefficient on key wage in the nonkey equation is statistically insignificant, the implication is that the covariation of the noncontour variables in the equation with nonkey wages accounts for wage change, not key-wage change. Failure to find significant coefficients on the key wage variable therefore supports a rather strong inference that contour-like behavior is not present.

Time-weighted average annual negotiated compensation change (wages and fringes) expressed in cents-per-hour for a specific local during one wage round is the dependent variable's form. (As was noted above, the use of percentage change in wages as the dependent variable does not markedly alter the results.) The practice of varying from local to local, and from time to time within a local, the timing and distribution of the total wage settlement over the normal three-year contract period necessitates incorporating into the dependent variable a time preference function relating the value or cost of the settlement to the time it was actually paid.

A simple time-weighted average is chosen to reflect the differing preferences for the packages. For a three-year contract, the first year's increment is weighted by three, the second year's by two, and the third year's by one. If the assumption is granted that the time preference function does not systematically vary by geographic location, this weighting procedure introduces no bias to a cross-sectional interpretation of the results. (For a different approach, see Hamermesh.⁶)

Market forces variables are represented in the equation by the change in construction employment lagged one year and by 1960-62based index of unemployment in the city. Change in the craft-specific index of unionization, lagged one year; number of construction strikes occurring in the city; and the deviation of a craft's wage rank from its rank among the city's building trade crafts in 1960 were used to measure the influence of union power on the wage settlement. The rank deviation variable is included to test the leapfrogging effect which has been alleged to occur when historical patterns of wage levels are disturbed. Cost-of-living factors are measured by the economy-wide change in the Consumer Price Index and by Standard Metropolitan Statistical Area population. SMSA population is a rough proxy for the level of prices inasmuch as the BLS's family budget profiles reveal a positive correlation between city size and cost of living. Finally, craft-specific factors are entered by the inclusion of dummy variables for the Electrician, Painter, Plumber, and Plaster crafts. Earlier research supports the craftspecific nature of wage determination and, hence, the inclusion of these variables.⁷ As noted in Table 1, certain variables were omitted from the Round I equation due to either data unavailability or lack of comparability.

Table 1 separately presents the cross-sectional parameter estimate for key and nonkey locals in each of the four wage rounds. Focusing directly upon the coefficients on the key wage variable, in Rounds III

⁶ D. S. Hamermesh, "Wage Bargaining, Threshold Effects, and the Phillips Curve," *Quarterly Journal of Economics* (August 1970), pp. 501–17.

⁷ D. E. Shulenburger, "A Contour Theoretic Approach to the Determination of Negotiated Wage Change in the Building Construction Industry," *Economic Inquiry* (forthcoming).

	Rou	nd I	Rour	ld II	Roun	d III	Round IV		
Variables	Key	Nonkey	Key	Nonkey	Key	Nonkey	Key	Nonkey	
Key Wage	=	.07 (.98)	=	.09 (1.58)		.57 (14.25ª)		.24 (6.25ª)	
Rank Deviation	=	_	-1.97 (-1.98^{b})	84 (98)	.37 $(.11)$	-1.42 (-1.69°)	-2.64 (83)	$1.12 \\ (.84)$	
Change in Employment	20.07 (1.26)	21.54 (2.75ª)	12.34 (1.11)	-5.55 (61)	$17.68 \\ (.29)$	-18.24 (-1.45)	$\begin{array}{c} 44.22 \\ \mathbf{(.72)} \end{array}$	70.71 (2.87ª)	
Craft Change Index	_	_	-1.59 (36)	18.96 (3.82 ^a)	14.43 (.32)	-7.78 (68)	-25.59 (65)	-2.09 (13)	
Number of Strikes	_	_	.60 (4.42 ⁿ)	.51 (2.50 ^b)	1.09 (1.36)	.82 (2.56 ^b)	1.01 (.93)	.40 (.61)	
SMSA Population	.10 (3.65ª)	.11 (1.98 ^b)	.05 (1.56)	05 (48)	05 (26)	.11 (.66)	.88 (4.88ª)	.54 (1.92°)	
CPI Change	-3.58 (80)	-3.41 (-1.33)	19.01 (3.10 ^a)	11.32 (2.25 ^b)	23.59 (2.84^{a})	-8.74 (-3.68^{a})	-32.68 (03)	-14.70 (-3.31^{a})	
Electrician Dummy	2.69 (1.03)	-2.46 (1.57)	39 (15)	-5.69 (-1.51^{a})	-3.49 (29)	65 (19)	13.89 (.84)	-22.25 (-3.60°)	
Plasterer Dummy	-5.93 (-2.16^{b})	-4.46 (-2.84^{a})	-7.74 (-2.45^{b})	-7.60 (-3.42^{a})	-20.34 (-1.48)	5.84 (1.73°)	-24.15 (-1.31)	-36.11 (-5.73^{a})	
Painter Dummy	99 (40)	-4.59 (-2.92^{a})	-4.09 (-1.56)	-7.95 (-3.59^{a})	2.94 (.25)	-5.58 (-1.67°)	-31.75 (-2.22)	-28.85 (-4.69^{a})	
Plumber Dummy	-2.21 (89)	82 (54)	.65 (.26)	-3.94 (-1.97^{b})	-3.08 (27)	3.43 (1.13)	6.84 (.47)	-10.05 (-1.86°)	
Unemployment Index	09 (-1.36)	01 (.15)	06 (-1.05)	06 (-1.86°)	.09 (.46)	.14 (3.12 ^a)	.02 (.13)	.03 (.75)	
Constant	30.44	20.74	3.66	15.61	-20.90	-16.67	191.67	125.28	
Adjusted R ²	.17	.07	.40	.16	.03	.58	.31	.34	
Increase in R ² with key variable	-	.01	-	.04		.51	_	.22	
F Ratio	3.67ª	3.36ª	7.41ª	5.51ª	1.27	33.04ª	5.19ª	13.01ª	
Number of Cases	107	283	107	283	107	283	107	283	

TABLE 1 Key and Nonkey Regression Equations*

* t-statistics in parentheses

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^{a,b,} and ^c: significant at .01, .05, .10 levels, respectively.

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and IV the coefficients on key wages in the nonkey equations are positive and significantly different from zero at the .01 level; in Rounds I and II, the coefficients are not significantly different from zero at the .10 level. Additionally, the inclusion of the key variable increased the adjusted R^2 by .51 and .22 in Wage Rounds III and IV, respectively, while increasing the adjusted R^2 by .04 or less in the first two wage rounds. Given the above discussion concerning the Type II error inherent in the method, this finding enables one to make strong inference that a wage-wage explanation for nonkey wage determination in the first two wage rounds is unsupported.

Furthermore, in Wage Round III the F ratio for the key wage equation is not significant at customary levels. This indicates that factors other than those present in the estimating equation influenced key wage determination and possibly, therefore, nonkey wage determination. This apparent failure to appropriately specify Round III's equations casts doubt on the inference about contour-like wage behavior which the significant coefficient on the key wage variable otherwise supports. Given the "explosion" in craft union wages in the 1965–68 period (as discussed by Mills⁸) the failure to model wage change in this wage round was not altogether unexpected.

Rank deviation's coefficient could be construed to be a measure of intercraft contour-like behavior within the geographical confines of a single city. In only two of the six equations in which this variable is included is its coefficient statistically significant; in each of these cases it is inversely related to wage change. Apparently disturbances in withincity contours are associated with smaller, not larger, wage changes.

Summary

Results presented here cast doubt on the thesis that wages in a set of key construction-industry bargaining units are important determinants of nonkey wages in the 1960–65 time periods. Substantial qualifications concerning a contour explanation of wage change in the 1966–68 time periods have also been stated. Only in the 1969–71 time period is there substantial support for the contour hypothesis as an explanation of wage change. This finding that construction wage behavior does not consistently conform to a contour-like model is a confirmation of the author's earlier craft specific research.⁹

Wage-wage inflation in the construction industry is, contrary to past postures of wage control agencies, not an obvious phenomenon in these

⁸ Mills, Industrial Relations . . . , pp. 70-75.

⁹ Shulenburger.

five construction industry crafts. Similarities of wage movements apparently are explained by other factors basic to the wage determination process. These conclusions imply that historical wage control policy which attempted to maintain historical relationships is not uniformly consistent with actual wage behavior in the 1960–71 time period. Perhaps the goals of a wage-control program could be equally well served by policies which concentrate on market factors.

Relative Wages and Inflation

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Much of the public discussion of inflation is dominated by an emphasis on the behavior of wages. Attention is usually focused primarily on the average rate of increase in hourly labor costs, with price inflation viewed as proceeding roughly in parallel with wage inflation, although at a rate that is lower by a margin reflecting productivity growth. Within this framework qualifications are often made to account for factors such as cyclical conditions or major sectoral price changes. But the tendency is to take wage trends as an important starting point for the analysis.

Anti-inflation policy proposals have also frequently been put forward with the aim of directly influencing average rates of wage increase. This is a theme that is common to most incomes policy proposals: the numerical guideposts of the 1960s, proposals for wage-price review boards, proposals to use tax incentives to influence average wage increases, and calls for the development of a "social contract." The average wage trend has to a large extent been viewed as the central element in the inflation outlook and as the critical variable to which policy should be directed.

Whether analysis of short-term inflation prospects is structured to take the overall wage trend as given or as determined along with other variables in the system makes little practical difference if wage trends are viewed as unresponsive to current market conditions. In either case wages are introduced as costs, with demand conditions viewed mainly as influencing output and employment levels instead of price and cost trends.

Average Wage Trends

The fact that wage adjustments for a significant fraction of the workforce take place under previously negotiated long-term contracts is one significant element of the rationale for regarding wage trends as sticky. In addition, other workers not covered by wage contracts but employed in the same firms usually receive closely comparable wage increases.

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Moreover, if the terms of new contracts are negotiated largely on the basis of notions about appropriate relationships with wages under contracts previously negotiated, prevailing trends tend to be maintained—especially under the present system of overlapping contract durations and staggered contract expiration dates. Finally, for workers neither covered by wage contracts nor employed by firms with other workers covered by wage contracts, wage adjustments based on periodic surveys and on informal or implicit understandings between firms and their employees that historical relationships between their wages and those of other related workers will be maintained also contribute to keeping prevailing trends going. Under this view of the wage-adjustment process, the direction of spillovers is less important than the basic idea that spillovers are pervasive and linkages between wages close.¹

A review of average wage increases during the past decade lends credence to the idea that the wage trend can be regarded as given or as only weakly responsive to current market conditions. If 1974 is excluded, annual increases in the average hourly earnings index during the past ten years averaged 6.9 percent, with annual deviations averaging only a third of a percentage point. (During 1974, when consumer prices rose by more than 12 percent, the wage index rose by two-and-a-half percentage points more than the average for the remaining years from 1968 through 1977 and the largest deviation for those years was nine-tenths of a percentage point above the average in 1975.) During this period the unemployment rate ranged from 3.5 percent (1969) to 8.5 percent (1975) and consumer price inflation ranged from 3.4 percent (1971 and 1972) to 8.8 percent (1973). It should be recognized, of course, that wage increases had moved up to rates near 7 percent from the 3-percent range that prevailed in the early 1960s, and that this discussion has been focused on annual measurements with no attention given to lags. Yet, average wage increases have shown a remarkable stability during most of the past decade.

Despite the degree of stability shown by the behavior of average wages and the rationale that can be developed for this behavior, treating the wage trend as given irrespective of market conditions is subject to serious conceptual shortcomings and it is not likely to provide a reliable empirical approach. One reason is that, although there is a strong tendency for wages in particular sectors or set under similar arrangements to move in tandem, changes in relative wages or relation-

¹For an excellent discussion and empirical analysis of the magnitude and direction of spillovers for wage increases, see Robert J. Flanagan, "Wage Interdependence in Unionized Labor Markets," *Brookings Papers on Economic Activity* (1976: 3), pp. 635–73.

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ships among wages do occur. These changes in relative wages can be significant, and the main sources of the changes can often be identified. A second reason—one that applies with particular force under current conditions—is that cost-of-living escalator provisions have been incorporated into a large proportion of long-term wage contracts. This development was apparently stimulated in part by the experience of inflation, and it has made the wage trend conditional to an important extent on price behavior. Differences in the size of wage increases among sectors of the economy and among different wage-setting arrangements, as well as information on the coverage and contributions to wage changes of cost-of-living escalator provisions, are shown in Table 1. These differences not only give rise to significant changes in relative wage patterns, but also create the conditions that influence the behavior of average wages in subsequent periods.²

Dispersion of Relative Wages

Relative wages among industries have shown a cyclical tendency toward wider dispersion during periods of persistently high unemployment and narrower dispersion during periods of persistently low unemployment. This historical tendency is significant because cyclical changes in wage relationships among industries may be subject to reversal as a result of cyclical change. The relationship between dispersion of relative wages among industries and unemployment has been noted in econometric studies.³ Relative wage dispersion has changed more gradually than unemployment, so that sharp cyclical peaks in unemployment are not accompanied by abrupt changes in dispersion. Measures of relative wage dispersion among industries are not generally sensitive to differences in the industries covered, except for construction. Dispersion measures are sensitive to the inclusion of construction wages because the level of wages in construction is above wage levels in most other high-wage sectors, and relative to other high-wage sectors, construction wages have behaved differently. A brief discussion of construction wage behavior follows the discussion of wages in other industries in the private nonfarm sector.

Changes in the dispersion of relative wages since World War II are shown in Figure 1. The path of change can be characterized as generally

² For additional discussion of wage differentials, short-term changes in relative wages, and their implications for wage inflation, see Marvin Kosters, "Wages, Inflation, and the Labor Market" and "Wage and Price Behavior: Prospects and Policies," in *Studies on Contemporary Economic Problems*, 1976 and 1977, ed. William Fellner (Washington: American Enterprise Institute, 1976 and 1977).

³ See, for example, M. L. Wachter, "The Wage Process: An Analysis of the Early 1970s," Brookings Papers on Economic Activity (1974:2), pp. 507-24.

	(percentage)									
	(hereen name)									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Average hourly earnings										
index, percent change ^a	6.7	6.6	6.7	7.1	6.6	6.5	9.4	7.8	6.9	7.4
Deviation from average ^b	2	3	2	.2	3	4	(2.5)	.9	.0	.5
First-year wage increases										
negotiated under major										
collective bargaining agreemen	ts ^e									
All industries	7.4	9.2	11.9	11.6	7.3	5.8	9.8	10.2	8.4	7.8
Construction	8.7	13.1	17.6	12.6	6.9	5.0	11.0	8.0	6.1	6.5
Manufacturing	7.0	7.9	8.1	10.9	6.6	5.9	8.7	9.8	8.9	8.5
Nonmanufacturing (excluding construction)	7.6	9.6	14.2	12.2	8.2	6.0	10.2	11.9	8.6	7.9
	7.0	5.0	14.2	12.2	0.2	0.0	10.2	11.9	0.0	1.9
First-year wage increases in manufacturing ^d										
Union		7.3	7.6	9.2	5.7	6.0	8.1	8.7	8.4	
Nonunion		4.6	4.6	3.9	4.4	5.9	7.5	5.7	6.0	
Wage increases attributable to cost-of-living escalator provisions ^e										
All industries	1.6	1.6	3.7	3.1	2.0	4.1	5.8	4.8	3.5	
Manufacturing	1.8	1.7	3.8	3.7	1.8	4.0	$7.2^{0.0}$	5.2	3.2	
Nonmanufacturing	1.1	1.4	2.6	1.8	2.2	4.7	2.0	4.1	4.0	
Percent of workers covered										
by escalators	24	25	26	28	41	39	39	50	58	61

TABLE 1 Wage Increases by Sector and by Wage-Setting Arrangements, 1968-77

Source: U.S. Department of Labor, Bureau of Labor Statistics.

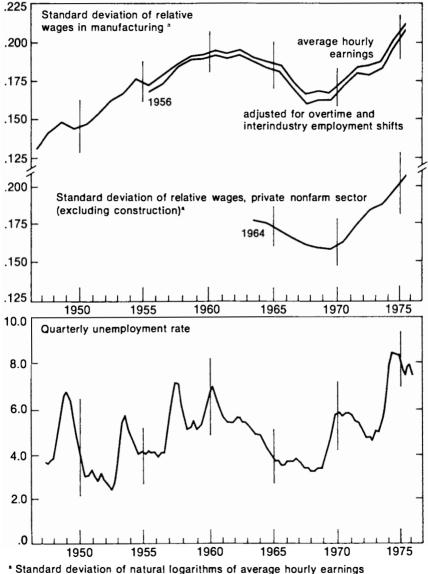
^a Percentage changes in the index are computed from December to December except for 1977, which is the annual rate computed on the basis of the 11 months of data available through November.

^b Deviations from the average are computed using the years 1968–77, excluding 1974. ^c Data are first-year mean percentage changes for collective bargaining agreements covering 1,000 or more workers in private nonfarm industries.

^d First-year wage changes for union workers include all changes negotiated during the period and scheduled to go into effect during Interface with the period and solution workers include all changes include all changes made under decisions during the period.
 Data are for all workers covered by escalator provisions under collective bargaining agreements covering 1,000 or more workers

in private nonfarm industries.

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for the industry sectors included.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

rising after the wartime years, when relative wage dispersion was compressed, until the beginning of the 1960s. During the 1960s dispersion declined during a period of tightening markets. After stabilizing in the late 1960s, dispersion increased with the rise in demand toward a cyclical peak in 1972–73.

Each of the measures of dispersion shown in Figure 1 again rose sharply in 1975 and 1976. Moreover, by 1976, these measures had risen to levels higher than the highest levels they had reached earlier in the postwar period. On the basis of historical patterns, high and increasing dispersion could be expected in view of the period of high unemployment and extensive market slack that followed the 1974-75 recession. While average wages rose much less rapidly after 1974, the sharp increase in the dispersion of relative wages in 1975 and 1976 indicates that the deceleration in wage increases was concentrated in the relatively low-wage industries.

The marked unevenness in the slowdown of wage increases after 1974 was apparently not generally a result of unusually large "catch-up" wage increases for industries in which wages had fallen behind during the period of high inflation. In this respect, the uneven pattern of wage increases occurring in 1975 and 1976 was in sharp contrast with the pattern of wage increases in 1970–72, following the preceding recession. At that time, there was a noticeable tendency for large wage increases to occur in industries in which relative wages had previously declined, with the result that dispersion rose from the trough it had reached in the late 1960s.⁴

Relative Wages and Extent of Unionism

Examination of relative wage patterns by extent of unionism provides insight into the influence that collective bargaining and contractual wage-setting arrangements have had on relationships among wages.⁵

Relative wages by extent of unionism categories are based on averages for each category of average hourly earnings for the industries included. The averages for each category, expressed as ratios to average hourly earnings in the private nonfarm sector, are charted for the past 20 years in Figure 2. These data show a decline in relative wages of

⁴ See Marvin Kosters, Kenneth Fedor, and Albert Eckstein, "Collective Bargaining Settlements and the Wage Structure," *Labor Law Journal*, vol. 24 (August 1973), pp. 517–25, for an analysis of wage increases under collective bargaining agreements during this period.

 $^{^5}$ For the classification of industries by extent of unionism that provides the principal basis for comparisons of wage behavior, see Kosters, "Wage and Price Behavior," Table 8, p. 183, and Table 11, p. 187.

the high union sector during the 1960s and a subsequent rise that was most pronounced after 1974.⁶ The shape of the path traced out by the more highly unionized sectors is generally similar to that of relative wage dispersion in Figure 1, because wages in the more highly unionized sector are generally higher than the average for private nonfarm workers.

Relative Wages in Selected Sectors

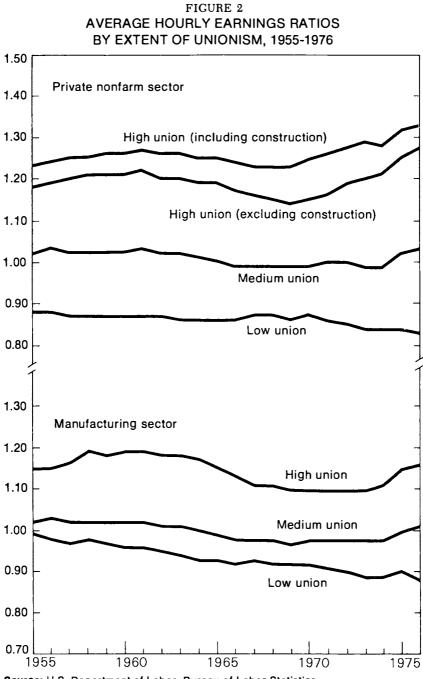
In order to trace differences in wage behavior among industries (particularly after 1974) to possible sources, three kinds of economic factors are identified to examine their influence on relative wages. These factors are: (1) strong, direct competition in world markets, (2) extensive economic regulation, and (3) the production of energy products. (See Figure 3)

Industries for which competition in world markets is particularly strong and direct include motor vehicles, metal mining, and primary metals, of which steel is a major component. The most noteworthy development pertinent to changes in competition from world markets in recent years was the shift from an overvalued dollar to flexible exchange rates. The devaluations of the dollar in 1971 and 1973 can be viewed as steps in this transition. During 1975 and 1976 the ratio of the average level of an index of currencies for 16 major trading partners of the United States to the value of the dollar was about 12 percent higher than in 1970 and 1971 prior to the devaluation. In the cases of automobiles and, especially, steel, two of those trading partners, Japan and Germany, are of particular importance. The values of the Japanese and German currencies were higher by amounts averaging about 20 percent and 45 percent, respectively, for the same period-shifts that were sufficiently large to significantly reduce competitive pressures from abroad in these industries.7

Among the industries subject to significant competition in world markets, those selected for examination of its influence on wage behavior

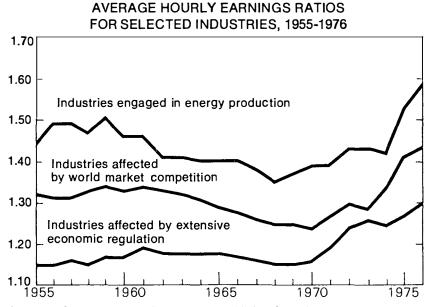
⁶ These average hourly earnings ratios reflect differences in skill levels, demographic characteristics of workers, and all other factors that influence wage levels in particular industries in addition to whatever independent contribution to wages may be attributable to differences in the extent of unionism alone. The source for a detailed and comprehensive analysis of measurement of union-nonunion wage differentials is H. Gregg Lewis, *Unionism and Relative Wages in the United States* (Chicago: University of Chicago Press, 1963).

⁷ The data on relative currency values were taken from Executive Office of the President, Council on International Economic Policy, International Economic Report of the President, January 1977.



Source: U.S. Department of Labor, Bureau of Labor Statistics.

FIGURE 3



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Note: For details on the specific industries included in each group, see Kosters, "Wage and Price Behavior: Prospects and Policies," Table 16, p. 193. were highly unionized industries with wages or wage patterns established under major collective bargaining agreements. While competition in world markets is an important factor in many other industries—such as textiles and apparel manufacturing—domestic competition (particularly competition in the labor market) is stronger in most of these than in industries such as automobiles and steel. The reduction in competitive pressures from abroad resulting from the decline in the value of the dollar may have contributed to the rise in relative wages that occurred. This rise in 1975 and 1976 suggests that, given the industrial structure and the bargaining structure in these industries, alleviation of competitive pressures from abroad may have been translated primarily into larger wage increases instead of being translated into more jobs and improved competitive conditions.

Industries operating under extensive economic regulation include transportation, telephone communications, and electrical, gas, and sanitation services. Since these industries are generally characterized by costbased rate-of-return regulation, wages are subject to relatively weak competitive pressures. So long as wage trends in these industries do not appear to be significantly out of line with wage trends in other industries with which they might be compared, the costs they represent are unlikely to be challenged in regulatory proceedings. Wages in these sectors are consequently insulated from competitive pressures even during periods of extensive general market slack.⁸

The industries that are engaged in energy production are bituminous coal and petroleum refining. The petroleum refining industry is both an energy-producing industry and one that has been subject to pervasive economic regulation since 1973. Special conditions have been present in the bituminous coal mining industry that do not exist in the other industries discussed. In addition to sharply higher product prices, subsequent pressures for increased production rates and requirements for experienced workers to implement government mine-safety programs may have contributed to rising relative wages as an essential element in attracting workers to the coal industry.

Relative wages rose to unusually high levels by 1976, and largerthan-average wage increases occurred in the immediately preceding years, in industries affected by extensive economic regulation and those engaged in energy production, as they did in industries affected by world market competition. The rise in relative wage ratios after 1973 and 1974

^{*} A lack of cyclical sensitivity of wages in regulated industries is noted in Robert E. Hall, "The Rigidity of Wages and the Persistence of Unemployment," *Brookings Papers on Economic Activity* (1975:2), pp. 301-35.

was particularly pronounced in the energy-producing industries and those affected by world market competition.

Construction Wages

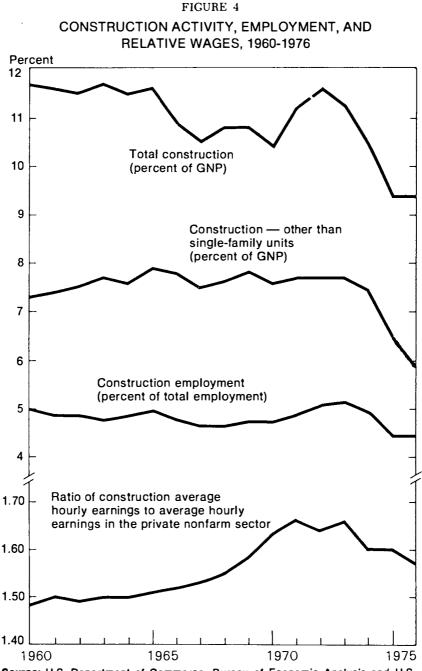
The construction labor market differs in several important ways from other labor markets. There is a great deal of flux in construction employment, with workers moving frequently between employers, job sites, areas, and union and nonunion work. The construction product is usually to some degree custom built, and work that must be done "on site" cannot be imported, which limits the channels through which competition can occur. For the unionized component of construction activity, wage scales are established for geographic areas. For public construction projects, wage levels are bolstered by the Davis-Bacon Act and similar state and local laws which require payment of "prevailing wages" in the area in which the construction takes place.

Construction wages rose more rapidly than other wages in the economy throughout the 1960s. By 1970 extremely large union wage settlements in construction gave rise to serious concern not only on the part of purchasers of new construction but also on the part of employers in other industries who feared the threat of spillovers from construction wage patterns. These conditions contributed to the introduction of a system of wage controls in construction in early 1971. The rising divergence between construction wages and other wages was stabilized after the introduction of these controls, although stabilization may also have been facilitated by other factors.⁹

Two developments that are particularly relevant in analyzing the stabilization and subsequent decline of relative wages in construction are the growth of nonunion or "open shop" construction activity and the major slump in construction demand after 1973 (see Figure 4). The disproportionately large union wage settlements in construction during the late 1960s were accompanied by, first, a widening differential between union and nonunion construction wages and, second, by an increase in open-shop construction activity. Erosion of the union share of construction occurred through the growth of open-shop contractors, "double breasted" operations with union and nonunion activity controlled by the same owner, and mixed construction crews.¹⁰

⁹ See Marvin Kosters and J. Dawson Ahalt, *Controls and Inflation: The Economic Stabilization Program in Retrospect* (Washington: American Enterprise Institute, 1975), for a discussion of the role and influence of wage and price controls in the construction industry.

¹⁰ See Herbert R. Northrup and Howard G. Foster, *Open Shop Construction* (Philadelphia: Industrial Research Unit, Wharton School, University of Pennsylvania, 1975), for an extensive analysis of the growth of open-shop construction activity.



Source: U.S. Department of Commerce, Bureau of Economic Analysis and U.S. Department of Labor, Bureau of Labor Statistics.

After more than a decade of generally strong construction demand, there was a pronounced slump in construction activity after 1973. The fact that the slump was concentrated in components of the construction industry where union activity was strongest—industrial, public, and multiunit housing construction—increased competitive pressures from open-shop contractors and nonunion workers. While some of the decline in the rate of increase of construction wages (and in relative wages as measured by construction average hourly earnings) may be attributable to the consequent change in the mix of union and nonunion workers included in the average, collective bargaining settlements negotiated in the construction industry were also lower than those negotiated in most other sectors.

Cost-of-Living Escalators

The proportion of workers under major collective bargaining agreements that include cost-of-living escalator provisions rose from about 25 percent a decade ago to over 60 percent in 1977, but this does not fully reflect the significance of the change. For one thing, cost-of-living escalator provisions are more prevalent for long-term than for short-term agreements—73 percent of workers under three-year contracts are covered. A second point is that payments under escalator provisions are now limited by "caps" in fewer instances than they were before so that a large rise in prices would be translated more fully into wage increases. Consequently, the contribution to wage increases attributable to cost-ofliving escalator provisions could under current contracts be larger than would be suggested by the earlier experience reported in Table 1.

The data shown in Table 2 illustrate the contribution that wage payments under cost-of-living escalators make to wage increases under some of the largest major contracts negotiated during 1976 and 1977. Increases in consumer prices at a 6 percent rate during the terms of these contracts convert the relatively modest increases (as they are conventionally reported in government statistics) into projected overall wage increases in the 9 to 10 percent range. The wage path for workers in these industries—high-wage industries with relative wages that are high by historical standards—will be closely linked to price behavior until their contracts expire in 1979 and 1980.

Implications for Wage Trends

The preceding discussion of wage and labor market developments provides the basis for several observations regarding overall wage trends. First, the changes in relative wages that have occurred demonstrate a

IRRA 30TH ANNUAL PROCEEDINGS

TABLE 2

Selected Major Collective Bargaining Settlements: 1976 and 1977 (annual percentage increases over life of contracts)

	Average Annual Increase
Selected settlements, 1976 and 1977	
Wages (not including escalator payments)	
Trucking (1976)	7.2
Electrical equipment (1976)	7.2
Rubber (1976)	8.7
Automobiles (1976)	4.2
Steel (1977)	4.1
Communications (1977)	4.6
Wages (including allowance for escalator payments) ^a	
Trucking	9.7
Electrical equipment	9.9
Rubber	11.7
Automobiles	8.4
Steel	9.1
Communications	7.7
Wages and benefits (including allowance	
for escalator payments) ^a	
Trucking	10.4
Electrical equipment	9.5
Rubber	9.9
Automobiles	9.8
Steel	9.3
Communications	9.5

Source: Executive Office of the President, Council on Wage and Price Stability, Collective Bargaining, February 1977, An Analysis of the Steel Settlement, June 1, 1977, and News Release, Analysis of New Contract in Communications, October 14, 1977.

^a The allowance for escalator payments is computed on the basis of an assumed 6 percent annual rate of increase in the Consumer Price Index during the duration of the contracts.

considerable capacity for adjustment in the labor market, despite the forces that tend to inhibit flexibility. Second, to the extent that some of the relative wage adjustments have been brought about by short-term market and institutional forces—and that these adjustments represent temporary departures from structural balance—pressures for restoration of conditions representing a sustainable equilibrium can be expected to assert themselves.

The rise in coverage by cost-of-living escalator provisions in major collective bargaining agreements demonstrates a third point: wage increases for a growing proportion of the work force are contingent on the rate of increase in consumer prices. This development, together with the high (by historical standards) relative wages in industries with large proportions of workers covered by cost-of-living escalator provisions, suggests that a rise in price inflation would be translated in large part into proportionately larger average wage increases. That is, higher inflation would mean either larger average wage increases or further increases in the already wide dispersion of wages among industries.

In summary, it appears that the stability shown by average wage increases during the past decade has been to some extent fortuitous. This stability does not reflect roughly constant and closely parallel rates of increase in wages for each industry, but reflects instead different rates of increase among industries and corresponding changes in relative wage patterns. Thus in addition to the closer linkage between prices and wages attributable to the spread of cost-of-living escalator provisions, a reversal of the rise in wage dispersion among industries could contribute to a rise in average wage increases. Since wages at the lower end of the distribution are usually set under less formal arrangements than in many of the high-wage industries, and wage decisions in many low-wage industries are distributed over a very large number of small firms and employee units, wages for these workers are likely to be quite sensitive to a strengthening of demand in the labor market. These conditions also pose severe practical and administrative difficulties, in addition to equity or fairness issues that would arise, for formulating an incomes-policy approach aimed at directly influencing wage trends.

DISCUSSION

JEROME M. STALLER U.S. Department of Labor

Professor Redwood's paper raises a number of comparative concerns in such areas as industrial relations systems, incomes policy, and the utilization of indexation. My comments, while addressing each of these areas, will focus on the last.

It appears from what Professor Redwood has described, that from the perspective of the Australian government, a number of these policy objectives were in mind with respect to wage indexation. One was to reestablish and then maintain some status quo with respect to relative wages; i.e., to avoid the leapfrogging or jungle warfare that seemed to characterize the Australian industrial relations system. A second objective was clearly to use wage indexation as a means of checking inflation.

In an industrial relations system, where 80 percent of the workers are covered by union contracts, a "voluntary" incomes policy that reimburses fully for recent inflation will have a strong tendency to stabilize relative wages. However, while stability of relative wages is ensured, such a policy would tend to severely weaken the collective bargaining process. While this weakening of the bargaining process appears to have occurred in Australia, it did provide a sense of stability and certainty that the existing industrial relations system was incapable of performing on its own.

With respect to the second objective of checking inflation, it appears that the policy of full-wage indexation did have the advantage of reducing some wage push aspects of inflation. This would be due to the fact that a policy which pays workers for inflation ex post removes the need to anticipate accurately the future rate of inflation and consequently the need to recoup past misestimates. It also avoids the wage-push problem engendered by overestimation of the rate of price increase.

A program of partial indexation is a more direct attempt at forcing the labor component to absorb the consequences of the inflationary rise and to redistribute income from labor to other segments of the economy. Without placing similar constraints on other segments of the economy, such a program would have little likelihood of a long-term existence, let alone success. In fact, after four quarters of "fractional" indexation, the Australian Conciliation and Arbitration Commission reverted back to full indexation.

A major problem confronting the Australian government at this point is devising a means for getting out of the indexation/incomes policy box prior to the onset of serious distortions without returning to the unstable industrial relations environment that prevailed prior to 1975. While this dilemma was similar to that faced by the U.S., when we were coming out of controls in 1973 and 1974, we did have the distinct advantage of having a relatively stable industrial relations system where some 80 percent of the unionized workers were and are covered by agreements of three or more years duration.

This stability in our industrial relations system can ironically be attributed, in part, to the existence of the escalator concept which paved the way for the first multiyear UAW-GM agreement back in 1948. While escalators and the growth of multiyear agreements have not grown at the same pace, the concept of incorporating either ex post or a priori inflation into contracts has provided stability to our industrial relations system.

Unlike Australia, where wage indexation is essentially a publicpolicy initiative (i.e., until this program was started, there was very little indexation in Australia) in the U.S., it is now both a private and public policy initiative. From both the public and private standpoint, escalators have been designed to maintain the purchasing power of the groups covered.

There are a number of federal programs that are covered by some form of indexation provision. In fact, it is estimated by OMB¹ that more than 25 percent of budget outlays were for programs where benefit increases were tied to the cost of living. The largest such programs are Social Security, Supplemental Security Income, and Food Stamps. Also covered by escalator-type clauses are various governmentally run retirement and workers' compensation type programs, such as Civil Service Retirement, Railroad Retirement, Federal Employee Compensation, and Black Lung. It should be noted that this tendency to maintain from a public-policy standpoint the distribution of income was evidenced in the recent debate over the minimum wage bill. The bill that finally passed, while not specifically linking the minimum wage to any change in average hourly earnings, did provide for increases which were estimated to

¹ Executive Office of the President, Office of Management and Budget, "Automatic Cost of Living Increases in Federal Programs," July 30, 1975.

occur if in fact indexation over the next four years was in place. It is likely that the notion of indexation may eventually find its way into our minimum wage legislation. It is also possible that indexation is likely, in time, to be introduced into the tax structure as it is in Australia and Canada.

In the private sector, wage indexation has been a facet of our industrial relations scene since the early fifties and a significant aspect of it since the late fifties. Today nearly 60 percent of the 10 million workers covered under major collective bargaining agreements are also covered by a cost-of-living escalator provision. This represents nearly a doubling of escalator coverage over the past five years. Thus, with the realization that we might be faced with significant rates of price increases over time, more and more unions are pressing and receiving escalator provisions to protect the wages and salaries of their members.

Since wage changes under escalation take place independent of factors that might otherwise affect the wage position of particular firms or industries, it is not surprising to find that escalator formulas exhibit considerable flexibility. For example, nearly two million workers are covered by clauses providing a 1-cent increase for each 0.3 point rise in the CPI. A 1-cent adjustment for each 0.4 point rise in the CPI covers about 725,000 workers, and another 300,000 workers receive 1-cent for each 0.3 or 0.4 *percent* rise in the CPI.

Given the wide variation in escalator coverage over time and the variation in escalator formulas, one might suspect some significant distortions in interindustry relative wages. As Douty observed in 1975, "In most post-war years, escalator wage adjustments even under liberal formulas, have been comparatively small and non-escalated settlements appear to have kept inter-industry wage relationships reasonably in line."² However, even the rapid and sustained rise in prices since 1973 has not altered the basic interindustry wage structure. Over the past 20 years during which escalators have played a role in the wage-determination process, our preliminary research indicates that this structure has remained virtually unchanged, both over the short and long run. Thus, while escalators may not have altered the relative wage position of one group vs. another over any sustained period, it may have affected the speed with which adjustments were made and consequently the income received of one industry group vis-à-vis another. Further investigation is needed to examine these preliminary consequences of escalation on the interindustry wage structure.

² H. M. Douty, Cost of Living Escalator Clauses and Inflation, Executive Office of the President, Council on Wage and Price Stability, August 1975, p. 43.

DISCUSSION

ROBERT J. FLANAGAN Stanford University

The paper by Shulenburger attempts to establish empirically the sense or nonsense of a widely held belief—that wage determination in unionized construction is dominated by imitative behavior and can be explained by the "contour theory" of wage imitation. Data on union wage increases are subjected to an interesting and more thorough analysis than in previous studies, leading to a conclusion that, with the exception of the period 1969–71, contour theory does not explain wage changes in five construction crafts. More generally, Shulenburger concludes that "Wage-wage inflation in the construction industry is, contrary to past postures of wage control agencies, not an obvious phenomenon in these five construction industry crafts." This is a strong and provocative conclusion—much stronger than the analysis justifies, in my opinion.

One problem concerns the operational content of "contour theory." Although it is the basic concept behind the empirical work in the paper, it is never explicitly defined. This leaves an author many choices. Shulenburger has gone a considerable distance in examining a version of wagewage behavior in which most bargaining units are alleged to follow the gains established by a few "key" bargains. However, this is by no means the only or even the best formulation of imitative wage behavior.

This particular approach to union wage determination is at best a short-run model. In particular it does not consider at all interactions between union and nonunion wage movements. These interactions are basic to theoretical and empirical analyses of union wage and employment movements in manufacturing, but receive scant attention in most analyses of the construction sector. This seems particularly inappropriate given the developments in construction over the past decade. More fundamentally, developments in the nonunion sector appear to play no important role in contour "theory." In my remaining comments I simply accept the paper as it stands—a decidedly short-run analysis with the imbedded assumption that union wages are determined as if there were no interaction with wages and employment in the nonunion sector, although I do not consider this a satisfactory assumption.

Much of the empirical work in the paper rests on the notions of wage rounds and key wage-determining units which provide persistent wage leadership. While these concepts are part of the rhetoric of discussions of imitative wage behavior, they appear to be far less stable in fact than the empirical procedures used in this paper assume. Shulenburger's factor analysis shows some tendency toward three-year contracts in construction although with considerable variation in practice around this tendency. But this masks a general trend over the period toward longer contracts. As contract durations change, the order in which individual units negotiate also changes and the notion of persistent wage leaders weakens considerably. This shows up quite clearly when one tries to identify wage leaders in manufacturing-the rigid patterns of the immediate post-WWII period simply did not persist over time. It seems likely that the same is true in a sector with as many bargaining units as construction. Indeed, the necessity to use alternative and arbitrary definitions of the "key bargain" in this paper (i.e., wage level and city size) confirms that it is. The somewhat ad hoc approach to the definition of the key bargain underscores another difficulty with applying the contour concept-it provides no criteria for what determines a wage leader or why such leadership should persist.

The more general point here is that while imitative behavior may be an important element of unionized wage determinations, wage leadership is not fundamental to the notion of imitative behavior. This is fortunate since the actual leaders shift from negotiation to negotiation as the timing of contracts change. (This possibility is defined away in the present paper.)

In adhering to the notions of wage rounds and key bargains, Shulenburger assumes that the relevant spillover variable for followers is the *rate of change* of wages achieved in some key bargain. But this is only one possible specification of imitative behavior. An alternative formulation, which circumvents some of the more difficult operational problems of the contour approach discussed above, postulates that a union seeks to maintain a target relative wage differential with other unions (and with the nonunion sector). This formulation provides a more clearcut notion of equilibrium and disequilibrium in unions' wage determination and avoids the timing problem that characterizes the key bargain approach. It stresses that the important fact is not who goes first but rather the extent of disequilibria in traditional relative wage patterns.

I have found in work on other sectors that the alternative formulations yield quite different results, largely because the target relative wage formulation provides a clear specification of *disequilibrium* forces in union wage determination—a notion which is curiously inexplicit in the Shulenburger paper. I suspect this alternative formulation might also provide an explanation of the divergent results obtained for the earlier and later "wage rounds" in Shulenburger's analysis. The relative wage disequilibria were much greater in the later period.

In conclusion, I find the paper interesting for the doubt that it throws on the rigid leader-follower version of wage imitation. As it stands, however, it does not rule out more general varieties of wagewage inflation in the construction sector.

DISCUSSION

WALTER FOGEL University of California, Los Angeles

Finding that his paper tends to support a number of notions about the recent behavior of relative wages which I, myself, have entertained, I find little to take issue with in the presentation of Marvin Kosters. The paper represents an admirable partial collection of facts on the recent behavior of relative wages and a useful, if cautious, interpretation of the proximate forces which produced those facts. My discussion will add emphasis to some of those facts and interpretations and will put forth some interpretative comments from a different perspective than that employed by Kosters.

First, a couple of points about cost-of-living escalators. With respect to wage dispersion, they would, I surmise, tend to increase wage dispersion in the total economy, while reducing it within the strongly unionized sector where these clauses are most common. My view that escalators increase wage dispersion in the total economy is based on a belief that, in periods of anticipated price change such as the present, they increase the disparity in annual wage change from that which would otherwise exist between the escalator-nonescalator sectors, or, roughly speaking, between the union and nonunion sectors. But within the escalator or union sector, they reduce wage change dispersion by introducing a constant—based on the CPI—as a major component of all wage changes.

Escalators may also increase the *stability* of annual wage change in the economy, in an invidious fashion, when the major impetus for price changes is from the cost rather than demand forces. Stability of wage change, at least over some limited period, can result from the apparent circularity between wage and price change where wage increases depend on price increases, as Kosters points out, but also, price changes seem to depend on wage changes, operating through unit costs. Indeed, if arithmetic stability of money wage change were a desirable goal, one way to achieve it would be to increase the rate of cost-push inflation.

The most general theme that can be drawn from Kosters's paper is that the strongly unionized sector has done better of late in protecting its real wages than have the relatively unorganized sectors. Upon closer look, it appears to be the strong-union, noncompetitive sector which has enjoyed the wage change process the most.

These conclusions follow from at least three sets of facts in the Kosters paper. First, the ratio of earnings in the high-union sector to those in the total private nonfarm economy have increased since 1970. Second, first-year wage increases in manufacturing have been substantially greater for union than for nonunion establishments. My calculations from Kosters's data in Table 1 indicate that in the eight years from 1968-76, the difference between union first-year percent increases in wages and the annual percent increases in nonunion establishment wages was over 18 percentage points. This comparison is somewhat misleading since some union contracts increase wages more in the first than in subsequent years, yet the size of the difference is still revealing. Third, there have been substantial increases in the relative earnings of workers in industries which, for the most part, are not very competitive in their organization or behavior. I have calculated roughly the following 1970-76 increases in earnings ratios from Figure 3 of Kosters's paper for his three industry groups:

Energy production: from 1.40 to 1.59	19 points
World market competition: from 1.26 to 1.42	16 points
Extensive economic regulation: from 1.16 to 1.30	14 points

The denominators of these ratios are private nonfarm earnings. Clearly, workers in these three, largely noncompetitive industries already received high wages in 1970. The domestic and world events of the next five years made them even higher. Some of you may find some irony in that fact since most of the industries in question are reputed to have faced major difficulties, if not crises, over the last several years.

I can understand why oil prices and even profits must increase, but I am not able to understand why wages, salaries, and bonuses in the oil industry must go up faster than in other parts of the economy, especially in view of the higher profits which are supposed to be necessary for further energy expansion. And I can comprehend the increased competition from imports which the domestic steel industry must face, but I cannot, then, understand why steel industry wages have risen faster than those in most other industries and, in view of that, why the industry feels that it should be protected from foreign imports.

As I stated, I don't really understand how these paradoxes can exist, but I admit to having a notion on the subject and that notion is that the existence of these seeming paradoxes have something to do with market power and that this market power is somehow supported by, when it does not originate from, political power. And it is not adequate, as far as I am concerned, to explain these juxtapositions of opposites as temporary departures from longer run relationships, as short-run deviations of little importance. Construction wages may now be returning to their long-run relationship to other wages, but I can't help thinking that the current unemployment in the industry, especially the unionized part of it, has at least a little to do with the very large increases in construction industry wages which occurred in the early 1970s. And I cannot help but think that the current unemployment in the steel industry, which may dampen future wage increases there, is too high a price to pay for the noncompetitive wage and price behavior of the industry earlier in this decade.

The blame, if that is the proper word, for this noncompetitive, nonfunctional behavior, must rest more with management than with labor in my view. Since 1967, the CPI has increased by about 75 percent. Average straight-time earnings in the steel industry over the same period have gone up by something over 100 percent, but increases in payroll taxes have eaten up much of the difference, so that the steelworker has barely increased his real spendable earnings over the period. Unions can hardly be criticized for trying to maintain the real income of their members, even if real incomes of other workers are falling. When the real wages of its members are threatened by inflation, a union will not be persuaded that the national welfare and the welfare of some of its members call for moderate wage increases. The political nature of unions and the self-preservation instincts of man ensure that the union will not be persuaded. It is necessary, instead, for employers to resist the immoderate wage demands, for the national welfare, if not for their own long-run interests. Contrary to the published arguments of my able colleague, Daniel Mitchell, it appears not to be true that employer resistance can be counted on when it is needed. The reasons for that may be many, but one of the more important ones seems to be the possibility of a bail out from Washington, in the form of tariff protection, tax relief, or a direct government stimulus. My speculative hypothesis is that a number of noncompetitive industries do not resist uneconomic wage demands because the resultant cost increases support pricing behavior which maximizes short-run profits, and the long-run problems are thought to be better dealt with at a governmental level.

Obviously, these are speculative observations which are not now supported by solid research and judgment. If they are at all correct, they carry important implications for inflation and wage policy. It may be possible to apply wage-price policy effectively to a small number of industrial sectors even while a general application of those policies would not be desirable.

VII. EMERGING ISSUES IN RURAL LABOR MARKETS

Rural Labor Markets and Rural Manpower Policy^{*}

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Rural America has long been the stage for first witnessing the population and employment changes that have shaped American society. From the nation's first Census in 1790, when the population was 95 percent rural, the rural population continued increasing for 150 years, until 57.2 million persons lived in rural America. Between 1940 and 1970, the rural population stabilized at 54 million persons, as new nonfarm residents replaced the 19 million persons leaving agriculture.

Population trends since 1970 seem to evince a new dynamism in rural America, promising a Rural Renaissance. Since 1970, the rural population has been increasing at a rate of almost twice that experienced in urban areas. Between 1970 and 1976, the net increase of 5 million rural residents increased the rural *share* of the nation's population from 31 to 32 percent,¹ the first such increase in almost 200 years. This six-

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^{*} Giannini Foundation Paper 493.

¹These estimates of the current population distribution are based on a Census definition of "nonmetropolitan" which differs from others used in this paper. The Current Population Reports in the P-20 series define urban residents to include all those living in an SMSA of 50,000 or more, those living in the county in which an SMSA is located, and those in counties linked to an SMSA by daily commutation ties. The rural population is a residual. Under this definition, the rural population increased from 62.8 million in 1970 to 67.8 million in 1976. The 1970 Census of Population, in contrast, defined rural as those living in places of 2500 or less and outside of urbanized areas. This definition resulted in a 1970 rural population of 53.9 million. Definitions are important for assessing apparent changes; to date, there has been no examination of the effect of different definitions on the magnitude of rural-urban population changes.

year gain in the rural population is equivalent to the impact which would be experienced if the SMSA around Philadelphia were dispersed across non-SMSA counties.

The Rural Renaissance of the 1970s promises to alter rural labor market operation and optimal rural manpower policies. A rural America which was once incapable of providing employment opportunities to its youth and those leaving agriculture now induces, in some areas, an influx of urban jobs and workers. The result is more rural heterogeneity—as some rural areas continue to lose population and employment, other rural areas are gaining population and employment at rates in excess of those experienced in urban America. Changes in the nature of rural labor markets demand a reformulation of rural manpower policies to provide the flexibility necessary to assist a growing but diverse rural America.

The sources, permanence, and consequences of recent rural population changes are diverse. Today's 57 million rural residents live in 2485 non-SMSA counties,² each subject to influence from a variety of factors. Some rural counties are experiencing "permanent" population growth as manufacturing facilities continue to be dispersed around the nation and as wealthier retirees in an aging America relocate in the warmer climates of the South and Southwest. Some rural counties are experiencing localized booms associated with the search for energy, as, for example, in the Mountain states and Alaska. Some rural counties which first emerged as recreational areas are now attracting year-round residents. Finally, some rural counties continue to experience population losses, as, for example, processing and manufacturing facilities close or farmers exit agriculture.

Rural labor markets are as varied as the changes transforming rural America. In the residence taxonomy, rural is usually a residual category, comprising those persons living in places of less than 2500 population and outside any urban fringes. Despite diversity in sources of employment and earnings levels, compared to urban labor markets, rural labor markets typically contain persons with lower levels of education and skill deployed across different occupations and industries. The result is a set of labor markets with a variety of local problems. In some areas, for example, rural labor markets may be closely intertwined with agricultural labor issues, while in other rural areas problems may include the provision of public services to a mobile and transitory energy workforce. In some rural areas, labor market problems may arise because of the threat of competition from producers in developing countries (e.g.,

² Calculated from F. Hines, D. Brown, and J. Zimmer, "Social and Economic Characteristics of the Population in Metro and Nonmetro Counties, 1970," (Washington: U.S. Department of Agriculture, ERS Report 372, 1975), pp. 3-6.

shoe or textile), while in others the issues may include clashes between new and established residents over the level of public services (and hence public employment).

The localized approach to manpower programs promulgated in the Comprehensive Employment and Training Act (CETA) of 1973 should be ideally suited to the diverse needs of rural America. But initial experiences under CETA have been mixed. Rural areas have not obtained their "full share" of manpower funds under some programs because of administrative hurdles or allocation formulas and because most manpower programs are geared to run concurrent with urban-dominated needs. Even if *current* manpower efforts in rural and urban areas were proportional to *current* manpower needs, the higher incidence of longerterm related problems (poverty, lower education and skill levels) would leave rural America behind. If rural America is to "catch up," remedial manpower efforts will have to be launched.

This paper reviews trends in the quantity, quality, and deployment of the rural workforce. These workforce trends are related to a taxonomy of forces affecting rural employment patterns, and a framework for assessing such forces is described. An assessment of past and current manpower policies in rural America suggests that rural areas may be better served if manpower programs concentrate on public-service employment rather than relying on indirect taxes or subsidies to induce others to create job opportunities. At a minimum, it must be recognized that capital that is mobile enough to be attracted by local subsidies is also mobile enough to leave the area (after a time lag) if even more attractive subsidies appear, limiting the bargaining power of local communities in the competition for private-sector industry and jobs.

Rural Labor Markets

Labor market analysis seeks to establish the causal determinants of labor market inputs, processes, and outcomes. Input analysis studies labor force participation decisions, the skills workers acquire before and after labor force entry, and the duration of work on both annual and life-cycle bases. Process analysis is concerned with matching job opportunities and applicants, with the job-search and commuting patterns of workers, and labor turnover. Outcome analysis examines the deployment, earnings, and unemployment experiences of those in the labor market. Analysis is complicated by the simultaneity inherent in the input-processoutcome framework, the importance of the nonmeasurable factors which help determine choice behavior, and the influence of institutional forces which affect mobility and earnings.

In 1974, the rural labor force (those living in non-SMSA counties)

totaled 27.8 million persons, or 58.3 percent of all persons 16 or older in rural counties. Both the number and the proportion of rural residents electing to work increased sharply between 1970 and 1974; the rural labor force grew by 4 million while the labor force participation rate (LFPR) increased nearly 7 percent, a huge jump. The rural labor force grew so rapidly because of a 20-percent increase in the number of rural women electing to seek employment. Between 1970 and 1974, nearly 2 million more rural females decided to participate in the labor force, exceeding in just four years the 1.9 million rural female labor force entrants in the decade of the 1960s. Labor force projections indicate that females will be an important source of labor for rural development.

Despite recent increases in the number of women at work, most of the labor force (61 percent in 1974) is male. Males are more important in the rural labor force (62 percent) than in the urban labor force (60 percent), reflecting the (current) lesser propensity of rural females to work. The rural labor force includes proportionately more white males (92 percent in rural areas versus only 88 percent in urban areas) and white females (91 percent versus 86 percent), reflecting the urbanization of minorities.³ For both males and females, rural labor force participation rates are lower than urban LFPRs; the rural male LFPR is 75 percent versus 78 percent for urban males, and the rural female LFPR of 43 percent is less than the urban female 46.3 percent LFPR.

Worker productivity (and thus earnings) are influenced by labor force knowledge and skills. One productivity indicator, years of schooling completed, shows that more educated persons tend to reside in urban areas. In 1974, over one-third (36.2 percent) of all rural residents 25 or older were high school dropouts, compared with only 20.4 percent urban dropouts. Minorities fared worse than whites; more than 70 percent of the rural black and Spanish males 25 or older in 1974 had not finished high school. Minority females fared only marginally better; about 70 percent of the black females and 65 percent of the Spanish females were high school dropouts. Across all race and sex cohorts, educational attainment declines with rurality; in the most rural counties, over one-half of all persons (51.4 percent) 25 or older did not complete high school in 1974.

The lesser quantity and lower "quality" of the rural labor force demands explanation. Three types of arguments can be used to explain the behavior of the rural labor force. If one believes that the rural labor

³ The net gain in the rural population between 1970 and 1976 was dominated by whites. The net gain of 5 million rural persons between 1970 and 1976 included more than 4.9 million whites and fewer than 100,000 blacks. See *Population Characteristics*, Series P-20, No. 307, p. 26.

force is slower to adopt new attitudes and patterns, then the lag in female labor force participation, for example, merely reflects a predictable rural delay in accepting urban-generated behavioral changes. A labor economist would discount such lags and point to differences in prices to explain rural-urban gaps. If the wages of rural females increased more slowly than urban female wages, one would expect a lag in rural female labor force participation. A third school of pundits explains differential choice behavior in terms of the peculiar attributes thought to characterize rural America; for example, if rural areas contain proportionately more persons opposed to the idea of women working outside the home, rural female labor force participation rates will be lower. This same taxonomy of explanations can be used to evaluate rural-urban differences in education and skill, health, or mobility.

Given the aggregate indicators of poor rural employment quality, why does rural employment continue expanding? Rural employment expansion in the 1970s is closely tied to expansions in: (1) natural resource activity, including mining and other energy-related activities; (2) the expansion of government payrolls at all levels, in both temporary (public-service employment) and more permanent positions for providing new and expanded services or serving as regulators and inspectors; (3) recreational activity, especially in areas within commuting distances of metropolitan areas; (4) manufacturing employment, especially for nondurable industries; and (5) employment associated with servicing the "new" rural populations, including retirees and those desiring a "rural lifestyle." In some areas, agriculturally based processing industries have expanded, providing employment opportunities from a traditional font.

The sources of employment expansion have important implications for rural labor market analysis. Since government employees typically have higher levels of education that does the nongovernment labor force, public employment expansion typically "creams" from the educated labor pool. Employment expansions can also discriminate by sex. The nondurable manufacturing facilities which (re)locate in rural America and the expanding recreational and service industries often hire high proportions of female workers, helping to account for the rising rural female LFPR in an era when male LFPRs are declining. The extractive natural resources employ proportionately more males, but resource exploitation does not usually provide a high proportion of its jobs to *local* residents. Thus, the source of rural employment expansion has important implications for the permanence of the jobs provided, the number and nature of persons hired, and the wages and work experience obtained, since government and natural resources typically pay far more than recreation, services, and nondurable manufacturing.

Rural Manpower Policies

Although federally assisted efforts to train, place, and provide jobs for the unemployed date from the 1920s and 1930s, the nation's current manpower policies date from the passage of the Manpower Development and Training Act (MDTA) of 1962. Initially, manpower efforts centered on retraining male household heads who had lost their jobs because of "automation," but emphasis soon shifted to the disadvantaged as the unemployment rate decreased and the Economic Opportunity Act (1964) recognized the plight of specific groups among those unemployed. Throughout the 1960s, the twin themes of retraining and specific programs for specific groups dominated manpower thinking, resulting in program proliferation and increased expenditures on manpower programs.

The 1970s marked a new turn in manpower policies. Critics of jobtraining pointed to its expense and the difficulties experienced in employing those trained when unemployment rates were high. Few programs could demonstrate substantial social benefits, and even fewer exhibited rates of return which persisted over time. Rather than retraining specific disadvantaged groups, the 1970s ushered in the era of jobcreation programs. The first nationwide Public Service Employment (PSE) program since the depression was launched with the enactment of the Emergency Employment Act (EEA) in 1971, designed to provide transitional jobs and needed public services in times of high unemployment.

The success of the EEA and persisting unemployment led to the enactment of the Comprehensive Employment and Training Act (CETA) late in 1973. Because of a new emphasis on local participation in federally sponsored programs, CETA called for manpower programs to be "decategorized and decentralized." After prolonged debate, it was decided that local prime sponsors could select that mix of placement, training, and job creation efforts which seemed locally optimal. CETA remains the basic legislative framework governing national manpower policy, although its public-service-employment provisions have been amended and expanded on several occasions.

Rural areas have generally been neglected in manpower policy formulation. During the 1960s, when programs were created for specific groups of unemployed and disadvantaged persons, one study showed that rural program participation was lower than the rural share of the target population in 10 of 12 manpower programs, largely because "most major manpower training and employment programs appear to be designed primarily with urban residents in mind."⁴ The only program with dominant rural participation was Operation Mainstream, a public-service-employment program which accounted for less than 2 percent of training program outlays in fiscal 1972.

The enactment of CETA increased local-area options for expending manpower funds, but did not provide the funds necessary to exercise those options in rural areas. Under the Emergency Employment Act, rural counties received only 10 percent of EEA funds in fiscal 1972, even though they contained 27 percent of the (1970) unemployed.⁵ Under CETA, the rural funding share increased, but rural counties obtained fewer than 60 percent of the Title II funds (1974) which they would have received if funds were granted on the basis of unemployment or population shares. It should be noted that allocations in 1976 and 1977 have moved rural areas closer to need-determined parity, but rural areas still tend to be "underallocated" funds in light of their relative needs.

Rural areas could have their need for funds underestimated for several reasons. Manpower programs which allocate funds on the basis of local unemployment parameters are only as accurate as the underlying unemployment statistics. Unemployment estimates, derived largely from unemployment insurance claims, decrease in accuracy as the size of the sample population decreases. If rural unemployment is underestimated, then rural funding needs will be underestimated. Since most countercyclical manpower programs assume that the costs of unemployment increase nonlinearly, they typically reserve a portion of available funds for areas suffering "severe" unemployment, usually defined as an unemployment rate of 6 or 6.5 percent for at least three months. To be eligible for these supplemental manpower funds, an area's unemployed must actively seek work. Since job search is typically exhausted more quickly in rural areas (given fewer employers and more opportunities for selfemployment), and because a lower proportion of rural jobs are covered by unemployment insurance (which makes benefits contingent on labor force participation), rural areas are less likely to share in the manpower

⁴See R. Schnitt, "Manpower Training and Employment Programs Serving Rural America" (Washington: Congressional Research Service, 1973), p. 4.

⁵ See P. Martin, "Public Service Employment and Rural America," American Journal of Agricultural Economics, vol. 59 (May 1977), pp. 276-82. Rural-urban unemployment shares seem to have remained very similar to population shares between 1970 and 1976, with rural areas containing 26 to 28 percent of the unemployed.

funds reserved for areas experiencing severe unemployment.⁶ Even if rural unemployment is estimated accurately, the *timing* of peak rural needs may deny rural areas funds because program operations are tied to national economic indicators, which are heavily influenced by urban conditions. With the onset of a recession, for example, consumers often postpone purchases of consumer durables. Since production of cyclically sensitive durables is concentrated in urban areas, urban areas will be the first recipients of countercyclical manpower funds. If rural needs are evident only as the program winds down, most rural areas may be eligible for funds when fewer funds are available for distribution.

In addition to allocation criteria, rural areas face administrative and operational hurdles in seeking and expending manpower funds. Few rural areas maintain liaison offices in Washington (as many cities do), making them less aware of programs and limiting their ability to apply at the outset of program operation. Rural areas are less likely to have offices and staff who can formulate priorities, make application, and hire people or select persons for training. If the manpower program is countercyclical, like PSE, rural areas' participation is sometimes limited because of a reluctance to promise permanent jobs to those hired only temporarily.

Allocation formulas may limit rural funding shares and administrative and operational difficulties may make rural program operation more complex, but it is program *outcomes* that are crucial for individual and social welfare. Rural program outcomes usually serve to reinforce rural difficulties in program funding and operation. Many manpower programs provide (at least temporary) *public*-sector jobs. But public employees are usually far better educated than the unemployed workers they are attempting to incorporate; in 1970, only 18 percent of all "regular" government workers were not high school graduates, but 48 percent of the rural population 25 and older were high school dropouts. The result is a plethora of rural manpower programs in public works, projects which can be terminated at the conclusion of funding but which provide few skills and even fewer job prospects for participants.

Current rural manpower programs suffer from allocative, operational, and outcome deficiencies. Most calls for policy changes argue that rural areas require more funds, but few examine the nature of the programs which should be funded. Should rural areas get only an increase in

⁶ Rural legislators appear to be aware of the lesser propensity of the rural unemployed to remain in the labor force. In the debate over Title VI of CETA (1974), "members of Congress from less densely populated parts of the country generally favored a formula which gave little or no weight to the severity of unemployment in a prime sponsor area." See D. Daniels, "Evolution of Manpower Legislation" *Labor Law Journal*, vol. 26 (June 1975), p. 332.

(shares of) manpower funds, or should separate manpower legislation be enacted to meet the needs of rural America?

Manpower programs designed to serve particular groups or areas derive their raison d'etre from both static and dynamic labor force and labor market peculiarities. Separate manpower policies for rural areas may be justified at a point in time because rural areas may demand relatively greater remedial efforts; for example, lower average education levels may require lengthier (re)training programs in rural areas. Similarly, if rural labor market parameters respond differentially in the course of the business cycle (e.g., rural unemployment rates may peak after urban rates), separate (or extended) countercyclical programs may be justified in rural areas.⁷ Knowledge of any such rural-urban differences assists, of course, in the design of optimal manpower policies.

The 1970s' reversal of population growth rates gives new credence to the concept of a separate rural manpower policy. Rural areas are heterogeneous, exhibiting a wide diversity in growth patterns and prospects. Since rural areas do not normally provide the infrastructure or public services already available in urban areas, rural policies may be forced to be of a "catch-up" nature, justifying lengthier periods of funding, for example. Manpower programs may have to be more closely tailored to the specific problems of each rural area—for example, in the link between manpower and community development policies. The integration of manpower and community development policies may force a reevaluation of the latter.

The goal of manpower programs is to improve individual and social welfare. Since (manpower) programs directly and indirectly alter choice behavior, they exert an important influence on local welfare. If policies succeed in inducing only a short period of relatively low-paid work in rural America, are they really acting to increase social welfare? If, for example, northeastern manufacturers shift production and employment to the Southeast, are the inducement incentives merely providing the owners of private capital a few more years of profit (and jobs at or near minimum wage levels) before imports finally make production unprofitable? In such situations, are those hired really better-off in any long-term sense? In the struggle to provide employment in rural America, the overarching goal of manpower and social policies must not be overlooked.

 $^{^{7}}$ Differences among demographic groups are adduced to justify other specialized programs. At any point in time, lower average educational attainments may justify remedial programs aimed at minority persons, just as the extreme sensitivity of youth unemployment rates to the aggregate unemployment rate serves as a rationale for youth job creation programs.

The Significance of Welfare Reform for the Rural South

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On August 6, 1977, President Jimmy Carter submitted his Better Jobs and Income Act to the U.S. Congress. In his accompanying message, he stated that after studying the existing welfare system of the nation he had found it to be "worse than I expected." ¹ He described the present system as being "anti-work, anti-family, inequitable in its treatment of the poor, and wasteful of taxpayers' dollars." ² In presenting his reform proposal, the President called for "a complete and clear break with the past "³ Thus, for the second time in this decade, a presidential administration has decided to launch an immense reform effort directed at the welfare system.⁴

The Proposed Changes

In many ways, the proposed welfare reform of the Carter Administration resembles that put forth earlier by the Nixon Administration. The three major income-supplement programs that currently exist—Aid to Families with Dependent Children, Supplemental Security Income,

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 $^{^1}$ Office of the White House Press Secretary, "Message of President Jimmy Carter to the Congress of the United States," August 6, 1977 (mimeographed material), p.2.

² Ibid.

³ Ibid., p. 3.

⁴ See Daniel P. Moynihan, *The Politics of a Guaranteed Income* (New York: Vintage Books, 1973), and Vincent J. Burke and Vee Burke, *Nixon's Good Deed:* Welfare Reform (New York: Columbia University Press, 1974).

and Food Stamps—would be consolidated into a single program. Eligible recipients would be divided into two groups: those who are required to work and those who are not. The major conceptual difference between the Carter plan and the earlier Nixon plan is that the Carter plan contains provisions for the creation of 1.4 million public-service jobs and training slots. Both proposals would set up national eligibility standards and uniform benefit schedules. The inequities created by the hodgepodge of different state standards and benefits would be eliminated by a single federal system.

Issues

The major discussions of welfare reform today, as with the Family Assistance Plan, center around: (1) who would be affected—primarily AFDC recipients and, for the first time, male-headed households regardless of employment status of the head; (2) what effect would reform have on the working poor—basically a discussion of work incentives among the low-income population; and (3) which regions of the country would be most affected?

Relative to the population in other regions, the southern population is characterized as being more rural and more poverty stricken.⁵ Moreover, the poor in the South, who accounted for 44 percent of the total in the nation, are more likely to be employed than those in other regions.⁶

Income and Employment in the Rural South

In recognition of the void of primary information concerning the specific impact of such reform efforts, the U.S. Department of Labor funded a study of southern rural labor markets that was completed in early 1977.⁷ The study combined available secondary information and research findings with an extensive primary labor market survey of households, employers, and rural community organizations.⁸

⁵ Ray Marshall, "Some Rural Economic Development Problems in the South," American Economic Review (May 1972), p. 204.

⁶ President's National Advisory Commission on Rural Poverty, *The People Left Behind* (Washington: U.S. Government Printing Office, 1967), p. x.

⁷ John F. Adams, Vernon M. Briggs, Jr., Brian Rungeling, Lewis H. Smith, and Roosevelt Steptoe, *Labor Markets in the Rural South*, report prepared for the U.S. Department of Labor, Grant No. 51-13-72-10 (February 1, 1977), p. 557.

⁸ Four southern rural counties were selected for intensive field study. In each a completely random sample of households was selected. In total, 3,357 interviews were completed. In addition, structured interviews were also conducted with major employers, financial institutions, community organizations, and government agencies in these same counties.

The mean household income found in the study area was an extremely low \$6,353 in 1973.⁹ More importantly, over 50 percent of the households had a mean income below \$5,000. In fact, 43 percent of the households were living at or below the poverty threshold, with another 10 percent barely above the poverty level. Hence, with only minor changes in their circumstances, over half of the households in the study counties would be below the poverty level as officially defined.

One key feature that distinguishes the rural labor market in the South from those of other regions and which contributes significantly to the poverty problem is a low labor force participation rate. The 42.3 percent participation rate computed for the study was found to be related to several factors including: a lack of job opportunities, an age distribution skewed toward the elderly, the prevalence of work-inhibiting health problems, and employment discrimination.¹⁰

Although the unemployment rate was low in these rural counties (2.7 percent), the percentage of discouraged workers and involuntary parttime workers was extremely high. Indeed, if discouraged workers had been counted as unemployed, the unemployment rate would have been over 11 percent. Another 8 percent of those who were employed on a part-time basis stated a desire to work full time but could not find such jobs. Even those who were employed had a high probability of being poor.

Rewards to work are greatly restricted in the rural South due in part to a narrow industrial base in which agriculture and public-sector employment dominate. Small employers, engaged primarily in retail and service enterprises, predominate in the private sector. Where jobs are available, wages are often low and fringe benefits few.

The conclusions drawn from the rural labor market study make it clear that internal economic development and expanded job opportunities will not occur in the foreseeable future. Thus, welfare reform, with expanded benefits and coverage, is of particular importance to the rural poor in the South.

AFDC in the Rural South

Perhaps no program symbolizes the problems of the current welfare system more than AFDC. The average family benefit under AFDC in

⁹ John F. Adams, Vernon M. Briggs, Jr., Brian Rungeling, and Lewis H. Smith, *Employment, Income and Welfare in the Rural South* (New York: Praeger Publishers, 1977), p. 93.

¹⁰ Ibid.

the study counties was a mere \$1,200 in 1973. Even when other income is added to the benefits, not a single family had a total income that reached the prevailing poverty threshold. The great majority (over 62 percent) fell short by as much as \$2,500 to \$3,000 a year.

The average AFDC recipient in the rural South is a female household head with dependent children and tends to be middle-aged; to have had little, if any, work experience; and to have a low level of educational attainment. In addition, there is a high probability that she is a member of a racial minority.

Although the majority of AFDC recipients were not in the labor force, the labor force participation rate of recipients is higher than one might expect. Twenty-eight percent were employed and 12 percent were unemployed at the time of the study.

Those AFDC recipients who do work are employed in occupations and industries which generally pay the lowest wages. Over half were employed as maids or in agricultural occupations. One-third of all AFDC recipients reported agricultural jobs as their longest job ever held.

Private employers have often been leading advocates of a policy of jobs rather than welfare. However, the study did not reveal one employer who had offered to hire an AFDC family head. They left the matter to "other employers" or to the public sector; unfortunately, however, interviews with local government officials revealed similarly disdainful attitudes.

More recipients would probably work but are held back by the lack of job opportunities, lack of work experience, low skill levels resulting from lack of education and training, program regulations that discourage work, or some combination of all four factors. Even if the recipient could find employment, it is doubtful that the low wage levels that characterized the southern rural labor market would be an attractive work inducement.

By its nature and intent, AFDC is a restricted program. Even if it were possible through aggressive outreach efforts to enlist all of the families eligible for such assistance, it would not mean that there would be much impact on the magnitude of southern rural poverty. Most of the needy families of the rural South are not presently eligible for AFDC (e.g., male-headed households in which the male is unemployed; maleor female-headed households in which the head is employed but is unable to earn an income sufficient to pull the family over the established poverty threshold; and childless families with employed heads who are unable to earn income above poverty levels).

Food Stamps

In terms of persons covered and dollar amounts involved, the Food Stamp program has become the most important of all federally supported income supplement programs. It is the only aid program which does not have some specific qualifier other than income. The amount of actual subsidy which an individual household receives under the program varies with the income level and size of the household involved.

In the survey counties, 28 percent of the total number of households were found to be participating in the program. The survey also disclosed, however, that the potential participants were far in excess of actual participants. In total, 53 percent of the households were found to be eligible on the basis of their reported incomes. Nonparticipation of potentially eligible low-income households is substantial. Discussion with welfare officials in these counties and subsequent interviews with eligible nonparticipants made it obvious that participation in the Food Stamp program was not encouraged.

The Working Poor

With such an inordinately high number of impoverished households and such a restrictive AFDC program for families, it should be no surprise that there exists a substantial number of households in the rural South with an employed head which remain below the poverty level. Over half the households in the study headed by a person under age 65 were living below the poverty threshold.

The working poor are not eligible for any welfare programs per se, although they are eligible for food stamps. Further, if employed, the poor are usually not eligible for existing government-sponsored employment and training programs—most of which are more valuable for the income supplement they provide.

Many employed poverty household heads work in agricultural jobs— 33.6 percent. Such jobs are low-skilled or semiskilled and hold little hope for overcoming poverty. Further, many of these agricultural jobs are seasonal or part-time, resulting in great uncertainty for the income status of the working poor.

The Necessity of Federal Welfare Reform

Two inescapable conclusions emerged from the study. First, the present welfare structure is inadequate, because so many poverty families are excluded from coverage and because of low benefit levels. Second, there is little likelihood that the present system can be restructured by local and state initiatives to meet the needs of the poor of the rural South.

The welfare reform proposals of the Carter Administration, like those of the Nixon Administration, would result in a federal system of uniform eligibility and benefits. More is known about the specific operational features of the 1972 welfare reform bill (hereafter referred to as FAP) than is known about the Carter proposals. Hence, it is possible to apply the expanded eligibility and benefits provisions of FAP to the primary household data from the study in order to approximate the impact of welfare reform on the rural South.

REGIONAL IMPACT

Had FAP been enacted, the rural study indicates that \$900 million annually would have passed into the rural South—the majority of which would have come from outside. This new income would be subject to multiplier effects which could bring the total income generated by welfare reform in the rural South to over \$1.3 billion annually. In addition to raising the annual income of poverty families, welfare reform would bring about financial redistribution between the rural South and other areas.

Redistribution of income among areas would not be the only probable redistributive effect. Assuming participation by all eligible families, almost two-thirds of the direct payments of \$900 million would go to nonwhite families. With an existing income structure which favors white families, welfare reform should cause some internal income redistribution in the rural South to the benefit of minority groups.

FAMILY IMPACT

Implementation of FAP would have meant a 35 percent (\$980) increase in annual income for the more than one-half million eligible families in the rural South. Although the increase would have been substantial, the average annual income even under FAP was estimated to be \$3,759—leaving most families well below federally established poverty levels. Much of this yearly income would not have come from the federal treasury. In fact, the average payment under FAP was estimated to be only \$1,525, 40 percent of the average annual income.

Since the figures assume all eligible families participate, the mean payment would in fact have been greater if some families were adversely affected and opted not to participate. This, surprisingly, is a reasonable prospect. Approximately 12 percent of the eligible families would have lost income by participating in FAP. The primary reasons for this were the prohibition against receiving payments under family assistance and at the same time receiving payments under other welfare programs, and the 100 percent offset tax on Social Security. The Social Security restriction was particularly significant.

The average increase in family income of \$980 does not include the benefits which are presently derived from food stamps. The family assistance plan as proposed, however, would have prohibited participants from receiving food stamps. If it is assumed that all households eligible for family assistance purchased the full allotment of food stamps to which they were entitled, 64 percent of the eligible families would have had their potential benefits under the plan reduced by an average of \$300 to \$400.

Of course, all eligible families do not participate in the Food Stamp program (only 65 percent in the study area). In addition, all households do not purchase food stamps every month during a given year, nor do they always purchase the full allotment of stamps which they are allowed by law to purchase each month. These three factors would reduce the actual effect of eliminating food stamps.

WORK INCENTIVES

The family assistance plan would have been of great benefit to the working poor. About half of all poor families in the rural South were estimated to be eligible for benefits under FAP, but this included over 80 percent of the working poor. In fact, the study estimated that for over 70 percent of all eligible families, the household head was employed sometime during 1973, usually more than half of the year. Further, the majority of families received over three-quarters of their annual income from earnings. Obviously, the question of work incentives in the face of a comprehensive welfare reform plan is of major significance.

Although the additional income for most working poor families would be substantial under FAP, it was so only because it was in addition to current levels of income. For almost all working poor households, the benefits under FAP if they did not work were smaller by significant amounts than current income levels and smaller by almost one-half than the level if they were employed. Hence, it is unlikely that welfare reform would lead to significant labor force withdrawal.

Several factors, however, could adversely influence work incentives. First, for many women workers with a family to support, the welfare levels have never been sufficient in the rural South to challenge even the low wages paid to domestic servants. FAP would have changed that and, given the alternative, some labor force withdrawal could be expected. Second, there is a relatively small number of households among the eligibles for whom earnings were a small part of annual income. This makes adjusting earnings to meet built-in disincentives relatively easy without running afoul of work provisions such as those in FAP. Third, the low wage levels of many farm and migrant workers and the unpleasantness of their work environment could tempt many of these workers to withdraw from the labor force in favor of the income which a household would receive under family assistance with no member employed.

The strong labor force attachment of the poor in the rural South at present, however, suggests that designing a comprehensive welfare reform program which will not lead to mass flight from the world of work may not be difficult. The data on work motivations among the poor are substantial and almost all suggest that work orientation among the poor, even among welfare recipients, is as strong as that among the nonpoor.¹¹ In the rural South, thousands of poor families continue to work although wages are low, the tasks difficult, and the jobs unpleasant. The small probability of improvement is as obvious to them as to anyone. Such behavior is itself an indication of strong work motivations.

JOB CREATION

The key distinction between the Nixon and the Carter proposals is that the latter specifically call for the creation of public-service employment jobs. The rural study concluded that such jobs are essential to the future of the rural South. Yet, the study also found that there is very little prospect that such jobs can be considered to be transitional to private-sector jobs. There are scarcely any jobs into which to move.

In contrast to the private sector, the public-service jobs provide an entitlement to year-round employment. In this sense, they offer the prospect of higher income opportunities relative to many jobs available in the private sector. This means that public-service employment in the rural South must be innovative and adaptive.

Conclusions

More than any other region, the rural South needs welfare reform. Hope for changes at the local level is unrealistic. A nationwide comprehensive income maintenance system that is federally administered and

¹¹ Leonard Goodwin, Do the Poor Want to Work? (Washington: U.S. Government Printing Office, 1972) and Sar Levitan, Martin Rein, and David Marwick, Work and Welfare Go Together (Baltimore: Johns Hopkins University Press, 1972).

financed must be enacted. Aside from establishing a minimum floor, it should include coverage for those who do work and for those who cannot. Eligibility should be premised exclusively upon income and not on the personal characteristics of the poverty population such as marital status, family composition, or any other factor except need.

Yet the realities of southern rural poverty must be kept in mind. The substantially aged population, the exclusion from coverage of single people and childless couples, as well as the fact that a substantial number of eligible families could actually have their real income levels reduced all serve to underscore the fact that the impact of welfare reform in the rural South will alter the dimensions of poverty, but it will certainly not eliminate it.

Developing a National Policy to Deal with Undocumented Aliens

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The past year has witnessed an intensification of the policy debate concerning what to do about the presence of undocumented aliens in the United States. The efforts of the Carter Administration to structure a national program to deal with this issue have provided a focal point for these discussions. The purpose of this paper is to discuss the impact of undocumented aliens on the U.S. economy. Special emphasis will be given to describing the effects of illegal immigration on labor markets. The paper will also outline how the program proposed by the Carter Administration seeks to deal with these problems.

It is not possible to specify precisely the effect of undocumented aliens on the economy. It is, however, possible to trace the broad contours of the problem. For example, it is often noted that exact information is not available with regard to the number of undocumented aliens who are currently in the United States. The most widely cited estimates are from 3 to 12 million, although the methodologies used to determine the number at either end of this range are open to question. It is known that the Immigration and Naturalization Service in the fiscal year that ended last September apprehended and deported more than 1 million undocumented aliens. While the relationship between this number and the total number of undocumented aliens currently in the country is not known, because an apprehension is an event that could include any person more than once during any given period of time, this figure is illustrative of the magnitude of the illegal immigration process. Even adopting the most conservative estimates of the number of undocumented aliens successfully entering the country per year, one is led to the conclusion that this process has important economic and social consequences. This is especially true considering that the average annual growth in jobs over the last ten years has been approximately 2 million.

One of the most important issues raised in this debate has been the

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question of whether undocumented workers take jobs that U.S. workers could fill or whether they take jobs for which U.S. workers are unavailable. The answer to this question is crucial in determining whether the process of illegal immigration is beneficial to the United States. If domestic workers are displaced, the process causes unemployment; if they are not displaced, it brings about economic growth.

It is certainly true that some undocumented aliens take jobs that would be attractive to U.S. workers. The number of apprehensions of both student and tourist visa abusers has risen in recent years. Not coincidentally, there has also been an increase in the number of cases cited by the Immigration and Naturalization Service where undocumented aliens have been found holding relatively highly skilled and paid jobs that would clearly be attractive to domestic workers.

The total number of these "direct" displacements is not known. It is, however, likely that the more important question from the quantitative standpoint is the impact that undocumented aliens have on the lowskilled, low-wage labor market where most of them find employment. It is certainly true that many of the jobs that undocumented aliens take are jobs that U.S. workers for one reason or another will not take. But it is important to go beyond the characteristics that these jobs have at a given moment and ask whether or not the jobs necessarily have to be bad jobs. In some cases the unattractiveness of the job may be a selffulfilling prophecy brought about by the fact that undocumented aliens have filled the jobs in the past. Employers will generally react to a situation where undocumented workers are in surplus supply and are exploitable in the sense that they cannot be protected by labor standards laws by structuring jobs in an inefficient manner. Subsequently, the jobs can only be filled by undocumented aliens because they are, in fact, bad jobs. But they are also bad jobs because they have been filled in the past by undocumented aliens. The overall impact of this process is to put downward pressure on labor standards. It may be that this pressure spills over to markets not normally thought to be associated with the process of illegal immigration. It is not possible to capture the impact of this process quantitatively, but the overall consequences for the U.S. labor market, especially for those geographic areas where undocumented aliens tend to concentrate, are important.

The effect of illegal immigration on the social fabric of the United States must also be carefully considered. If unemployment in the United States continues to stick near the 7 percent level, it is possible to conjecture that a failure to get illegal immigration under control could lead some time in the near future to increased pressure for mass deportations. Such mass deportations have taken place in this country in the past during periods of high unemployment, and massive violation of the civil rights of U.S. citizens, especially those of Hispanic background, occurred at these times. It is in the best interest of the United States to keep this from happening again.

A persuasive argument could also be made that by allowing the process of illegal immigration to continue, we are in effect creating in this country an underclass of people who do not have the rights and privileges of U.S. citizens. Although the illegal immigrants themselves may be willing to accept their circumstances, because they use as a reference point the even worse conditions that they came from, it is unlikely that their children will be willing to accept the same conditions. There are obvious parallels between this situation and the explosions that followed the mass immigration of rural southern blacks to the urban North after World War II. Inaction may result in a civil rights struggle 10 to 15 years from now.

From the above discussion it is evident that there is much we do not know about the process of illegal immigration. There is hope that in the future solid research will be able to answer many of the questions that we are currently uncertain about. Well-structured and innovative research in this area should be encouraged. The discussion above, however, also makes it clear that we can ill afford to wait for such research before taking some kind of action. Both the substantive and political ramifications of not taking any action at this time are too severe.

The proposals of the Carter Administration as outlined in the President's message to Congress on August 4, 1977, are an effort to construct a humane policy in the context of the complex factors discussed above. They are a relatively moderate set of proposals that can accurately be characterized as a compromise of competing points of view on the questions involved. A conscious attempt was made to rely on taking marginal actions with a number of available policy tools rather than taking overly ambitious action with any one alternative (e.g., attempting to close the border). The main elements of the Administration's proposals are the following:

Employer Sanctions

Since the principal attraction of the United States for undocumented aliens is economic, the proposal recommends that it be made illegal for an employer to hire an undocumented alien. The penalty for violation would be a maximum of \$1000 for each undocumented alien hired. The enforcement of this statute would be on a pattern or practice basis; that is, against employers who consistently hire significant numbers of undocumented aliens. This avoids enforcement against those who may unwittingly hire an undocumented alien on a casual basis. Nevertheless, it is believed that by making the hiring of undocumented aliens illegal, a considerable amount of voluntary compliance will be induced on the part of even small employers.

Under the Administration's proposals, an employer would be able to defend against the charge of hiring an undocumented alien if evidence of legal residence in the country is asked for and received in good faith prior to employment. Acceptable evidence of legal residence would be designated by regulation by the Attorney General. The Social Security card will be one of the acceptable pieces of evidence of legal residence. It is believed that this process will reduce the potential burden on the employer of having to identify who is and who is not legally entitled to work in the country.

One of the potential problems with the employer sanction portion of the proposal is that the employers might use race as a method of determining whether or not a person was legally entitled to work. This problem could be particularly severe in the case of Hispanic legal residents. The pattern-or-practice enforcement will help alleviate this problem since only egregious and sustained violation of the law will be prosecuted. Additionally, designation of the Social Security card as one of the acceptable means of identification will allow individuals in the country legally to demonstrate easily their eligibility to work.

There is some potential for abuse in designating the Social Security card as one of the acceptable means of identification since it is widely available to people in the country illegally and is easily forged. Both this problem and the problem of potential discrimination on the basis of race could be addressed by the institution of a uniform national work-permit card, perhaps itself based on the Social Security card. However, creating a work-permit card would be costly and raises legitimate civil liberties issues. Although the civil liberties issues could be at least partially ameliorated by strictly limiting the use of the card to employment situations, the current Administration proposals do not recommend the creation of a work-permit card. Certain steps are suggested to upgrade and secure the issuance of Social Security cards.

Border Enforcement

There is widespread agreement both inside and outside the Administration that border enforcement efforts alone will not be enough to stop the entry of undocumented aliens. Additionally, the internal and external ramifications of an all-out effort to police the border are not desirable. However, given that the amount of resources currently devoted to border enforcement is clearly less than is necessary to do even a minimal job of policing the border, increased resources and more efficient use of existing resources can have an effect on the process of illegal immigration. The Administration proposal suggests that an additional 2000 enforcement personnel be placed on the Mexican border and that the Immigration and Naturalization Service shift a significant number of personnel from current assignments to areas of high risk with regard to illegal immigration.

Adjustment of Status

The most difficult social question with regard to undocumented aliens is the issue of what to do with the large number of people who are already living and working in this country illegally. In some cases these individuals have been here for many years. Ideally, an individual assessment should be done for each illegal immigrant and a decision reached, on the basis of objective criteria, on whether or not that individual should be allowed to remain. This would be very difficult administratively. The proposals attempt to recognize the differences between people that have been in the country a long period of time and people who have been here only a short period of time, and thus attempt to recognize the differences between these people without setting up an overly cumbersome bureaucratic process to judge whether or not the individual can stay.

The proposals suggest that undocumented aliens who were in this country before January 1, 1970, would be allowed to apply for permanent resident alien status which would eventually allow them to become U.S. citizens. Individuals who entered the country illegally between January 1, 1970, and January 1, 1977, would be allowed to become temporary resident aliens and allowed to live and work in the country for a five-year period after which a new determination would be made as to their status. Individuals who enter illegally after January 1, 1977, would remain deportable.

The most widely criticized aspect of this proposal has been the temporary resident alien provision. The primary purpose of this proposal is to withhold a final decision with respect to the large number of people who potentially fall into this category until more information is known as to their numbers and location. It was also recognized that if large numbers of people in this category became eligible for citizenship, many of their relatives would also become eligible under current law. Also, it was believed that many people who fall into this category are essentially migratory, that is, they move back and forth from their source country at some regular interval. It seemed appropriate to keep from locking these people into U.S. citizenship if they would rather remain citizens of their sending country.

The temporary resident aliens would not be eligible to vote, hold office, or receive certain types of federal assistance. It has consequently been charged that these people are in effect second-class citizens. Although there is some merit in this position, one would be hard pressed to argue that these people would be worse off than they currently are. The incentive to register for this category would be enhanced by the fact that it would be illegal to work in the country if registration was not completed.

Cooperation and Source Countries

Since the process of illegal immigration is both a push and pull phenomenon, any policy that ignores, especially the economic, conditions in the sending countries does not recognize the complete scope of the problem. There are, however, important political and substantive difficulties involved in addressing this aspect of the problem realistically.

For example, Mexico has traditionally refused to accept bilateral aid from the United States. Additionally, the political mood does not favor large-scale aid, that is, aid on the scale that would reduce the incentive for migration. This position is somewhat difficult to understand since a persuasive argument can be made that the current illegal immigration process is a form of foreign aid, financed primarily by domestic workers in low-wage labor markets.

This situation represents a real dilemma both for the United States and for the sending countries. Discussions have been under way, particularly with Mexico, attempting to structure a realistic set of proposals to reduce the push factors involved in illegal immigration. Although it is useful for such talks to continue, there are no easy solutions. It is, however, clear that unless this part of the problem can be solved it is unlikely that the United States would be able to get illegal immigration under control by using only unilateral measures.

One form of assistance to sending countries which has been proposed is the establishment of a temporary worker program under which foreign workers would be allowed into this country for employment particularly in agriculture. In his message to the Congress, the President rejected the introduction of any "bracero"-type program. Although such a program would certainly work to the benefit of both unemployed Mexican workers and U.S. agriculture, the impact on overall labor standards and on employment possibilities for U.S. workers in an economy with approximately 7 percent unemployment would be adverse. As discussed above, it is argued that many of the jobs that the foreign workers would take would be jobs that U.S. workers would not fill. However, this fails to recognize the potential impact that the use of foreign laborers can have on the structure of jobs that are available in the United States.

About 20,000 foreign workers per year have been admitted to the United States in recent years under the auspices of the "H-2" temporary worker program. This smaller program requires that before temporary foreign workers are brought into the country the Department of Labor do a labor market test to determine whether or not U.S. workers are available to take the work under discussion at prevailing wage and working conditions. If the undocumented aliens program is successful in reducing the flow of the illegal immigration from sending countries, the pressure for importation of foreign workers under the "H-2" program will likely increase. The Administration's proposals state that the Department of Labor will upgrade its administrative structure so the "H-2" program responds to the legitimate needs of both employer and employee interests in this area.

One of the most often overlooked elements in the Administration's proposal is the creation of an interagency immigration task force to undertake a comprehensive review of our current immigration law. The Departments of State, Justice, and Labor were instructed to undertake such a study on an interagency basis. Since the current immigration law in this country is based primarily on considerations of over a decade ago the recommendations forthcoming from this task force may be helpful to the Congress in restructuring and rationalizing the immigration code.

Conclusion

In his statement when the Administration's proposals on undocumented aliens were announced, President Carter made it clear that he was sending the proposals to Congress with the expectation of additional input both from the Congress itself and from various constituency groups and that he fully anticipated that changes would be made in the bill by the Congress. The Administration proposals represent a compromise of conflicting viewpoints inside the Administration. It can be anticipated that during the legislative process both the Congress itself and the various constituency groups will bring some of the same and perhaps additional points of view to this important problem. Education and debate on this issue have a way of causing most people to recognize that there are no easy solutions and that compromise is absolutely necessary. It is thus healthy that the national debate on the question of what to do about the large numbers of undocumented aliens in the United States continues. The United States can no longer afford to ignore the problem and hope that the issue will go away since, if anything, the natural economic and social forces involved are gaining in strength.

DISCUSSION

LOREN C. SCOTT Louisiana State University

First of all, each of these papers is very interesting and contains a number of meritorious insights and proposals. Given our time limitations, I will concentrate on those issues in which I generally disagree with the authors. The first two of these three papers, since they deal with poverty in rural areas, might logically be discussed as a unit, while the paper on illegal aliens can be considered separately.

One is struck by both the contrasts and similarities in the papers by Martin and by Briggs, Rungeling, and Smith (B-R-S). The B-R-S paper is clearly the more pessimistic of the two with much emphasis on the problem of job scarcity as a source of poverty in the rural South. There is little documentation of this position by these authors, but no doubt, this was due in part to page limitations set by these *Proceedings*.

Martin, on the other hand, speaks of a "Rural Renaissance" and does document a reversal of the historical rural-urban shift. He presents evidence showing that both the rural population and labor force have been growing since 1970 vis-à-vis urban areas. He indicates that rural employment has been growing steadily in certain rural "pockets" due to natural resource activity, expansion of rural government payrolls, increased outdoor recreational activities, expanded manufacturing employment, and work effort associated with servicing these expanding rural activities. Actually, these two conflicting views on the extent of job activity in rural areas might be reconciled in a number of ways. First, if one reads the original source of much of the B-R-S work,¹ one finds that their impressions were based on pre-1970 employment data. Martin's more optimistic view is based on post-1970 rural job growth. Second, the B-R-S data are based on information from four carefully selected counties in the rural South. Perhaps none of these counties constituted one of the "pockets" in which job growth is occurring as suggested by Martin.

¹ Brian Rungeling, Lewis H. Smith, Vernon M. Briggs, Jr., and John F. Adams, *Employment, Income, and Welfare in the Rural South* (New York: Praeger Publishers, 1977), ch. 3.

The major consistency in the two papers is their suggestion to rely on public-service employment (PSE) as a major policy directive for correcting rural poverty. PSE is promoted despite the growing evidence that (1) it has been used primarily as a subsidy to state and local governments without creating a significant number of new jobs, and (2) that where new PSE jobs have been created they have generally been unproductive and conducive to very little human capital creation. I am aware of no scientific study demonstrating the cost-effectiveness of PSE. The statement by Martin that the "success" of the Emergency Employment Act was instrumental in the passage of the CETA legislation can certainly not be supported with empirical evidence.

On the other hand, if Martin is correct in his assessment of job growth in certain rural pockets, there is an alternative policy directive for combating rural poverty whose cost effectiveness has been demonstrated. If jobs will not come to the people, why not move people to the jobs? In the Mississippi Labor Mobility Project, individuals were moved from a rural area of excessive unemployment to rural areas of excess labor demand, with resulting excellent social and private payoffs.²

For those relocatees who have marketable skills, the government simply faces a job-matching task. For those relocatees without the skills required in the demand area, relocation can be combined with a retraining program. The recently developed Skill Training in the Private Sector (STIP) program—combining basic education, institutional skill training, and OJT contracts—would be an ideal partner with relocation efforts to get the rural poor into meaningful *private-sector* jobs.

Unfortunately, subsidized relocation programs such as these are not politically compatible with CETA efforts. Local governments are simply unwilling to use local manpower funds to send unemployed citizens to other locales—even if these citizens would be better off there. Thus, subsidized relocation programs must be operated from a national vantage point, as is now done with the Job Corps.

Mr. Knapp's paper deals with an entirely different issue—that of illegal aliens, their effect on U.S. labor markets, and the Carter Administration's proposals to alleviate the problem. It is on this latter issue that I will center my remarks. Knapp states in his paper that the Administration is making a conscious attempt at "taking *marginal actions* with a number of available policy tools rather than taking overly ambitious actions with any one alternative . . ." (emphasis added).

² H. Tyrone Black, Loren C. Scott, Lewis H. Smith, and William A. Sirmon, "On Moving the Poor: Subsidized Relocation," *Industrial Relations*, vol. 14 (February 1975), pp. 63-77.

A careful analysis of the policy proposals listed suggests that perhaps the phrase "marginal actions" is a rather generous one. Two of the proposals—the adjustment of status and upgrading of the H-2 program must be construed as major leakages in the dam to hold back the flood of illegal aliens. The employer sanctions proposal is an attempt to raise the price of hiring illegal aliens by imposing fines on employers who hire these individuals. Yet, there is an important loophole in this sanction which noticeably reduces the probability of a fine ever being assessed. If the worker produces a Social Security card, the employer will not be fined. This suggests that those labor brokers who deal in the provision of illegal aliens to employers must simply add one more skill to their repertoire—the ability to produce forged Social Security cards. I think we all will agree that this is a skill which requires only a minimal investment in human capital.

The only proposal of the four which Knapp mentions which might significantly affect illegal alien entry is that of beefed-up border enforcement. Even then, it is not at all clear that the benefits from reduced alien flow will be greater than the increased costs of the additional 2000 enforcement personnel mentioned.

Finally, one must acknowledge that the effect of these four policy proposals on alien flow into the U.S. pale into insignificance when compared to the influence of legislation President Carter signed into law on November 1, 1977. On that date, the minimum wage law was designated to rise from its present level of \$2.30 per hour to \$2.65 on January 1, 1978 with a provision for step increases to \$3.35 by January 1981. Aside from its other documented harmful effects,³ this legislation should dramatically increase the demand for individuals willing to work at wage rates below the minimum, i.e., illegal aliens. It is to President Carter's credit that he fought organized labor's efforts to raise the minimum immediately to \$3.00 per hour. Had that occurred, there is no question that the flood of illegal aliens would have been a problem of much greater significance to U.S. labor markets.

³ James F. Ragan, Jr., "Minimum Wages and the Youth Labor Market," *Review of Economics and Statistics*, vol. 59 (May 1977), pp. 129–36; Jacob Mincer, "Unemployment Effects of Minimum Wages," *Journal of Political Economy*, vol. 84 (August 1976), pp. S87–S104.

DISCUSSION

ALEXIS HERMAN

Women's Bureau, U.S. Department of Labor

The emerging issues facing rural America are by no means isolated issues affecting only a part of America. They affect us all. But since my day-to-day activities are centered around women in the labor force, my responses here will be oriented toward women.

We in the Women's Bureau are very much aware that too little attention has been directed toward the special needs of rural people in general and rural women in particular. There is, first of all, a serious lack of comprehensive up-to-date statistics on the rural population, and particularly rural women. This fact is borne out in a 1977 report of the National Advisory Council on Women's Educational Programs. Reporting on a study of the educational needs of rural women and girls, the report notes that data on rural women are hard to come by. In the course of the Council's special study it became evident that neither the Census Bureau nor the Department of Agriculture collects adequate information about rural women.

There is also need for a clear and precise definition of what is rural, particularly in terms of scientifically measuring the effectiveness or ineffectiveness of government programs on rural residents. The Bureau of the Census defines rural areas generally as places that are outside urban fringes and that have fewer than 2,500 persons. Some studies have considered rural areas to mean nonmetropolitan areas, which are counties that contain no city of 50,000 or more residents. Still others who use the nonmetropolitan concept attach to it the historical dominance of agriculture or its continued importance to that industry.

All three presentations, though covering divergent issues, pointed up the need for additional data. The paper on "Rural Labor Markets and Rural Manpower Policy" assesses the labor markets largely in terms of 1974 data for nonmetropolitan areas, and does include some data on women. I think it is important to point out, as the paper mentions, that nearly 2 million women helped to swell the rural labor force growth of 4 million between 1970 and 1974. This factor should certainly enter into decisions on rural manpower policy. From the paper on "Developing a National Policy to Deal with Undocumented Aliens," it is evident that more research is needed in order to develop strong policy in this area. Do we know how many women are affected, for example—both the women aliens and women who are U.S. citizens? Implications could range from the need for child care for the children of aliens, to the competition with U.S. women for household jobs, and to the exploitation of the female aliens who are domestic or household workers.

So we very much need to have an information system which makes it possible to collect and retrieve up-to-date statistical data whenever necessary, in spite of and in addition to special studies that may be conducted by the government or private sector. For I think it is quite clear that if the data base used to formulate national policy does not have adequate information relevant to the issues, or on specific segments of the population, that policy and its resulting programs cannot significantly impact upon the problems nor speak to the needs of those population segments.

In spite of the lack of comprehensive data on rural women, I would like to sketch, as far as possible, a statistical profile based on 1970 Census data, which are the latest available.

Among a rural population of 53.8 million, we find that exactly half are females. We also find 4.2 million black and 1.1 million Spanishorigin females. Rural women have an attachment to the labor force somewhat the same as that of urban women. There were nearly 6.6 million rural women 16 years of age and over in the nation's labor force. Their labor force participation rate was 35.9 percent. Whether or not they lived on farms or in nonfarm areas, rural women 25 years and over had completed a median of 11.5 years of schooling. Although the occupations of rural women differed according to geographical area, as a whole the three leading occupations were clerical worker, operative, and service worker, in that order.

This sketchy profile has no doubt changed to some degree since 1970, and I hope the data for 1980 will contain more breakouts by sex.

In response to the paper on the "Significance of Welfare Reform for the Rural South," based on data from a special study of four counties, I would like to mention a few key elements of this Administration's proposals which would affect women in particular.

A key feature of the proposed "Program for Better Jobs and Income" is the chance it offers welfare and other low-income people to work their way out of poverty. Some 1.4 million special public-service employment and training opportunities for low-income families would be created. There would also be provision for subsidized on-the-job training in private industry or institutional skill-training, with allowances equivalent to the wages of special jobs.

All low-income people would be eligible for benefits—families with a father in the home, single people, childless couples, and mothers in single-parent homes.

The proposed program would greatly reduce the present variation in benefits from state to state. There would be two levels of assistance: income support for families not required to work or unable to work, and work benefits for those required to work. A family of four, for example, would get \$4,200 a year in income support in cases where no parent is able to work, or \$2,300 in work benefits in families with a parent expected to work. I think it is important to point out that, according to 1970 Census data for the rural South, mean income was only \$1,621 for farm families and \$2,059 for nonfarm families.

The requirement to work would apply to the principal wage-earner in all two-parent homes. The term "principal wage-earner" is defined as the adult with the largest earned income or the greatest number of hours of work during the previous year. This could have significance for women because wives sometimes earn more than their husbands, or have more steady employment.

There are strong work incentives built into the proposals. Families would be able to earn a certain amount without losing benefits. Also, earnings of up to \$150 a month used to pay child-care expenses would not affect benefit levels. In addition, people who work in unsubsidized jobs would receive a tax credit. We don't yet know the fate of the welfare reform proposals of this Administration, of course. There have been discussions pro and con as hearings were held during the first session of Congress.

In conclusion, I would like to say that I am delighted to participate in the kind of policy discussion taking place here. The very fact that I have an opportunity to provide some input on behalf of women is significant in itself. I hope this is a pacesetter—that there will be increasing activities where the planners, enactors, and administrators of national policy can hear and discuss women's viewpoints on the needs of women.

VIII. CONTRIBUTED PAPERS: MANPOWER PROBLEMS AND POLICIES

Speech Styles and Employment Opportunities^{*}

LARRY M. BLAIR Oak Ridge Associated Universities

HUGH S. CONNER Grambling State University

Most researchers would agree that group prejudice is an important factor limiting full utilization of human resources within our economy. The role that language usage and related social phenomena play in screening out particular persons and groups from employment opportunities has not received the attention that has been given other forms of discrimination (e.g., ethnicity, age, and sex).

This study explores the extent of the prejudicial impact that nonstandard speech style (and ethnicity) may have on the perception of job competence for purposes of hiring, promotion, and termination. The nonstandard speech styles discussed here are Black English and English spoken with a rural accent. The empirical study investigates whether or not employers use speech style as at least a partial basis for establishing a person's potential ability to be a productive employee.

Black English

Stewart (1970a, 1970b) has described the evolution of black language through stages of pidgin and Creole to Black English commonly used

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in the poor black community today. Black English has unique grammatical and phonemic systems and a lexicon mostly borrowed from standard English.

Black English is a language phenomenon unique to a particular social subculture; it is the primary language of the poor black subculture. Shuy (1970); Wolfram (1970); and Shuy, Baratz, and Wolfram (1969) concluded, from studies conducted in Detroit where people were asked to identify audiotaped speakers, that linguistic style marks the user for identification with specific socioeconomic and ethnic groups. Similar studies conducted in New York City produced evidence that black, Puerto Rican, Italian, and Jewish community members could not only identify the ethnic group of the speakers, but could also identify the speaker's status within the speaker's community (Labov, 1966, 1968).

Life-Cycle Effects

In A Theory of Social Comparison Processes, Festinger (1954) states that in the absence of objective, empirical criteria upon which to base a judgment, people will evaluate themselves through comparison with others. Since one is enculturated by members of a specific group, behavioral evaluations will be made through comparison with attitudes and norms, the belief system, of the enculturating group. Newcomb (1953) and Rokeach (1960) suggested that prejudicial treatment results from perceived differences in beliefs.

The negative results that may accrue from speaking nonstandard (Black) English can be traced through early childhood, performance in school, entrance into the labor force, performance during working lifetime, and, finally, the development of intergenerational effects. A lifecycle model demonstrating the poverty reenforcing effects of speaking Black English is briefly developed below.

DEVELOPMENTAL DISADVANTAGE

From infancy, the child is enculturated in the poverty black belief system and accepts Black English as his primary language.

EDUCATIONAL DISADVANTAGE

The Black-English-speaking child, upon entering the classroom, may be confronted by a middle class teacher who attributes to him all the negative evaluations associated with the black stereotype, plus those associated with a nonconforming speech style. The teacher's inference of the child's disposition may lower the teacher's expectations and teaching efforts, thus increasing the probability that the child will have a poor

academic performance. The child has been "set up" for deselection from the educational system [Baratz (1970), Engleman (1970), and Naremore (reprint 1969)].

EMPLOYMENT DISADVANTAGE

Potential employers and placement agency personnel may associate the Black English speaker with dispositions inferred from both his blackness and his language style. Further, the mismatch between the young black's primary language and standard English decreases his ability to score well on placement tests, lowering the probability of employment opportunities at his level of competence (hiring, promotions), and discouraging his participation in the labor force while facilitating his participation in illicit economic activities.

ECONOMIC DISADVANTAGE

The Black-English-speaking adult may be excluded from opportunities for developing skills on the job, compounding the effects of previous prejudicial treatment and language inference. He is, therefore, unlikely to receive training, upgrading, and rehabilitation geared to his aspirations or his level of competence, but rather he is likely to be forced into an underemployment-unemployment situation, out of the labor force, and/or into the illicit street subeconomy. All of these situations result in the perpetuation of the poverty cycle to the next generation.

Since language serves the needs of the group by which it is used (Shuy, 1970), pressure toward conformity exerted by the black community functions to preserve Black English as the primary language of the black community.

The Experiment

The present study was an experiment that evaluated the effect of speech style and ethnicity on employers' perceptions about job competence. (Appendix A contains more details on the methodology.)

Four males were recorded in a simulated job interview. The four represented two speech styles and two ethnic groups: a white speaking standard English, a white speaking nonstandard English (rural accent), a black speaking standard English, and a black speaking nonstandard English (Black English).

Sixty-four white businessmen responsible for the personnel decisionmaking of enterprises volunteered to serve as subjects in the experiment.

One of four recorded interviewers whose speech style and ethnicity were the same as one of the job applicants provided instructions to the employers for questionnaires. The interviewers were introduced on the recordings as vocational training program directors, i.e., as someone of "high status" relative to the job seekers. The recorded interviewers' speech style and ethnicity were manipulated so that one-fourth of all subjects heard only one recorded interviewer. The recorded interviewer introduced the applicants' (60 second) job interviews (order was balanced) recorded on the same tape. The cassette players and questionnaires were taken to the employers and operated by one of eight persons who did not otherwise participate in the experiment.

The speech style and ethnicity of both the applicants and recorded interviewers could affect employers' ratings concerning the applicants' job competence. Perceived job competence was assumed to be the major determinant of personnel decisions regarding hiring, promotion, and transfer.

Table 1 shows the means for the applicant speech style/applicant ethnicity interaction on which Newman-Kuels multiple comparisons were performed.

	Applicant						
Principal - Dependent Variables	White Standard	Black Standard	White Nonstandard	Black Nonstandard			
Hiring (H)	.722ª	.613 ^b	.635 ^b	.516°			
Promotion (P)	.747ª	. 633 ^b	. 62.5 ^b	.472°			
Transfer (T)	.687ª	.656ª	.625ª	. 529ъ			
Composite HPT	.719ª	.634 ^b	.644 ^b	.514°			

TABLE 1

Means for Applicant Speech Style \times Applicant Ethnicity Interactions for Principal Dependent Variables for Businessmen

Note: Row means that share letters are not significantly different at the .05 level by Newman-Kuels test.

The Regression Model

The regression model suggested is one where the employers based their employment ratings on their reactions to attributes in the job seekers. In our study these attributes are the job applicants' ethnicity and language style, the language style of the recorded interviewer, the minority contact experienced by the employer, and the age of the applicants.

Employment Rating = f (ethnicity of applicant, language style of

applicant, language style of recorded interviewer, minority contact of employer, age of applicant)

The initial statistical regressions indicated that two of the potential explanatory variables—age and minority contact—did not have any significant statistical relationship with any of the dependent variables (t-values of 0.65 or, usually, considerably less). The age variable had little variation as most employers perceived the job applicants as being in their mid-twenties.

The lack of a significant relationship between the amount of minority contact of the employer and his ratings of minorities was somewhat surprising. It was assumed that discrimination in employment opportunities would be less for those employers with higher levels of minority contact. This lack of a significant relationship may simply reflect a poor measurement technique for quantifying minority contact or the fact that little real minority contact existed for any of the employers in the study.

The regressions were rerun leaving out the age and minority contact variable. Ethnicity and speech style have sizable and statistically significant impacts on the various employment ratings (hiring, promotion, transfer, and composite). The statistical results were stronger and had a larger R^2 for hiring and promotion than for transfer.

[Composite Rating] CR = .686 - .083BLACK - .073WHNS - .129BLENG + .063LIJ(-3.86) (-3.38) (-6.03)(4.14) $B^2 = .321$ F(4/251) = 29.6 (.0001) [Hiring Rating] HR = .695 - .110BLACK - .071WHNS - .098BLENG + .057LIJ(-4.68)(-3.01)(-4.15)(3.45) $R^2 = .271$ F(4/251) = 23.3 (.0001) [Promoting Rating] PR = .715 - .113BLACK - .094WHNS - .168BLENG + .064LIJ(-4.25) (-3.50) (-6.31)(3.38) $R^2 = .337$ F(4/251) = 31.8 (.0001) [Transfer Rating] TR = .657 - .031BLACK - .062WHNS - .1288BLENG + .060LII(-0.96)(--1.95) (-4.00)(2.64) $R^2 = .121$ F(4/251) = 8.7 (.0001)

where HR = hiring rating, PR = promotion rating, TR = transfer rating, CR = a composite employment rating (hiring, promotion, and transfer), BLACK = a value of 1 for black applicants and 0 for white applicants, WHNS = a value of 1 for whites speaking nonstandard English and 0 for all else, BLENG = a value of 1 for blacks speaking Black English and 0 for all else, and LIJ = a value of 1 when both the applicant and the taped interviewer spoke the same language pattern, i.e., standard vs. nonstandard.

Average employment ratings for blacks were 12 to 15 percent lower than those of whites, except for the transfer rating where the coefficient for the *BLACK* variable had a quite low level of significance. Whites speaking nonstandard English were rated 10 to 13 percent lower than standard-speaking whites, or about the same as standard-speaking blacks. Blacks speaking Black English had average ratings from 17 to 28 percent lower than standard-speaking blacks and 24 to 39 percent lower than standard-speaking whites. This substantial negative effect of Black English speech style has a high level of statistical significance in all four regressions.

The most appropriate form of the variable to capture the effect of the recorded interviewer was found to be a control variable with a value of one when the applicant's and the interviewer's speech styles were the same, regardless of ethnicity (i.e., standard English speakers vs. nonstandard English speakers). The presence of a taped interviewer with the same speech pattern improved employment ratings by 8 to 10 percent for standard-speaking whites and blacks and for nonstandard-speaking whites, and by 12 to 15 percent for Black English speakers.

None of the variables in the three individual employment ratings regressions (hiring, promotion, and transfer) have coefficients statistically significant from the coefficients for those variables in the composite rating (CR) regression. However, at least one general inference may be made by comparing the results of the three individual employment-ratings regressions. Speaking nonstandard English (for blacks and whites) appears to have a greater negative effect on promotion than on hiring or transfer. This may reflect the larger role played by communications in higher level positions.

Whites speaking nonstandard English still rank approximately even (or slightly above in all but transfer ratings) with blacks who speak standard English. Thus, whites' speech style and ethnicity trade off equally for the employers. Also, speaking nonstandard English by whites produced only about 48 to 72 percent of the negative effect of speaking

Black English by blacks (and this is without the additional ethnicity factor added in). This lesser effect for nonstandard speech by whites may reflect a greater acquaintance by the employers with the nonstandard style of speech spoken by the whites.

Two other notes may be of interest concerning the statistical analyses of the project. There were very strong statistical results indicating that the negative coefficient for blacks speaking standard English was entirely the result of ethnicity; i.e., employers did not perceive any speech differences between blacks and whites who spoke standard English. Also, tests on three other potential control variables—order of presentation of applicants, differences attributable to the persons who delivered the tape cassettes and questionnaire to the employers, and religion of the employers—indicated that none of these factors affected the test results.

Conclusions

This study has examined the effects of speech style and ethnicity on ratings for job competence. The evidence obtained supports the hypotheses and some notions expressed within the two final stages of the postulated poverty cycle. The Black-English-speaking applicant has been shown to be selected for hiring and promotion less frequently, and transferred (fired) more frequently than all other applicants. Perception of relatively incompetent speech was shown to be a significant factor determining the assignment of lower ratings about job competence to the Black English applicant. Black English speakers are not as likely to be hired. When hired, Black English speakers are not likely candidates for promotion and thus are less likely to gain on-the-job training. Consequently, they are much more likely to suffer lifelong employment and economic disadvantages. It is interesting to note that the relative lower employment ratings of blacks found in this study (10 to 20 percent) reflect the relative lower average of black to white income earnings in the economy.

Appendix A

SUBJECTS

Sixty-four white businessmen (median age 41.5, range 24-63) solely responsible for the personnel decision-making of firms volunteered for interviews to be conducted within the privacy of their own offices. Subjects had received a mean of 14.5 years of education (range high school-Ph.D.) and were affiliated with four arbitrarily categorized religious groups: 27 subjects were LDS (Mormon), 13 were other Protestants. 7 were Roman Catholics, and 17 were not affiliated with any specific religious group.

INVESTIGATOR (Person delivering cassette recorder and questionnaire)

The investigator factor allowed evaluation of any biasing effects of the investigator on applicant evaluations made by subjects. Eight University of Utah business, architecture, and premedical students served as investigators; all were aged 20-22, were neatly groomed, and had experience within interview settings. Two investigators were randomly assigned to each of the four recorded interviewers and heard only that recorded interviewer prior to the completion of the experiment.

PROCEDURE

Names of businesses were randomly selected from the membership of a prominent Salt Lake City businessmen's association. Businesses selected were phoned by one of three white, male, standard-Englishspeaking experiment assistants who determined the number of persons employed by that firm and the name of the person solely responsible for personnel decision-making. The information was solicited according to a standardized script.

At the appointed time, the investigator arrived at the businessman's office. The investigator introduced himself and turned on the recorded material. Subsequent telephone follow-up indicated that investigators were well thought of and, according to subjects, had not performed either verbal or nonverbal behaviors that had biased subject responses.

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Employment Service Potential

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While it has long been recognized that the major factor influencing the performance of the U.S. Employment Service (ES) is the volume of hiring activity, until recently no valid measure of this phenomenon existed. In its place, analysts have tended to use various measures of employment and unemployment as proxies for the economic forces impacting ES. While obvious ties exist between hiring activity and the variables cited, the relationships have not proven to be either consistent or stable enough to adequately account for these forces. From a historical standpoint, the lack of quantifiable estimates of hiring activity has not been considered to be a serious problem. Recent emphasis, however, on increased placement performance and the use of mathematical techniques in the design, operation, and evaluation of the ES delivery systems has made the need for such data obvious.

In October 1975, Nevada published estimates of what subsequently has been called Employment Service Potential, or ESP, for the Reno, Nevada, SMSA.¹ These estimates went beyond hiring activity in that they were adjusted to exclude those hires in which ES was precluded from participating by virtue of institutional or structural factors (i.e., the activities of union hiring halls and rehires). As a result of this effort, Nevada was funded by the Employment and Training Administration, U.S. Department of Labor, Region IX, to expand the estimates to include all local ES offices in the state, and to experiment with various applications of ESP to ES operations. The results of this contract were published in December 1976.²

During the time the above effort was under way, and subsequent to it, a number of other ESP projects have been funded by the Department of Labor throughout the nation. At present a major effort is being con-

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¹ James Hanna, Nevada Operations Improvement Project, Nevada Employment Security Department, October 1975.

² James Hanna, Nevada Employment Service Project, Nevada Employment Security Department, December 1976.

ducted with the University of Michigan to develop a methodology for producing ESP estimates on a nationwide basis. Perhaps indicative of the interest in such estimates is the recognition given in the Department of Labor's FY 1978 Resource Allocation Formula Handbook as follows: "Among the factors which may indicate the extent to which a labor market is favorable or unfavorable for ES productivity, probably the best would be the new hire rate on some comprehensive industry basis." ³ While not expressly indicated, the new hire rates (which exclude rehires) by industrial division are the product of the ESP methodology.

The purpose of this article is to summarize Nevada's efforts in this area. While this material results from both of the publications previously cited, it is for the most part a condensation of the December 1976 final report.

Methodological Approach

The basic intent of the ESP methodology was to develop quantifiable estimates of the total number of hiring transactions, within a given time frame, in which ES had some possibility of participating. Essentially, this called for (1) determining the total number of hiring transactions by major industry (i.e., mining, construction, etc.) within each local office area, and (2) adjusting these counts to reflect the various institutional and structural factors in each respective area precluding ES involvement.

The first step in this process was accomplished using the records of the Nevada Unemployment Insurance Service. These records contain, for every employer covered under the program, quarterly documentation on each employee containing social security number, name, total wages paid, and that portion of total wages subject to the UI tax. To produce counts of total hiring activity for a given quarter, a computer program was written which compares, by individual employer, all social security numbers occurring in the current quarter with the corresponding record for the immediately preceding quarter. By definition, any social security number occurring in the current quarter but not in the immediately preceding one, was counted as a hire. These counts were in turn aggregated by industry and local office area to produce total hiring activity counts.

The computer runs produced counts of hiring transactions that were

³Handbook for Applying the Resource Allocation Formula to Measure Employment Service Performance and to Allocate Title III ES Grants to State for FY 1978, #340 (Washington: U.S. Employment Service, May 1977), p. A-17.

considerably beyond expectation. For FY 1976, hiring activity of 344,429 was 1.6 times that of average covered employment. Put in another manner, the average job was filled by 1.6 individuals during the course of the year. The high rate is basically the result of (1) growth of new jobs, (2) seasonality, and (3) normal turnover. The importance of the latter two factors is highlighted by the fact that the gain in average employment between FY 1975 and 1976 was only 10,417. Variations by industrial division are presented in Table 1.

TABLE 1

Hires vs. Covered Employment Fiscal Year 1976					
Industry	Covered Employment	Hires	Ratio of Hires to Covered Employment		
Mining	4,008	4,000	1.0		
Construction	13,882	36,082	2.6		
Manufacturing	12,559	14,187	1.1		
TCPUª	15,605	13,004	0.8		
Trade	53,909	94,770	1.8		
FIRE ^b	10,742	10,749	1.0		
Service	107,266	171,637	1.6		
	217,971	344,429	1.6		

^a Transportation, communication, and public utilities.

^b Finance, insurance, and real estate.

Given the statewide average of 1.6, the relatively high ratio of hires to covered employment recorded in the construction industry is not surprising. This industry is characterized by its seasonality (especially in northern Nevada where winters can be severe), and project orientation. In the latter case, construction workers normally have no long-term commitment to any one employer, and move from job to job. Seasonality is also a factor in the tourist industries (service and trade) contributing to hiring and firing cycles. In contrast to construction, however, the industry is not project-oriented and generates few hires from this factor. Rather, the industry experiences considerable turnover from employees changing jobs for reasons other than job loss (better working conditions, more opportunity for advancement, etc.). The fact that this occurs is not surprising in view of the commonality and transferability of skills (blackjack dealers, waiters and waitresses, etc.), and the lack of substantial retirement programs or other nonwage benefits which reduce the tie to a particular employer.

Institutional and Structural Factors

In the case of the institutional and structural factors precluding ES involvement in the hiring process, two main areas were considered.

These were (1) hires via union hiring halls, and (2) rehires. In the case of (1) the logic is rather obvious, while in (2) the thinking was that anyone who had gone to work for an employer for whom he/she had worked in the immediate preceding 12-month period, would either be a formal rehire, or have some other connection.

UNIONIZATION ESTIMATES

Estimates of the total hiring activity resulting from union hiring halls were developed by use of a mail questionnaire to a stratified sample of employers by industrial division within each ES local office area. The results are presented in Table 2:

These data, in terms of both industry and geographical differences, were in accordance with a priori assumptions. On an industrial basis, hiring-hall activities were most prevalent in construction, with nearly one out of two hires occurring via this avenue. The only other industries where this activity was of any significance were service and TCPU, accounting for 14.0 and 12.1 percent, respectively. In the first instance, the influence of the Bartenders and Culinary Union in southern Nevada is the primary factor, whereas in the second, it is apparently the activities of the Teamsters.

Geographically, unionization was related to population size with the highest incidence of hiring-hall activity occurring in the two SMSAs. Highlighting this point is the fact the two SMSAs combined, while accounting for only 12.9 percent of the state's land area, account for nearly 81 percent of the total population of approximately 600,000.

REHIRE ESTIMATES

To arrive at counts of rehires, computer programs were written which would take each social security number which showed up as a hire, and check the respective employer's four previous quarterly contribution reports for prior employment. The results for calendar year 1975 are presented in Table 3.

On an industrial basis, construction ranked first in terms of rehires, followed by TCPU and mining. Undoubtedly, rehiring in construction results from the project orientation of the industry which results in layoffs when projects are completed, and hiring and rehiring when new projects are started. In the case of the other two industries, explanations are not as readily available, though in mining the geographical location appears to be the primary factor.

In contrast to the unionization factors, rehires are inversely related to population. This probably results from the closeness and relative stability of the rural areas compared to the two SMSAs. In the case of

Local Office	Total	Mining	Const.	Manuf.	TCPU ^a	Trade	FIRE ^b	Service
Winnemucca/Lovelock	3.1%	0.2%	20.0%	1.7%	13.6%	0.2%	%	%
South Lake Tahoe	1.3	^	24.9					
Fallon	1.4	_	8.9	_	6.3			<u> </u>
Carson City	2.1	_	14.5	_	_			
Elko	4.3		25.2	_	_	_	_	_
Ely	2.1	_	27.9	_	_		_	0.1
Reno SMSA	8.9	2.2	60.0	5.2	13.2	3.5	1.2	1.6
Las Vegas SMSA	22.2	0.5	54.3	12.5	12.7	14.0	2.7	23.3
State	$\overline{14.8}\%$	$\overline{0.4}\%$	$\frac{1}{48.8\%}$	6.6%	$\overline{12.1\%}$	8.6%	$\overline{2.0}\%$	14.0%

^a Transportation, communication, and public utilities

^b Finance, insurance, and real estate

Local Office	Total	Mining	Const.	Manuf.	TCPU	Trade	FIRE	Service
Winnemucca/Lovelock	16.2%	14.3%	7.0%	30.6%	34.0%	13.6%	5.6%	22.0%
South Lake Tahoe	14.5	_	27.3	_		7.4		14.5
Fallon	11.3	15.9	16.1	15.9	_	9.5	15.6	9.4
Carson City	16.1	37.9	15.5	17.6	13.6	13.0	31.7	15.3
Elko	17.9	8.1	29.2	12.5	28.3	15.8	20.0	26.8
Ely	18.8	5.0	15.0	30.4	15.2	16.1	_	24.4
Reno SMSA	10.6	26.6	24.6	7.5	18.6	10.0	10.5	9.6
Las Vegas SMSA	10.9	2.7	16.4	17.1	16.1	8.8	10.6	10.7
State	$\overline{11.7}\%$	$\frac{15.5}{15.5}\%$	$\overline{18.7\%}$	$\overline{13.7\%}$	$\overline{17.1\%}$	10.0%	${11.5\%}$	$\frac{11.1\%}{11.1\%}$

TABLE 3 Rehires as a Percent of New Hires by Local Office Area 1975—by Industry and Local Office

Fallon, which appears to contradict the above statement, depressed economic conditions, coupled with a net out-migration, may outweigh the closeness of community factor.

ES Potential

To develop estimates of ES potential, the unionization and rehire factors were then applied to annualized industry counts of new hires by local office area. As such, ESP is defined as new hires times the rehire factor (1 minus the proportion of new hires which are rehires) times the unionization factor (1 minus the proportion of new hires which are via union hiring halls). This formulation has one minor disadvantage

FY 1976					
	New Hires	Rehire Factor	First Approximation	Unionization Factor	ES Potential
Carson City	17,034	.851	14,503	.974	14,121
Elko	7,922	.856	6,780	.976	6,614
Ely	4,657	.817	3,806	.970	3,692
Fallon	4,744	.877	4,161	.987	4,108
Las Vegas SMSA Winnemucca/	188,245	.888	167,106	.777	129,797
Lovelock	6,479	.856	5,569	.956	5,326
Reno SMSA	107,540	.890	95,741	.922	88,284
South Lake Tahoe		.881	6,878	.984	6,766
State	344,429	.880	302,929	.854	258,708

TABLE 4 ES Potential by Local Office FY 1976

in that the two factors involved (unionization and rehires) are not mutually exclusive. Consequently, an individual could be a rehire who was hired via a union hiring hall.

Table 4 presents ESP by local office computed using overall averages for the unionization and rehire factors for convenience. In essence, the figures indicate that of the 344,429 hires that occurred in Nevada industries covered under the UI program, ES had the potential of participating in approximately 75 percent, or 258,708, of these hires. On a local office basis, this ranged from a high of 87 percent in South Lake Tahoe to a low of 69 percent in the Las Vegas SMSA.

ES PENETRATION

Conceptually, the idea of developing estimates of ES penetration is rather straightforward in that placements are divided by potential. In practice, however, the problem is complicated by the variety of ways placements are calculated in the Employment Security Automated Reporting System (ESARS). The placement counts in Table 5, while not entirely comparable to ESP, are felt to be the best available.

Local Office Area	ES Potential	Nonagricultural Placements of 3 Days or More	Penetration
Carson City	14,121	1,416	10.0%
Elko	6,614	705	10.0 / c 10.7
Ely	3,692	601	16.3
Fallon	4,108	738	18.0
Las Vegas SMSA	129,797	5,519	4.3
Winnemucca/Lovelock	5,326	713	13.4
Reno SMSA	88,284	5,153	5.8
South Lake Tahoe	6,766	973	14.4
State	258,708	15,818	6.1

TABLE 5 ES Penetration by Local Office FY 1976

The data indicate that statewide ES filled 6.1 percent of the jobs in which it realistically could have been involved. Local office penetration ranged from a low of 4.3 percent in the Las Vegas SMSA to a high of 18.0 percent in the Fallon office. It is interesting to note the sharp difference in penetration between what can be considered a "rural" office (all offices outside the two SMSAs) and the "urban" offices. Whereas penetration in the rural offices was 10.0 percent or higher for the period in question, it did not exceed 5.8 percent in either SMSA.

Historical penetration rates were derived by applying 1975–76 unionization and rehire rates to annual hire data dating back to FY1973. In turn these estimates were divided into placement counts with the results presented in Table 6.

TABLE 6ES PenetrationFY 1973-FY 1976						
			n Placements re—Grants Only			
Fiscal Year	ES Potential	Number	Penetration			
1973 1974 1975 1976	245,261 271,695 244,985 258,708	17,918 16,037 13,661 15,818	7.0% 5.9 5.6 6.1			

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The data suggest that the Nevada ES has made a reversal in a downward trend that started in FY1973. A glimpse at the analytical power of ESP can be obtained by assuming constant staff levels between FY1975 and 1976. Under this assumption, the increase in placements from 13,661 to 15,818 can be evaluated as to whether it was primarily the result of improving economic conditions, or to real improvement within ES. Prior to ESP, the above answer would be, if not subjective, a nonquantifiable evaluation based on unemployment rates, employment gains, and information of this sort. With ESP, however, new light is shed on the subject. The fact that placements increased 15.8 percent while ESP increased only 5.6 percent, is indicative of real improvements within ES. By the same token, the increase in penetration from 5.6 to 6.1 percent reflects the same thing.

Conclusion

In conclusion, the development of ESP opens up a number of avenues for additional research, both with regard to the operations of labor markets and as a tool for improving the performance of the ES. In the first case, work is currently under way in both the California Employment Development Department and the University of Michigan in analyzing the nature of the jobs being filled.⁴ In particular, researchers are looking at job duration, pay, and related factors.

Within the ES, work has occurred, and is ongoing, using ESP for everything from a means of controlling for individual state economic conditions in budgeting formulas, to the development of local office staffing and evaluation measures. In addition, research is under way using ESP as an input into a large-scale effort to modernize the employer relations effort. Hopefully, the end product of both areas of research will be not only a better understanding of labor markets, but pragmatic solutions to ES operational problems.

⁴ For an example of the work under way, see *Employment Service Potential*, California Employment Development Department, Employment Research Section, September 1977.

Coping with Job Loss: An Integration of Research, Application, and Policy Development^{*}

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The relevance of industrial relations research to practical problems is currently undergoing a critical reassessment. For example, Dunlop (p. 276) has concluded that recent research efforts have been "almost totally irrelevant" to decision-makers. Briefly, he argues that researchers have not addressed relevant issues because the research focus has failed to reflect the needs of the parties. In its extreme, research is thus conceptualized in terms of academic interests representing only the normative framework of researchers. Methodologies, moreover, are said to ignore the institutional dimensions of a problem so that research findings are not pragmatic. And, finally, policy implications drawn from research are but loosely coupled to the actual decisions being made.

Two papers delivered at last year's IRRA Meeting raised many of these issues. Strauss (p. 335) described the immediate need for more broad-reaching theory and research because of the divergence between behavioral science theories and industrial relations problems. And Kochan (p. 245) beckoned researchers to broaden their parochial interests and integrate diverse paradigms in order to play a more effective role in public policy evaluation.

These constructive critiques share the hope for blending three typically segregated areas—research and theory, action, and public policy. This paper analyzes a research-action-policy process which illustrates that these problems are not insurmountable. The focus will be (a) describing the first, and currently only, statewide program dealing with the dislocation effects of public-sector retrenchment, and (b) illustrating the role research and theory are playing in dealing with this problem.

The model for consideration is a labor-management committee called

^{*} I wish to acknowledge the helpful comments provided by Thomas A. Kochan and Robert McKersie. Author's address: NYSSILR, Cornell University, P.O. Box 1000, Ithaca, NY 14853.

"The New York State Continuity of Employment Committee" (COE) which was established solely to tackle the delicate issues of public-sector worker displacement. Created in April 1976, its origin and format are reminiscent of the Armour Automation Commission (Shultz and Weber). The COE Committee emerged out of a collective bargaining agreement between the State of New York and the New York State Civil Service Employees Association (CSEA). Its membership consists of an equal number of union and management officials, and it is chaired by a neutral. The Committee's mission is twofold, reflecting a blend of research and action: (a) to study worker displacement problems arising from economic or programmatic cutbacks in state agencies, and (b) to facilitate programs and make recommendations that would minimize layoffs or, at least, their negative effects. Policy recommendations which result from these efforts are directed to the executive and legislative branches. The COE Committee enlisted social scientists to play a crucial role in all three areas of research, action, and policy.¹

Let me begin by highlighting the nature and background of the displacement dilemmas and the collective bargaining response to the problem. Following this will be a discussion of how research flowed from the problem, stressing the utility of behavioral science knowledge and techniques. A sample of specific illustrative programs and policy recommendations generated thus far will be cited along with an assessment of the project's current status.

The Problem and the Response

A period of declining resources in the public sector has existed over the last few years. Budget and program cutbacks in New York State have been particularly severe. As a result, problems of retrenchment have emerged in a sector characterized typically by its secure jobs. Turmoil has replaced stability, and the loss of workers' jobs has been one of the key outcomes. Between April 1971 and December 1976, approximately 10,000 individuals were laid off from New York State employment. Approximately 3,000 workers remain laid off today with almost another thousand having been rehired at lower salary grades.

The job-dislocation problems were growing to a crescendo since 1971. In light of the difficulties, both the employer and the union sought some way of dealing with this critical development. In the course of contract negotiations between the CSEA and New York State in the spring of 1976, the issue of job-loss came to a head. The parties were

¹I have served in the capacity of staff researcher.

clearly faced with a critical financial situation in New York State, one which ultimately forced the union to accept a no-wage-increase contract settlement. CSEA challenged management to assure them no more layoffs would occur. The union would not tolerate the expectation of job loss; a standoff resulted between the parties. In response to the bargaining crisis, a mediator proposed a compromise which was the creation of the COE Committee and the assurance of six months' advance notice to employees who were affected by an agency closing.

In a memorandum of understanding, it was agreed that the COE Committee would utilize a fund of one million dollars to develop a variety of strategies to mitigate worker displacement. Over a period of months, each side selected members of the Committee. The labor representatives consisted of four regional presidents, reflecting wide geographic and occupational interests. Management representatives came from a diversity of constituencies: the Department of Civil Service, the Personnel Division within the Department of Social Services, the Governor's Office of Employee Relations, and the Division of the Budget. In September 1976, mindful that a bargaining relationship existed, these labor and management officials jointly selected Robert B. McKersie, Dean of the New York State School of Industrial and Labor Relations at Cornell, to serve as neutral chairperson.

Once constituted as a formal committee, the COE members confronted the dilemma of how to meet their mandate. They needed to agree on the scope and nature of the problem, to generate alternative strategies for dealing with it, and to reach consensus on the choice of appropriate programs. To these ends, they sought information on similar efforts, such as the Armour Committee experiences and a range of manpower strategies. They wanted to learn answers to a variety of research questions relating to the whereabouts and conditions of laid-off state employees. Thus, the Committee decided to solicit the assistance of academic researchers. With guidance from the chairperson, behavioral science researchers were brought into the project in order to collect and analyze the required information.

This is an instance then in which a concrete problem was defined by labor and management representatives out of a bargaining relationship. The researchers did not impose the problem; rather, research flowed from the problem as conceptualized and revised by the COE Committee members. Research skills were viewed as an asset to meet the Committee's needs. In this way, the COE Committee was assured that the research studies would speak to the critical problems of the parties rather than the academic interests of the researchers.

The Role of Research

The research serves a variety of functions. First, it provides objective evidence to support or refute hypotheses and/or questions suggested by the Committee. To cite an example, the Committee wanted to know if low staff morale caused by job insecurity impacted patient care in state hospitals. A literature review and research design were prepared by the researchers to help the Committee decide how to pursue the question. Data collection would follow if deemed necessary. This is typical of how the Committee sought to demonstrate a "hunch" and how the researchers provided the tools to test it out.

By building on behavioral science knowledge and the literature describing strategies for workforce planning, the researchers suggest a range of nonpartisan alternatives to mitigate worker displacement effects. Information is collected concerning the whereabouts and condition of laid-off employees, their problems, and their present (and potential) skills. Pilot programs initiated by the Committee are evaluated in terms of their general efficacy.

Furthermore, the Committee wanted to understand how to ensure both efficiency and high morale of those workers who continued to work in a system under conditions of perceived job insecurity and a large degree of personnel movement. Research thus reflected the dual concern of humane and effective use of the state workforce.

Research has responded to the interests of the Committee to investigate the impact of layoffs from a variety of perspectives. The general thrust of the research has been to examine how lavoffs affect the employee's physical health, psychological well-being, and family life, as well as economic stability. To assist the Committee in its work, a search of the literature related to layoffs was conducted. Most previous studies have concentrated on the economic and employment consequences to the individual (Haber, Ferman and Hudson). Only some few studies, however, mirrored the multidisciplinary perspective that the COE Committee wished to explore. Aiken, Ferman, and Sheppard found evidence that economic deprivation is a strong predictor of psychic and social withdrawal. Kasl, Gore, and Cobb conducted a series of studies which showed significant medical and psychological effects from losing one's job. And Strange emphasized the severe impact on self-esteem, marital relations, and community ties, as well as financial standing. It seemed clear, then, that there is tragic potential for social, psychological, and political damage inherent in the job-loss experience. The multiple effects on state workers who *expected* job security had as yet not been

studied, and the COE Committee encouraged the researchers to investigate.

The research has proceeded according to a multiple treatment design. Some of the sample groups include: (a) current state employees in a so-perceived "threatened" agency, (b) current employees notified of an impending layoff, (c) former employees laid off for 6-9 months, (d) former employees laid off as long as 4 years ago. Questionnaires and interviews focus on a variety of areas: psychological, family, and health effects, economic costs of unemployment, the impact on attitudes toward work, and the effects on morale and efficiency for those still employed.

Survey results, as they are analyzed, are presented to the Committee for their consideration. Early findings may serve as examples of the way in which research, action, and policy can be integrated. Preliminary evidence indicated that under the perceived threat of layoffs, many good workers have chosen to quit voluntarily (which results in costly retraining and loss in organizational effectiveness). Moreover, absenteeism associated with low morale and perceived insecurities creates significant inefficiencies in services. The Committee may therefore be led to conclude that the overall "costs" of layoffs become higher than the initial savings through personnel cuts. While this is evidently true for the individual, various data indicate that it applies to the immediate agency as well.

The Committee is currently in the process of evaluating some of this cost-benefit-type research, a kind of balance sheet, in order to formulate action-policy recommendations. The individual and organizational problems identified from research results provide the Committee with firm evidence as to the efficacy of workforce deployment and displacement strategies adapted by the state. It is premature to guess whether the data will convince the Committee to lobby for such options as a nolayoff policy, or to advocate the expansion of advance notice under certain conditions, or to develop morale-building programs for concerned employees. But, for the time being (and whichever policies are ultimately recommended), one can safely observe that the research data will be a major input to the policy and action decisions. Relevant problems of crucial importance to the Committee have been framed in research terms and fed back into the deliberation process.

Programs, Policies and the Current Status

Action programs have been designed to deliver direct benefits to displaced employees. Reemployment has been the major objective, facil-

itated through a variety of techniques including retraining opportunities, relocation services, counseling, and placement programs. There is a fulltime coordinator/facilitator of the action programs who works in close cooperation with the affected agencies, the Civil Service Department, the state's Office of Employee Relations, and the CSEA.

The action program staff serve two purposes. First, they engage in advocacy for the displaced employee. They seek out individuals, determine their needs, and provide them with assistance. Committee members help to develop leads to agencies that may have hiring plans. The typical pilot program involves liaison work by a Committee representative to determine manpower needs in various state agencies, identification of suitable trainees from the list of laid-off individuals, assistance in recruitment where necessary, and the design, coordination, and evaluation of the program. The overall direction is that of "employability enhancement," that is, locating available job markets and easing entry through retraining or simple advocacy.

A second purpose is to institutionalize the COE Committee's action programs, i.e., to prevent problems in the future by minimizing the barriers to continuity of employment for state employees through various procedures and structures. This essentially represents effective workforce planning characterized by coordination, matching, and problemsolving. The goal is to develop a tighter match between staffing needs and staffing resources, to improve the manpower planning function so that, for example, agencies "scaling up" can easily acquire employees from agencies that are cutting back. Thus it has already been recommended that comprehensive workforce planning be developed in the form of an administrative "home" or center for statewide planning.

Accordingly, the action staff has been developing a number of programs and proposals including, for example, a skills inventory of laid-off employees, relocation and job-search grants, and special civil service announcements and tests. Together with the retraining, counseling, and private-sector outplacement services, these represent the tools for a readjustment program. Pilot projects in these areas are currently under way and have begun to be evaluated.

Preliminary findings growing out of the research and the action programs led the Committee to a large number of policy recommendations directed to the governor and the legislature. For example, there was considerable evidence that the agencies themselves could do much to mitigate discontinuities in employment. Thus, some strategies being evaluated by the Committee include: (1) the use of a project task force of affected agency representatives to do "hands-on" person-by-person planning in order to find solutions for all individuals in a target situation (as long as there is lead-time, commitment, and backing from higher state levels), (2) substantial advance notice of a layoff to provide the lead-time necessary to gear up for humane solutions, (3) budgetary incentives to agencies which conduct good planning, and (4) improved data management so that each agency maintains timely data for good human resource planning (e.g., attrition rates by title).

All the policy recommendations flowed naturally from the research and direct-assistance action programs. It must be noted, however, that reaching a consensus on policy proposals can be a time-consuming and conflictual process. Frequently, the mixed-motive problem-solving spirit reverts to adversarial positioning. Disagreements can be sharp. And even where a problem-solving spirit prevails, it is not isolated from the effects of the larger bargaining relationship within which the parties function. A threatened strike by the CSEA over the negotiations of the 1977–79 bargaining settlement stalled the progress of the Committee for some period of time. Moreover, the researchers are also subject to political pressures, and they must be sensitive to the parties' political concerns such as face-saving, matters of principles, and responsibilities to constituencies.

There are also obstacles which are less a function of internal process but rather external constraints. For example, the one-year state budget cycle inhibits long-range planning by state agencies. Conflicting political interests and stakes between state agencies can deter efforts directed toward sharing resources and information. These are chronic problems which impede Committee programs and which influence Committee decisions.

Concluding Thoughts: Lessons of the COE Committee

The COE Committee represents a specific strategy relevant to a New York State problem but, as a model, it offers some implications for industrial relations researchers. First, this is an example of one kind of strategy in which researchers have worked successfully with a committee of practitioners in dealing with a serious industrial relations problem. Second, the research problem was generated by the practitioners to serve their immediate and long-term needs, rather than imposed to meet the needs or interests of academics. Third, this experience has demonstrated that social science theories and methodologies can be used meaningfully in partnership with institutional participants. The contribution of the researchers was to identify the relevant literature useful for conceptualizing the problems, draw on published reports of similar

efforts, design a methodology for collecting raw data required for decision-making and planning, and ultimately generate alternative recommendations for action and policy. Thus, the COE Committee reflects the mix of research, application, and policy development which challenges some of the recent pessimistic assessments.

Moreover, this is not a one-way street for researchers. It is an invaluable opportunity for us to learn and contribute to theoretical understanding. The need to collect large amounts of diverse data using quantitative and qualitative methodologies provides ample opportunities for research. Therefore, the role of action researcher in a context such as the COE Committee allows multiple advantages. The parties are motivated, encouraging free access to many research sites. As researchers we are responsible for short-term feedback which forces us to be concrete and useful.

Industrial relations has a heritage to find better solutions to critical problems affecting conflicting interest groups. To this end, research can play an integral role. The COE Committee experience indicates one example of how research can effectively be utilized, not as an advocate of one side or another, but as a resource of both sides cooperatively seeking to resolve complex problems. If the field of industrial relations is to grow, more of us will need to perform such a function.

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Paid Educational Leave: New Element In Firm-Level Manpower Policy?*

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It is increasingly clear that the usual distribution of education and work over the life-cycle is in need of change. The linear life plan that now prevails—full-time education, then full-time work, and then fulltime leisure—is not satisfactory for either workers or employers. New attention is being directed to the problem of how to introduce some flexibility into the standard learning-earning split in people's lives.¹

One of the ways in which some alternation between education and work can be accomplished—a way that requires the support of employers—is paid educational leave of absence. The International Labor Organization recommended in 1974 that paid educational leave be a matter of national policy among all its members, and the Organization for Economic Cooperation and Development has published two research reports on it.² Definitionally, paid educational leave of absence refers to time spent on formally organized education activities during normal working hours in which some or all of the worker's wages are main-

^{*} This paper is based on research done by the author for the Organization for Economic Cooperation and Development, Paris. Assistance was received from Herbert Levine of Rutgers University, Rudy Oswald of the AFL-CIO, and Jarl Bengtsson and Tom Schuller of OECD. Author's address: School of Business Administration, Georgetown University, Washington, DC 20057.

¹ For example, the Lifetime Learning Act enacted by the U.S. Congress in 1976; the several OECD projects (publications cited below); the 32nd national conference of the American Association for Higher Education on March 20–23, 1977, in Chicago (whose theme was "Help Wanted—Higher Education and the World of Work"); and "Lifecycle Planning: New Strategies for Education, Work, and Retirement in America" on April 20–22 in Washington, a conference featuring Cabinet officials sponsored by the Center for Policy Process and Holt, Rinehart and Winston/CBS.

² OECD, Center for Educational Research and Innovation, Developments in Paid Educational Leave of Absence (Paris: 1976); and Alternation Between Work and Education (Paris: 1978). The ILO convention is in "Paid Educational Leave," Report IV, 59th ILO Conference, Geneva, June 1974. See also Konrad von Moltke and Norbert Schneevoigt, Educational Leave for Employment (San Francisco: Jossey-Bass, 1977). This new study was sponsored by the Carnegie Council on Higher Education.

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tained by the employer or another source. The leave may be brief or extended, the content of the training may be vocational or not, the education may be provided in-house by the employer or from outside sources, and the study may be full time or part time. On-the-job training and apprenticeship programs do not qualify under this definition, nor do tuition aid programs in which workers take courses in evenings or weekends on their own time.

In several European countries, paid educational leave of absence has very recently been implemented in one form or another as a part of local or national employment and training policy. For example, in West Germany, paid educational leaves were written into collective bargaining agreements covering 4 to 5 percent of the labor force by 1974. In Sweden, the right of all workers to paid educational leave was established by legislation in 1975 and implemented in 1977 when a payroll tax of .25 percent levied on employers provided funds sufficient to cover 2 percent of the labor force each year. In Britain, Industrial Training Boards levy a payroll tax on employers who in turn receive grants if they provide training (mostly short-term but on company time) to their workers. Long-term full-time re-education for workers whose skills have become obsolete is provided with all expenses paid (including living allowances) under a government program.³

In the U.S., there is no national policy on paid educational leave, although the Lifetime Learning Act of 1976 provides new authority for government initiatives. Although about 9 percent of all private-sector firms with 500 or more employees authorized one or more workers to take a paid educational leave or sabbatical of a month or longer in 1975, there are scarcely any arrangements whereby all workers are entitled to such leaves.⁴

Nevertheless, employers are highly involved in other ways in the education and training of workers. Not counting on-the-job training or apprenticeship, about \$2 billion was spent by industry in 1975 on direct costs of employee education and training—for in-house courses (mostly provided during working hours but off the job), and for payments to

³ These examples are taken from the author's "The Current State of Recurrent Education," in *Current Issues in Higher Education 1977*, ed. Dyck Vermilye (San Francisco: Jossey-Bass, forthcoming).

⁴ See Seymour Lusterman, *Education in Industry* (New York: The Conference Board, 1977). There are hardly any collective bargaining agreements that include paid educational leave (except those cited below). See U.S. Bureau of Labor Statistics, "Characteristics of Major Collective Bargaining Agreements, July 1, 1974," Bull. No. 1888 (Washington: U.S. Government Printing Office, 1975).

external suppliers of education for workers (including tuition aid). About three-quarters of all firms authorized or provided courses during working hours and about 3,760,000 employees, one of every eight, participated in them. An additional 700,000 workers took part in companysponsored courses after working hours, and 1,250,000 made use of tuition aid.⁵ Since demographic trends ensure that an increasing proportion of workers will be in the educable 25- to 44-year-old age group in the next decade, industrial involvement in employee education is likely to grow.

But should the education employers already provide to workers be extended or converted to paid educational leave? Is it really any different from in-house courses or formal in-service (off-the-job) training? Is it new? What distinguishes paid educational leave in the ideal from other forms of employer-provided education is a two-fold principle that gives it a different spirit as well as different substance. Paid educational leave is intended to be a right of all workers rather than a privilege for a few selected solely by management, and it embodies the notion of education undertaken recurrently with work over the employment lifecycle in contrast with once-for-all training tied to a particular job task. Additionally, paid educational leave implies regular cooperation between employers and educational institutions. These are the ideas that would have to be accepted if paid educational leave is to be developed in the U.S.

Before such developments take place—using European models or not—we need to ask about the role of paid educational leave in firmlevel manpower policy. How do managers and unions regard it? Is there a place for it as a regular part of the firm's employment and training policy? How is paid educational leave to be designed? Is it or can it be an economic investment with a return to the firm as well as to the employee? What are the relationships between work and education that are successful?

The objective of this study is to suggest some answers to these questions. The research methodology is case studies of actual paid educational-leave programs in two industries, the health-care industry and the postal service, plus another case study of an innovative educational program in a manufacturing firm. In total, 19 personal interviews with management and union officials were obtained from seven cases. Company and union statistics and internal evaluations were also obtained, adding to the empirical base.

⁵ Lusterman.

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The Design of Paid Educational Leave

There are three critical design variables that determine the role of paid educational leave in a firm's manpower policy and the benefits and problems it brings. The first is the content of the education—whether it is vocational or cultural, and if vocational, whether it is career-oriented and aimed at job mobility or aimed at skill maintenance and the combatting of skill obsolescence. The second design variable is the degree to which the education is specific to the firm vs. general and applicable to other firms in the industry. Third and perhaps most important are the duration, frequency, and modular format of the paid educationalleave program—whether the leave is brief and frequent or extended and infrequent, and whether the study is full time or part time. These arrangements determine whether paid educational leave constitutes true alternation between work and education, or whether it is more in the realm of "microalternation" or integration between work and education.

Content

All the education undertaken in the cases of paid educational leave investigated was strictly vocational. In addition, it was usually very clearly job-related and guite specialized and technical. In two paid educational-leave programs for New York City hospital and health-care workers in operation since 1971, formal vocational courses of study of five months' to two and one-half years' duration at local colleges are designed solely to equip unskilled workers (such as nurses' aides) with credentials they need for placement into skilled jobs (such as registered nurses or respiratory therapists). (See the appendix for details and identification of the programs.) In three programs in California, paid educational leaves are only one week per year (cumulative to four weeks after four years). But the education, to be approved, must help in the performance of a worker's current job or the next job in a logical job progression.⁶ In the U.S. Postal Service, paid educational leave is also jobrelated. In-house courses held at seven locations around the country range in duration from one day to 26 weeks-frequently three weeksand are often offered to workers as they enter new jobs.7 At the Kimberly-Clark Corporation, 80 percent of all the education taken from outside sources by workers and paid for by the company is vocational,

⁶ Examples of seminars that might be taken include "Oncology Nursing," "Trends in Intravenous Therapy," and "Nursing Care for the Adolescent."

⁷ Examples of courses are "Human Resources Management," "Financial Resources Management," "Postal Management for Small Offices," "Contract Negotiation," and "Digital Electronics."

by their own choice, even though cultural education is also supported. Overall, a large part of the paid educational leave is job-promotion training and is linked to career tracks for workers; a small part of it is devoted to job maintenance or skill updating (as opposed to upgrading).

FIRM-SPECIFICITY

Most training undertaken on paid leave is not firm specific; the skills obtained are not of greater value to the worker's present employer than they are to other employers in the industry.⁸ For example, a nurse's aide at Montefiore Hospital in the Bronx who becomes a respiratory therapist, paid for by Montefiore, will be just as productive for Beth-Israel Hospital in Manhattan after a brief familiarization period. The training is, however, industry-specific. But a somewhat different situation prevails in the paid educational leave plan in the U.S. Postal Service. Here the firm *is* the industry. Attempts are made to "postalize" the training to make it firm (industry)-specific. This characteristic dramatically alters the role of paid educational leave in firm-level manpower policy.

ALTERNATION VS. INTEGRATION

Paid educational leave of absence that is genuine alternation between work and education is exemplified by the two New York City plans previously mentioned. The duration of the leave is long (five months to two and one-half years), which means that the employee's job is left and a replacement hired, and the study is full time. On the other hand, paid educational leave that is more accurately termed integration between work and education is exemplified by the California plans and by the U.S. Postal Service. Here the duration of leave is short—typically three days (California) or three weeks (Postal Service), the employee's job is not left and no replacement is hired, and the study, although fullday or full-week, is part time when reckoned over a year.⁹

The distinction between alternation vs. integration is crucial to understanding differences both in the benefits and in costs of paid educational leave, and in its design and objectives. First, upward job mobility and career redirection require paid educational leave of the alternation

⁸ See Gary S. Becker, "Investment in Human Capital: A Theoretical Analysis," *Journal of Political Economy* (October 1962), for the seminal development of the theory of specific vs. general training. While Becker's reference was to on-the-job training, the theory applies equally to off-the-job training in which the employer is involved.

⁹ An example of half-day leave coupled with half-day study is the "20/20" plan for 10 to 15 promising but disadvantaged City of San Francisco health-care workers each year (not investigated in this paper).

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type, in which substantial educational inputs can be made free of any immediate job responsibilities. Leaves of the integration type are sufficient for antiobsolescence education and for skill updating, and that is in fact how they are used in the cases investigated.

Second, alternation schemes require external suppliers of education (e.g., the Cornell University Labor College and City University of New York community colleges in the New York City cases) in order to provide complete programs of study and accepted credentials. But integration schemes may rely on in-house training resources as well as external suppliers, who in turn are often professional associations rather than post-secondary educational institutions.

Third, paid educational leave of the alternation type is clearly much more costly than the integration type, mainly because of income maintenance for the workers on leave, but also because of higher administrative costs associated with negotiating programs with external suppliers and looking after placement of trainees upon completion of studies. Since leave plans of the integration type usually do not require replacement of the worker on leave, no additional labor cost is incurred.¹⁰ The cost to the employer for the alternation-type paid educational leave of absence in New York was reported to be \$11,000 per worker-trainee in 1975. requiring a 1 percent payroll tax to provide funding. In contrast, the integration-type leave plan of the U.S. Postal Service costs roughly \$225 per trainee in agency-provided direct training costs: the Kimberly-Clark corporation spent about \$275 per participant in its education plans; and no out-of-pocket costs were incurred by the Kaiser organizations in the California cases (costs of lost output due to absences could not exceed \$300 per trainee per year).

The Employer's Perspective

What benefits do employers receive from paid educational leave of absence for their workers? Do they regard them as an economic investment in which a return such as higher employee productivity is obtained? In six of the seven cases studied, the answer to the latter question is no. Direct benefits are not expected.

The exception is the U.S. Postal Service. Here paid educational leave of absence is offered specifically to improve enterprise productivity, and extensive benefit/cost evaluations are made. Studies by the Postal Service Training and Development Institute show positive partial correla-

¹⁰ Of course it may be that the enterprise suffers an indirect cost of lost output if the trainee's job is not covered by co-workers; if co-workers do fill in temporarily, then the cost is merely shifted from the employer to other workers. In both California cases and in the U.S. Postal Service, absences of workers for training were timed to coincide with slack work periods if possible.

tions between training investment and service output attempting to hold constant other determinants of service output such as mechanization. "An analysis of return on investment of the USPS training dollar reveals a return in excess of 12 to 1."¹¹

The reason why the Postal Service regards its paid educational leave as an investment with a favorable return is basically that the education for which it pays is largely firm-specific (ensured by the in-house design and provision of the education and the monopoly that the agency has in its industry). According to Becker's human capital theory, the Postal Service can recover its training costs if the productivity of trained workers increases more than their post-training wages and if they have low turnover. Both outcomes are likely with firm-specific training since the productivity of trained workers rises only in the firm providing training. This means that turnover will be low since it is in both worker's and employer's interest to continue employment, even for wage increases that are less than productivity increases.

But in all four New York City and California cases the paid educational leave is regarded primarily as an employee benefit. Although all costs of training are measured in the New York cases, there is no measurement of benefits to the employer—neither of immediate productivity increases of returning employees nor of longer term career patterns. Nor are data collected on more easily measured productivityrelated factors such as turnover, utilization of new skills, or job satisfaction.

In none of these four cases is the training firm-specific (even though it is job-related), and thus it is not likely that firms could recover much of their training investment because they could not subsequently pay these trained workers less than the market value of their services. If hospitals in New York required additional respiratory therapists, it might be cheaper for them to recruit such employees from the labor market than to develop them internally. Thus their regard for paid educational leave as an employee benefit rather than as an economic investment for the firm follows from the design of the leave provisions.¹²

 $^{^{11}}$ U.S. Postal Service Training and Development Institute, *Report of Activities*, *FY* 1975, p. 8. This benefit/cost ratio is a gross rather than a net measure insofar as it relates service output only to direct training cost without reckoning increased wages paid after training to those workers who are then more productive, and neither does it allow for any forgone output during training.

¹² Indeed, the origins of the New York paid educational leave plans can be traced to a time of severe shortages of health professionals when the cost of using external labor markets would have been very high. (Two other reasons why these plans were initiated are that new cost reimbursement provisions due to Medicare became available, and there were unusually committed and strong union leaders.) Currently there is an ample supply of such workers; in response all new leaves for 1977 have been cancelled.

THE ROLE OF PAID EDUCATIONAL LEAVE

Is there a place for paid educational leave of absence in the employment and training policy of a firm? The key to the answer lies in the design of the leave. If the leave is microalternation or integration between work and education, the answer is yes. If the leave is genuine alternation between work and education, the answer is no.

When paid educational leave of absence is brief and/or the study is part time, the worker-trainee's job is not vacated. Training can be scheduled to fit slack work times or co-workers can cover some of the trainee's work, and so the costs of training to the firm are low (or at least only partly visible). Education can be provided in-house, tailored to the employer's needs, and used to update (if not upgrade) skills. Thus paid educational leave of the integration type can be firm-specific and the firm can obtain benefits, recover its costs, and regard the leave as a private economic investment. As a new element in firm-level manpower policy, integration-type paid educational leave of absence can succeed.

But when paid educational leave of absence is long in duration, the worker-trainee's job is vacated, a replacement must be hired, and the total costs of training are high. External suppliers of education are required, full-time study is likely, and the training can be promotional, resulting in an upgraded job for the trainee. The benefits to the workers are obvious and large, but the employer is not likely to receive any benefits privately, even if the education is vocational. Training of this type is not likely to be firm-specific, and so the firm's investment in training can not be recovered. If there are external labor markets from which desired skills can be recruited at reasonable cost, there is no reason to expect firms to make investments in training of the alternation type. Instead, such investments are in society's interests since there are social equity as well as economic efficiency benefits. A governmental role is appropriate, as European examples have shown.

APPENDIX

Basic Data on Selected Paid Educational Leave Programs, 1976

Employer and Union Item	Kaiser Permanente Medical Care Services (N. Calif.) with Local 250 SEIU and California Nurses Assoc.	League of Voluntary Hospitals and Homes of New York with District 1119 NUHHCW	
Background on employer	ics; 11,000 employees of which 4,500 are members of Local 250 (service workers, semiprofessionals, practical	hospitals and nursing homes (New	Public-sector agency employing 670,000 workers; two large unions but they play no role in paid educational leave
Organization, duration of leave		Almost all 5 months to 2½ years continuous full-time study; mode is	Individual courses range from ½ day to 26 weeks; most are 1-3 weeks (full days); sometimes strung together into longer durations
Educational content	current job or next job in logical pro-	Vocational, directly related to needed skills and upgraded jobs; programs in basic health areas as labor market conditions dictate	Job-related, geared to perform current or new job better; courses in management development and technical or craft skills
Credentials		2-year college degree usually received	Many management courses carry contin- uing education college credit; otherwise in-house certificate of completion
Who supplies education	Post-secondary educational institu- tions, professional associations, con- sulting firms; employer judges rele-	Post-secondary educational institu- tions, mainly City University of New York community colleges on their campuses (but some in hospitals); arranged by Hospital League/District 1199 Training and Upgrading Fund	In-house by Postal Service Training and Development Institute at Washington Management Center and 5 regional loca- tions, plus Technical Training Center at Norman, Okla.; PST & DI staff decides content with university consultation
Selection of trainees		Application to Fund; selection on basis of academic readiness as mea-	Employees whose needs for training ob- jectives set each year by PST & DI area asked by local or regional management to participate
Occupation, age, sex of trainees	Mainly women age 35 or under in professional or semiprofessional jobs	85 percent women (union is 70 per- cent female), mostly 24-35 years old, few over 40, mainly nurses' aides, practical nurses	Largest number are first-line supervisors and low-level (especially new) managers; also many craft workers; mostly men; average age unknown

Relation of education to work	Job not vacated since leave is usually only 1-3 days at a time; no replace- ments hired for leavers; training is often highly vocationally specialized but not firm-specific; job mobility not expected; in-service (off-the-job) training is a substitute for leave; pro- ductivity, job satisfaction not mea- sured	other employment permitted; replace- ments are hired; training programs of- fered for purpose of upgrading skills and qualifying workers for better job; trainees almost always return to	Job not vacated and no replacement hired, study is full days but brief (≤ 3 weeks usually); training is career- oriented, designed to improve perfor- mance in new, higher-level jobs, but not tied to promotion directly; productivity gains for the agency are measured, be- lieved large
Size and participation	350-570 participants in 1975; 10-25 percent of registered nurses, <5 per- cent of other workers; leave begun in 1959 with CNA, 1969 with Local 250	242 on regular arranged leave in 1975 plus some "independent" students; 600 participants in last 5 years; all spaces filled; leave begun in 1971	68,125 participants in 1975 (10 percent of all employees are offered leave) and 321,300 person-days of training in major off-the-job programs
Costs	No out-of-pocket costs since no re- placements hired, tuition and fees not paid; opportunity costs potentially \$7.50 per hour for nurses, \$5 per hour average for others, or maximum of \$300 and \$200 per worker per year, respectively	Trainees paid 85 percent of salary up to \$150 per week plus tuition; aver- age cost per trainee was \$11,000 in 1975, financed by 1 percent gross payroll tax on employers; total expen- diture \$4.1 million (includes some ac- tivities not paid leave)	Direct costs average \$225 per trainee or \$34 per person-day for management training and \$57 for technical training; \$14.4 million total expenditure in 1975; opportunity costs not known (no re- placements hired), but likely less than direct costs (perhaps \$10 million max- imum)
Labor union role	Initiated, negotiated leave but no ac- tive administration involvement	Central, active; union initiated, nego- tiated; operated as separate program with joint union-management gov- ernance, but union-located, union- associated director	Not involved; little interest since most
Public authority role	No active role; may indirectly spur participation via state continuing ed- ucation requirements for relicensure	No active role; public educational in- stitutions cooperative but nonrespon- sive, not geared to needs of adult worker; state requires credentials which make leave necessary	None

Notes: Basic data for Kaiser (S. Calif.) with Local 399 SEIU is roughly similar to that for Kaiser (N. Calif.) after which it was modeled in 1975. Basic data for Hospital Corporation of New York with District Council 37 AFSCME is roughly similar to that of the League of Voluntary Hospitals with District 1199 except it is smaller in scale and receives some federal funding. The third New York City program involves Metropolitan Nursing Homes Association and Proprietary Hospitals Association with Local 144 SEIU. This program is new in 1976 and differs from the other New York programs insofar as only clinical portions of training are on leave from employment. Only a small portion of the Kimberly-Clark educational program constitutes paid educational leave.

DISCUSSION

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It is difficult to evaluate thoroughly four papers as different in substance and method as these in a brief period of time. However, these papers do seem to fall into two general categories which makes analysis somewhat easier.

The first category contains the papers by Blair and Conner, "Speech Styles and Employment Opportunities," and by Hanna, "Employment Service Potential." Both papers contain interesting concepts still in a formative stage with their policy implications as yet unclear. The ideas presented in them need further development if their policy applications are to become apparent.

The Blair and Conner paper presents results of an experiment which indicate the negative impact nonstandard speech styles have on employment opportunities. It would be useful to see the experiment repeated in other labor markets, particularly those labor markets with large numbers of people speaking nonstandard English. It would be especially interesting to know if the reactions of employers with more exposure to Black English, particularly when the management people making the employment decisions are themselves black, differ from those of the white respondents in the study. Finally, it is obvious that normally employment decisions are based on more than just speech patterns. Integrating the impact of speech styles with other variables influencing employment decisions so that the impact of speech along with those variables seems to be a natural step from the work already done.

Employment Service Potential (ESP), presented in the Hanna paper, provides an estimate of the number of hiring transactions that any individual U.S. Employment Service could have been involved in during a given time period. Hanna presents the concept thoroughly, and suggests that it has applications with respect to various employment service policies, including funding. These potential uses for ESP bear further investigation, both for the Nevada labor markets discussed and for a variety of other labor markets.

Both papers in the second category are case studies, and clear policy recommendations result from careful analysis in each. Nollen, in "Paid

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Educational Leave: New Element in Firm-Level Manpower Policy," says that firms have little incentive to provide training unrelated to workers' productivity to that employer. He concludes by suggesting that any serious efforts to provide workers with full-time and long-term training, which is of increasing importance due to the rapidly changing technological structure of our economy, will probably have to be dependent on governmental design and funding. The question left to be answered is under what circumstances government is likely to become involved in this kind of manpower policy. Clearly it provides training of this sort, but generally only under crisis conditions. Manpower policy has usually had a curative focus, not a preventive one. Is it possible for it to become more fully developed as a preventive tool?

Jick's paper, "Coping With Job Loss: An Integration of Research, Application, and Policy Development," recognizes that little manpower research has been directly relevant to policy, and outlines an instance in which research flowed from policy needs and in turn helped shape policy. This is clearly a consummation devoutly to be wished, and he ends with a clear challenge to develop and extend action research.

The action research described in Jick's paper resulted from a mediator's suggestion on how to end a collective bargaining impasse. Government-employee layoffs caused the impasse, and one senses the desperation which paved the way for the negotiators' acceptance of the committee which eventually developed the interplay between research and policy.

Both Jick and Nollen leave us with an unanswered question. Under what circumstances are changes in traditional policy feasible? Given difficulties in changing most institutional arrangements, are crisis or desperation necessary prerequisites for integration of research results with policy design? Is there another way for research to become translated into policy? They have suggested some directions for further thought, and, hopefully, future action.

IX. EMPIRICAL INROADS INTO BARGAINING THEORY

Bluffing in the Bargaining Process: An Empirical Test^{*}

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Recent papers by Hamermesh¹ and Bognanno-Dworkin² plus a forthcoming paper by Bowlby-Schriver³ have stimulated considerable interest in split-the-difference models as developed independently by Zeuthen⁴ and Nash.⁵ Hamermesh proposes that if one accepts split-thedifference as a valid model under conditions of bilateral monopoly, then deviations from the Nash solution can be viewed as measures of differential bluffing by the parties. Bognanno and Dworkin suggest that public-sector employers may pursue tactics of Boulwarism, and they hypothesize that bluffing failures by unions are an equally plausible explanation for not finding split-the-difference results.

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¹ Daniel S. Hamermesh, "Who 'Wins' in Wage Bargaining?" Industrial and Labor Relations Review, vol. 26 (July 1973), pp. 1146-49.

² Mario Bognanno and James Dworkin, "Comment," Industrial and Labor Relations Review, vol. 28 (July 1975), pp. 570–72.

³ R. L. Bowlby and W. R. Schriver, "Bluffing and the 'Split-the-Difference' Theory of Wage Bargaining," *Industrial and Labor Relations Review*, vol. 31 (January 1978).

⁴ Frederick Zeuthen, *Problems of Monopoly and Economic Warfare* (New York: Augustus M. Kelley reprints of economic classics, 1968) (first published in Danish in 1928 and English in 1930).

⁵ John Nash, "The Bargaining Problem," *Econometrica*, vol. 18 (April 1950), pp. 155-62.

The present authors are specifically interested in bluffing activity and its empirical interpretation in the bargaining process. Our results and analyses are primarily differentiated from the above authors' works in that we track the path of bluffing from the initial difference through two additional exchanges to the settlement point.

First, we examine data from public-sector negotiations to determine if actual bargaining takes place by testing individually the slopes (where slope is defined as concession per exchange by the respective parties) of the line segments of the concession (resistance) curve for equality. If management is not very responsive or is responding to something other than the union, we expect a straight line through the management offers to the settlement point which will have a slope significantly different from that of the union resistance curve. Second, we test for bluffing symmetry. Given symmetric bluffing, the corresponding line segments connecting the four points on both the concession and resistance curves will have slopes of equal absolute value. Simply, we anticipate that any change in the slope from one line segment to the next on the union resistance curve will be met by an analogous change on the concession curve. Lastly, the degree of managerial responsiveness is measured by dividing the percentage change in the management offer, relative to the difference between the parties, by the percentage change in the union demand.⁶ This coefficient provides an alternative test for Boulwarism as well as bluffing symmetry. Under conditions of pure Boulwarism, the coefficient assumes a value of zero. The inference is that no matter what the union does, no matter how large a reduction in demands, management simply does not respond. A coefficient greater than zero but less than one indicates that there may be some Boulwarism tendencies present. Coefficients exceeding unity show that management is very responsive to changes in union demands. If bluffing symmetry exists, the coefficient assumes unity.

Before we turn to the analysis, a brief discussion of the data and the bargaining environment that generated it is appropriate.

The Data⁷

Our data are based upon 16 years of bargaining experience between the Tennessee Valley Authority (TVA) and a group of international

⁶ ($\Delta M/D$)/($\Delta U/D$), where ΔM = change in management offer from the previous offer; D = distance (in dollars) between union and management at the previous position; and ΔU = change in union demand from the previous position.

⁷ The description of bargaining at TVA was abstracted from Bowlby and Schriver, "Bluffing" For a more authoritative reference, see M. L. Brookshire and M. D. Rogers, *Collective Bargaining in the Federal Service: The TVA Experience* (Lexington, Mass.: D.C. Heath and Co., 1977).

unions that represent TVA's construction trades and labor employees. These wage negotiations cover the 1960–75 period and have determined the wage rates for a minimum of about 8,000 and a maximum of about 12,000 workers each year.

The group of unions bargains as the Tennessee Valley Trades and Labor Council which now consists of 16 international unions, most of which are members of the Building Trades Department of the AFL-CIO.⁸ The international representatives meet with the same management as executives of the Council at an annual wage conference, yet they bargain separately;⁹ each international makes its own proposal and counterproposals and presents its own data to substantiate its claims. The Council has no staff, and each international representative is responsible to his own general president. Locals of these unions in the Tennessee Valley attend the wage conference but have no ratification rights with respect to ultimate agreements. The agreements are between TVA and the Council with each international negotiating a separate wage rate.

The annual wage conference is held in December, and wages are negotiated for the subsequent calendar year. The accepted procedure is that each international presents to TVA an initial wage demand about 3 days before the wage conference and TVA responds with a counteroffer during the first day of the conference. Thereafter, the counterdemands and counteroffers are separated by hours or sometimes a few days until a settlement or impasse is reached. Strikes are illegal and rare. Impasses are settled by the Secretary of Labor, but this solution is unusual.

Wage-settling at TVA is not covered by state or national labor legislation, the Civil Service Commission, or Executive Orders 11491 and 11616, but is grounded in Section 3 of the TVA Act¹⁰ which requires payment of "the prevailing rate of wages for work of a similar nature prevailing in the vicinity" to TVA's "mechanics and laborers." Wage conferences have been held by TVA and the Council since 1936 to bargain about prevailing rates in the vicinity and, for that matter, the vicinity itself.

⁸ In alphabetical order by their common names: asbestos workers, boilermakers, bricklayers, carpenters, electrical workers (IBEW), ironworkers, laborers, lathers, machinists, marble setters, operating engineers, painters, plasterers, plumbers, roofers, and teamsters. They are listed out of order in the tables.

 $^{^9}$ Work rules and other nonwage topics are negotiated at different conferences, so the wage bargaining data are not complicated by work rule/wage tradeoffs. Also, wages for white-collar employees are bargained at separate wage conferences with different unions.

¹⁰ 48 Stat. 58 (May 18, 1933).

The wage vicinity is presently defined as an area somewhat larger than the Tennessee Valley (all of Tennessee and parts of seven other states) and usually only union rates in the 14 major cities in that area are considered.

Although normal bargaining topics such as ability to pay and cost of living are not discussed at the conferences, serious bargaining does occur concerning current and anticipated union rates. In December when the conferences are held, many rates in the forthcoming year are unknown. Union negotiators attempt to exaggerate anticipated wage increases, while management generally views the future in more conservative terms.

Although each wage conference produces several hundred rates, our data consist of only 16 rates—the single most important rate for each union (determined by the number of TVA employees covered by the rate). Most of the other rates for a given union conform to the same pattern and are consistently related to the rates used in our analysis.

TVA has preserved in its archives the data from each wage conference, which include current union rates in the 14 cities (as of December of each year and including rates already negotiated for the next year if effective prior to April), each union demand, each TVA offer, final settlement, and the dates (and often the hour) of each of these entries. We selected the 1960–75 conference data (1975 was the most recent conference when our analysis was originally begun), and have limited the analysis to the first three demand/offer exchanges and final settlements. This resulted in 236 distinct wage bargains¹¹ for our analysis.

Table 1 presents average annual offers $(M_1, M_2, \text{ and } M_3)$, demands $(U_1, U_2, \text{ and } U_3)$, and settlement(s) for each craft. The sequence of offers (demands) is indicated by the numerical subscript; 1 represents the first offer; 2 the second, and 3 the third. Before testing our hypotheses it is necessary to define the line segments that comprise the concession and resistance curves.

Slope a is the slope of the line segment connecting the first and second union demands; b is the slope of the line segment connecting the second and third demands; c is the slope of the line segment connecting the third demand and settlement; d is the slope of the line segment joining the first and second offers; e is the slope of the line joining the second and third offers; and f is the slope of the line joining the third offer and the settlement point. It is assumed that first offers and

 $^{^{11}}$ Four observations are missing because the bargaining record could not be unambiguously interpreted. Sixteen additional observations were excluded because settlement occurred prior to the third exchange.

Craft	M_1	M_{2}	M_{3}	U_1	U_2	U_3	\boldsymbol{S}
1	587.30	593.10	598.25	661.60	638.35	631.10	608.50
2	535.71	539.82	544.64	591.43	576.07	569.64	553.93
3	547.46	551.88	555.63	577.92	572.42	567.08	560.63
4	456.06	459.38	462.03	495.63	490.19	485.16	468.75
5	515.03	518.59	522.03	561.25	553.63	547.84	531.72
6	501.84	505.63	509.22	537.44	532.13	528.38	516.72
7	297.90	301.17	304.33	325.00	318.67	313.50	307.67
8	473.25	475.96	481.46	507.08	506.25	502.71	489.79
9	496.00	499.50	503.17	537.93	531.50	526.33	511.50
10	489.53	495.16	498.91	532.34	530.94	523.28	510.00
11	475.31	478.44	481.88	513.75	508.91	504.69	489.84
12	434.91	438.44	441.94	467.34	464.56	460.26	449.44
13	404.82	408.93	412.14	436.89	431.71	428.82	419.36
14	504.22	508.91	511.84	554.09	544.09	538.25	523.25
15	521.34	524.84	529.22	554.06	551.59	548.13	537.81
16	334.84	337.50	346.41	381.56	373.31	372.13	346.25

TABLE 1

Annual Average Offers, Demands, and Settlements in Cents Per Hour, 1960-75

demands occur at T = 1 with succeeding offers and demands tendered at T = 2 and 3. Settlement takes place at T = 4.

The first set of hypotheses to be tested is that the three segments of the concession curve are equal in slope and that the three segments of the resistance curve are equal in slope. This hypothesis would imply that both parties had colluded in selecting a mutual settlement target, i.e., the prevailing rate, and that true bargaining did not take place, invalidating further analysis within the framework of conventional bargaining theory. If the segments of one curve alone were equal, while the other curve had unequal segment slopes, Boulwarism would be implied.

The hypotheses are:

$$\begin{array}{ll} \mathrm{HO}_{1}: & a = b = c \\ \mathrm{HO}_{2}: & d = e = f \end{array}$$

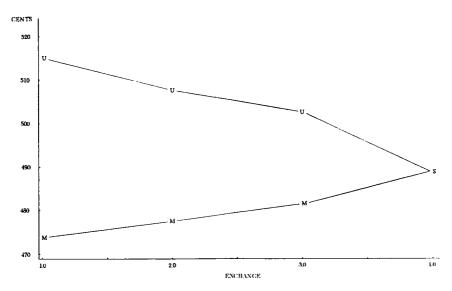
Table 2 presents the results of this test. The mean value of the slopes for all crafts over all years is presented for both unions and management at each step of the negotiation process. The F test for the union reveals that we must reject HO₁. Not all of the means are equal. To determine if any of the slopes are equal, we apply Fisher's Least Significant Difference Test. The least significant difference, LSD, for the union is 2.103 which indicates that $a \neq c$ and $c \neq b$. We cannot reject the hypothesis that a = b. The management line segments yield similar results; we must reject HO₂: d = e = f. The LSD test indicates that we cannot reject that d = e. As neither management nor union exhibits straight-line concession and resistance curves, respectively, the first and second hypotheses are rejected on the basis of the tests shown in Table 2. We can also reject the case of Boulwarism on the part of management. Chart I shows the concession and resistance curves derived from a plot of the line segments.

TABLE 2
Fisher Least Significant Difference Test for Concession and Resistance Curve Line Segments for All Crafts and Years

	Union Resistance Curve			Managem	nagement Concession Curve		
	с	а	ь	f	е	d	
mean slope F LSD	13.90	$6.62 \\ 35.62 \\ 2.103$	5.59	8.45	$4.12 \\ 28.77 \\ 1.338$	3.82	
	HO: $a =$	HO: $a = b$ cannot reject HO: $a = c$ reject HO: $b = c$ reject		HO: d = HO: d = HO: e = HO:		ject	

CHART I

CONCESSION AND RESISTANCE CURVES



Thus, we conclude that actual bargaining between the parties did indeed take place; and therefore, we can proceed with an analysis of bluffing in this relationship.

The second set of hypotheses proposes symmetric bluffing. The indi-

vidual hypotheses are: HO₃: a = d, HO₄: b = e, HO₅: c = f. Table 3 presents the results. For all crafts over all years, we reject all three hypotheses at the .05 level. The parties are bluffing asymmetrically at all three stages of the process.

Table 4 reinforces and extends the arguments developed in Table 3. Table 4 shows managerial responsiveness to changes in union demands.

-			-
Craft	a = d	b = e	c = f
1	23.25 = 5.8	7.25 = 5.15	22.6 = 10.25
$1 \\ 2 \\ 3$	15.36 = 4.11	6.43 = 4.82	15.71 = 9.29
3	5.5 = 4.42	5.33 = 3.75	6.46 = 5.0
4	5.44 = 3.31	5.03 = 2.66	16.41 = 6.72
5	7.63 = 3.56	5.78 = 3.44	16.13 = 9.66
6	5.31 = 3.78	3.75 = 3.59	11.66 = 7.5
4 5 6 7	6.33 = 3.27	5.17 = 3.17	5.83 = 3.33
8	.83 = 2.71	3.54 = 5.5	12.92 = 8.33
8 9	6.43 = 3.5	5.17 = 3.67	14.83 = 8.33
10	1.41 = 5.63	7.66 = 4.38	13.28 = 11.09
11	4.84 = 3.13	4.22 = 3.44	15.16 = 7.97
12	3.09 = 3.53	4.3 = 3.5	10.83 = 7.5
13	5.18 = 4.11	2.89 = 3.21	9.46 = 7.21
14	10.0 = 4.69	5.84 = 2.94	15.0 = 11.41
15	2.47 = 3.5	3.47 = 4.38	10.63 = 8.59
16	8.25 = 2.66	13.38 = 8.91	25.88 = 12.34
All Crafts	6.62 = 3.82	5.59 = 4.12	13.9 = 8.45
	$t = (4.21)^{**}$	$t = (2.13)^*$	$t = (4.44)^{**}$
	n = 236	n = 236	n = 236

TABLE 3
Slopes of Concession and Resistance Curve Line Segments

* P <.025; ** P <.005

TABLE 4

Managerial Responsiveness to Changes in Union Demands^a

Craft	a/d	e/b	f/c
1	.51	. 67	.51
2	.24	.43	.69
3	.61	.90	1.05
4	.63	.54	.48
5	.38	.61	.60
6	.85	1.04	.78
7	.63	.87	.59
8	0	1.01	.93
9	.76	.74	.81
10	1.30	.63	1.04
11	.73	.89	.85
12	1.54	.79	.55
13	.94	1.17	.64
14	.55	.53	.74
15	. 97	.74	1.53
16	.44	.48	.38
All Crafts	.70	.74	.74
* .995 confiden	ce interval	.57 < .70 < .83 .64 < .74 < .84	.59<.74<.89

A coefficient of 1 indicates that management is responding symmetrically to changes in union demands. Coefficients less than 1 indicate a less responsive management, and those values exceeding unity would indicate a very responsive management. We find for all three stages of negotiations that the coefficient of management responsiveness is less than unity. Management probably is responding to some previously selected wage target as well as to changes in union demands. Only two crafts (10 and 12) display coefficients exceeding 1 at the first step (d/a). At step two (e/b), there are three coefficients (6, 8, and 13) exceeding unity and three at the third step (f/c).

In conclusion, we find that Boulwarism is absent, and differential bluffing (or bluffing success) exists at each stage of the process. In addition we conclude that management and the union did not follow symmetrical bargaining curves and that a split-the-difference test would not be a valid test of union wins or losses.

Time and Learning in the Bargaining Process: A Test of Cross's Theory

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The "Nash hypothesis" is used as a reference point to help place our paper in relation to the development of bargaining literature. Simply stated, Professor Nash's theory leads to the behavioral deduction that two parties negotiating over the division of M dollars will agree on a split of M/2 dollars going to each.¹ To cast the problem differently, if the union demanded a 15 percent increase in wages and management offered a 5 percent increase, then the Nash result is a settlement of 10 percent. The parties would "split the difference" separating their respective positions. The Nash result is derived from a number of assumptions which represent the special case in which each party, in effect, is negotiating against his mirror image. Heuristically, it makes sense to conclude that in this special case each negotiator would agree to share evenly with his opposite (i.e., his mirror image).

Attempts have been made to test the "Nash hypothesis."² Students involved in this effort know that to conduct a "fair" test of this hypothesis, it is necessary that observed bargaining pairs have (i) identical preferences, (ii) full knowledge about each other's tastes (i.e., no bluffing), and (iii) equal bargaining skill. If these conditions do not hold, then provision must be made to control for them. Otherwise, it

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¹ John F. Nash, Jr., "The Bargaining Problem," *Econometrica* (April 1950), pp. 155–62.

² New empirical inroads into tests of the "Nash hypothesis" are represented by the following sequence of articles: Daniel Hamermesh, "Who 'Wins' in Wage Bargaining?" *Industrial and Labor Relations Review* (July 1973), pp. 1146–49; Mario Bognanno and James Dworkin, "Comment," *Industrial and Labor Relations Review* (July 1975), pp. 570–72; and Roger Bowlby and William Schriver, "Wage Bargaining in Theory and Practice," *Industrial and Labor Relations Review* (January 1978).

would be strictly fortuitous to discover the Nash outcome. However, it appears that what is of academic and practical interest is to determine and test the bargaining consequences which result when conditions (i)–(iii) do not hold. For instance, one may ask—as Bowlby and Schriver do implicitly—how does differential bluffing behavior cause the negotiated outcome to deviate from the Nash norm?³

In this paper we carry the exploration into bargaining behavior a step further by analyzing the role of "learning" and of "time preference" on the bargaining process and outcome. As with "bluffing," it is hypothesized that differences in learning ability and differences in the importance one places on the timing of an agreement will affect the process and outcome of a bargaining episode. In effect, we test a model of John Cross's theory.⁴ The latter builds on Nash's seminal piece. It is a dynamic, formal explanation of bargaining whose validity is dependent upon a rather rigid parametric structure. Using experimental data, we test Cross's theory by estimating his learning and discount parameters.

Without presenting a full display of the many hypotheses derived by Cross, we sketch in nonformal terms some central ideas of his theory. It is assumed that Party 1 and Party 2 are negotiating over the division of M—defined as a fixed, homogeneous quantity—and that conflict exists when the sum of their respective demands, denoted as q_1 and q_2 , exceeds M.

Each party's initial demand (the q_i 's, i = 1, 2) is that level of q which maximizes his net present value utility gain from agreement on those terms (i.e., \bar{q}). Given each party's utility function, $f_i(q_i)$, i = 1, 2, and loss function, C_i , i = 1, 2, the psychological process followed in determining the maximizing levels of q involves a simple discounting operation. Cross uses Party 1 and Party 2's own "marginal rate of time preference," denoted as a and b, respectively, as the rates of discount. To determine the appropriate discounting period, Cross introduces the concept of "expectations." He imagines a negotiator whose demand is based on his expectations about how fast his opponent will concede, denoted as r_2 and r_1 for Party 1 and Party 2, respectively. Thus, given the opponent's demand and his expected rate of concession it is a simple matter to determine the amount of time that must elapse before agreement is reached on one's own terms.

These pieces in place, the process followed in reaching agreement (i.e., $\tilde{q}_1 + \tilde{q}_2 = M$) involves (1) a revision of one's own expectations

³ Bowlby and Schriver.

⁴ John G. Cross, *The Economics of Bargaining* (New York: Basic Books, 1969), p. 247.

about the opponent's concession behavior, which leads to (2) a revision of one's guess about the period of time it will take to reach agreement on one's own terms, which in turn leads to (3) a revision in one's own level of demand. In theory, as Cross's negotiators follow this sequence of revisions, they are observed iterating toward an agreement. Of course, this process of converging demand rests on a number of stability assumptions.⁵

To motivate the process of concession described in the previous paragraph, Cross introduces the idea that each party learns about his opponent by observing his concession behavior. Accordingly, as bargaining proceeds, if the opponent's actual concession rate (denoted as \dot{q}_i , i =1, 2), differs from that which was expected (r_i , i = 1, 2), then the party will take note (i.e., "learn") and proceed to adjust his expectation about his opponent's concession behavior (\dot{r}_i , i = 1, 2). This adjustment causes the party to revise his estimate of the time it will take to reach agreement—an adjustment which results in a revision of his own demand (\dot{q}_i , i = 1, 2).⁶ The rate at which the latter adjustment occurs depends, in part, upon the magnitude of each party's learning parameter, denoted as α and β for Party 1 and Party 2, respectively.⁷

Treating r_1 and r_2 , q_1 and q_2 as variables, we empirically estimate the parties' learning parameters (α and β) and discount rates (a and b). Under the linearity assumptions in our empirical model, if the estimated values for each pair of parameters are not equal, that is, $\alpha \neq \beta$ and $a \neq b$, then the observed outcome from bargaining may deviate from the Nash norm.⁸

The Empirical Model and Estimation Procedure

The empirical model presented in this section was developed to test Cross's theory.

It already has been stated that each party's concession rate depends upon the rate at which he changes his expectations of the opponent's rate of concession. This relation is expressed as:

⁵ Cross, pp. 42-68.

⁶ Cross.

⁷ Convergence toward the point of agreement, stability, is assured if $\alpha < a$ and $\beta < b$. As Cross stated: "[I]f the players' learning rates are high (α and β large) and if they tend to respond markedly to changes in their expectations (a and b small), then an increase in one player's demand (or a reluctance to concede) will give rise to a relatively large concession from the other which, in turn, will reinforce the first player's demand for a larger share of the outcome." Cross, p. 75.

⁸ Cross, p. 58.

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(1)
$$\dot{q}_1(t) = 1/a \dot{r}_2(t)$$
; and $\dot{q}_2(t) = 1/b \dot{r}_1(t)$.

Further, it has been suggested that a party's expectation of his opponent's concession rate is a function of the difference between the opponent's actual concession rate and the expected rate during the previous round. This relation may be expressed as:

(2)
$$\dot{r}_2(t) = -\alpha[\dot{q}_2(t-1) + r_2(t-1)];$$
 and $\dot{r}_1(t) = -\beta[\dot{q}_1(t-1) + r_1(t-1)].^{10}$

Equations (1) and (2) imply that changes in demands from round t to round t+1 will determine the demands and expectations for round t+2. Given stability conditions, this process continues round after round until an agreement is reached. By gathering data on changes in demands and in expectations from round to round, one can estimate the magnitude of a, b, α , and β and predict the course to be followed throughout a bargaining episode as well as its outcome. Under stable conditions, Cross hypothesized the following:

$$H - 1: 0 < a < a; and H - 2: 0 < \beta < b.$$

To prepare the model for testing one merely need develop relations for each party which expresses \dot{q} and r as functions of actual and expected concession rates in preceding rounds. This is done first by substituting (2) into (1). Then, given the definitions in

(3)
$$r_1(t) = \dot{r}_1(t) + r_1(t-1)$$
 and $r_2(t) = \dot{r}_2(t) + r_2(t-1)$,

and by substituting (2) into (3), one derives the following pairs of equations,

⁹ These relations are derived from Cross's theory. From Party 1's perspective, (1) was derived in the following manner. Party 1 is assumed to maximize the relation $U_1 - f(q_1)e^{-avv} + (C_1/a)(e^{-avr}) - C_1/a$, where U_1 measures the net utility flowing to Party 1 at the time of agreement, $f(q_1)$ is assumed to be greater than zero, w is the anticipated length of time it will take to reach an agreement, e^{-avo} is a discounting function assumed to exist such that $f(q_1)e^{-av}$ is the present value of a demand for quantity q_1 and $C_1/a(e^{-av} - 1)$ is the present value of losses for postform greement until quantity q_1 is reached. The remaining terms have been defined in the text.

We assume that $f_i(q_i)$, i = 1, 2, is linear and that C_i , i = 1, 2, equals zero. Accordingly, differentiating the first-order condition for a maximum of U_1 with respect to time and solving for \dot{q}_1 yields $\dot{q}_1 = 1/a \dot{r}_2$. Finally, assuming that Party 1 (and Party 2) adjusts his demand in the same period he adjusts expectations as to his opponent's rate of concession permits us to write the latter equation as $q_1(t) = 1/a \dot{r}_2(t)$.

¹⁰ These specifications imply, as Cross does, that "learning" occurs as a constant proportion of the error in expectations.

(4)
$$\dot{q}_1(t) = -\alpha/a [\dot{q}_2(t-1) + r_2(t-1)],$$

 $\dot{q}_2(t) = -\beta/b [\dot{q}_1(t-1) + r_1(t-1)];$ and

(5)
$$r_2(t) = (1-\alpha) r_2(t-1) - \alpha \dot{q}_2(t-1), r_1(t) = (1-\beta) r_1(t-1) - \beta \dot{q}_1(t-1).$$

Second, equations (4) and (5) may be used to create equations for $\dot{q}_1(3)$ and $\dot{q}_2(3)$ as functions of $\dot{q}_1(1)$, $\dot{q}_2(1)$, $r_1(1)$, and $r_2(1)$:

(6)
$$\dot{q}_{1}(3) = (\alpha\beta/ab)\dot{q}_{1}(1) + (\alpha\beta/ab)r_{1}(1) + [\alpha(\alpha-1)/a]r_{2}(1) + (\alpha^{2}/a)\dot{q}_{2}(1); \text{ and} \\ \dot{q}_{2}(3) = (\alpha\beta/ab)\dot{q}_{2}(1) + (\alpha\beta/ab)r_{2}(1) + [\beta(\beta-1)/b]r_{1}(1) + (\beta^{2}/b)\dot{q}_{1}(1)$$

Subtracting $q_1(3)$ from $q_2(3)$ in (6) yields:

(7)
$$(\dot{q}_{1}(3) - \dot{q}_{2}(3)) = [(\alpha\beta - a\beta^{2})/ab]\dot{q}_{1}(1) + ([\alpha\beta - a\beta(\beta - 1)]/ab)r_{1}(1) + ([\alpha b(\alpha - 1) - \alpha\beta]/ab)r_{2}(1) + [(\alpha^{2}b - \alpha\beta)/ab]\dot{q}_{2}(1).$$

Finally, by rewriting (7) as

(8)
$$\gamma(3) = \gamma_0 + \gamma_1 \dot{q}_1(1) + \gamma_2 r_1(1) + \gamma_3 r_2(1) + \gamma_4 \dot{q}_2(1) + \mu$$

where γ_{i0} , γ_1 , γ_2 , γ_{i3} , and γ_4 are estimated regression coefficients and μ is assumed to be a random error term, our model is prepared for estimation. The regression coefficients γ_i , i = 0, 4, in equation (8) equal the reduced-form parameters associated with common variables in equation (7). By simultaneously solving the four equations making up the parameters in (7) in terms of their corresponding regression coefficients in (8) yields:

$$\beta = [\gamma_1 - \gamma_3 - (\gamma_1/\gamma_2 - \alpha_1); \alpha = ([\gamma_3(\gamma_2 - \gamma_1)]/[\gamma_1 + \beta(\gamma_2 - \gamma_1]) + \gamma_2 - \gamma_1 + 1; b = \beta/(\gamma_2 - \gamma_1); \text{ and } a = \alpha\beta/b\gamma_1 + \beta^2.$$

Further, given the hypothesized relations H-1 and H-2, the signs of the coefficients in (8) may be stated a priori: $\gamma_1 > 0$; $\gamma_2 > 0$; $\gamma_3 < 0$; and $\gamma_4 < 0$.

The parameters in equations (7) and (8) may be estimated from data collected on $q_i(t)$ and $r_i(t)$, i = 1, 2, over a number of rounds of negotiations. The operating definition of r(t) is in (3) and that of $\dot{q}(t)$ is q(t-1) less q(t). In principle, data on these variables can be obtained from actual negotiating sessions. However, since real-world datagathering efforts in collective bargaining often encounter serious problems, we use data generated through an experimental process.

The experiment adopted was tailored after Siegel and Fouraker's.¹¹ With iso-profit tables in hand,¹² a total of 53 bargaining pairs were observed bargaining in three different experimental sessions during the Fall 1975-76. All subjects were students enrolled in introductory courses in Industrial Relations at the University of Minnesota. All participants knew that the values on the iso-profit tables represented actual dollar amounts they could earn through earnest bargaining. The maximum joint profit level in the table was \$10.80 and corresponded to the price-quantity "agreement" of $p = 150\phi$ and q = 9. An agreement on these terms represented the Nash result.

The experiment proceeded with parties, physically separated, recording their price-quantity demands on slips of paper which were exchanged with their opponent each round. Subjects could either accept the offer or counter it in the next round. The negotiators knew (1) that no more than 15 rounds of bargaining were permitted, (2) that an impasse resulted in zero benefits, (3) one another's profit level associated with each price-quantity demand, and (4) that reneging was prohibited.

From the proposals and counterproposals, data on the actual concession rates were calculated. Data pertaining to expected concession rates were collected by merely asking each party to indicate the pricequantity demand he expected from his opposite in the next round. This information was plugged into equations (3) to come up with $r_1(t)$ and $r_2(t)$ values.¹³

Results and Conclusions

The descriptive results of the bargaining experiment are quite interesting. Table 1 presents data regarding the number of agreements reached by the round number.

Cross assumes that the parties are motivated to bargain because net

Tattern of Agreement by Notinu					
Rounds	Number of Agreements	Percent of Total			
1-5	4	7.5			
6-10	25	47.0			
11-15	23	43.2			

TABLE 1 Pattern of Agreement by Round

¹¹ Sidney Siegel and Lawrence E. Fouraker, Bargaining and Group Decision Making (New York: McGraw-Hill Book Co., 1960), p. 132.

¹² Copies of the tables appear in Siegel and Fouraker, pp. 114-15.

¹³ The experimental procedure is discussed in Ch. IV of James B. Dworkin, "A Reformulation and Empirical Analysis of Cross' Economic Model of Bargaining," Ph.D. dissertation, University of Minnesota, 1977.

benefits flow to each at the time of agreement. Fifty-two out of 53 of our teams reached agreement and earned a profit. Too, Cross theorizes that as the impasse deadline approaches, costs will rise, ceteris paribus, causing additional concessions and, thus, greater pressure for agreement. Preimpasse costs are usually low compared to costs during the impasse.¹⁴ The pattern of agreements in Table 1 is consistent with this perception as the bargainers in our experiment knew that neither party would profit by a breakdown, and by the 15th round all but one of the teams reached agreement.

As already noted, the maximum joint profit outcome was \$10.80, which equally shared is \$5.40. Only 66 percent of our bargaining pairs reached the Nash point, compared with 75 percent in the Siegel-Fouraker study.¹⁵ On average, our *buyers* (i.e., q_1) netted \$5.32 and our sellers (i.e., q_2) \$5.09: a spread which may be explained by the existence of differential "learning" and "discount" parameters. Our empirical results are consistent with this difference.

The reduced-form parameter estimates corresponding to the coefficients in (8) appear in Table 2. The statistical method used in making these estimates was OLS regression applied to pooled, cross-section (bargaining pair) and time-series (rounds) data.¹⁶

Estimates of the coefficients γ_1 , γ_2 , γ_3 and γ_4 are statistically significant and each is signed as predicted. The independent variables in this form of our model explain approximately 36 percent of the variance in the

Variables	Coefficient	Standard Error	Mean	σ
$ \begin{array}{c} \gamma_{0} \\ \dot{q}_{1} \ (t-2) \\ r_{1} \ (t-2) \\ \dot{q}_{2} \ (t-2) \\ r_{2} \ (t-2) \\ r_{2} \ (t-2) \end{array} $.5939 .1147* .7324* 1512* 8221*	4.09 .0354 .0274 .0629 .0653	$\begin{array}{c} 64.33 \\ 81.71 \\ 40.04 \\ 40.26 \end{array}$	107.83 138.10 62.54 60.60
$R^2 =$ F =	.364 N 90.45 \overline{DV}	= 636 DF = = 23.94 $\delta DV =$		

TABLE	2
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Estimates of the Regression Coefficients Appearing in Equation (8)

* = Statistically significant at the .01 level DV = Dependent Variable $(\dot{q}_1(t) - \dot{q}_2(t))$.

¹⁴ Cross, p. 61.

¹⁵ Siegel and Fouraker, pp. 58-59.

¹⁶ Numerous other estimation methods were also used. For example, runs were made on cross-section data; using dummy variables to control for specific "team" and "time" effects; and OLS was applied to pooled data twice transformed to control for autocorrelation and heteroskedasticity. The estimates presented here were comparable to those estimated from these other methodologies.

dependent variable. With these estimates, we solve for the structural parameters of the model, namely: α , β , a, and b. Estimates of these parameters appear in Table 3.

	Buyer (q_1)	Seller (q2)
Learning rate	$\hat{\alpha} = .3924$	$\hat{\beta} = .4853$
Discount rate	$\hat{a} = .5848$	$\hat{b} = .7856$

 TABLE 3

 Estimates of Cross's Learning and Discount Parameters

Notes: Standard errors associated with the structural parameters are not generated via the indirect least-squares procedure. See Barry R. Chiswick and Stephen J. Chiswick, Statistics and Econometrics (University Park, Pa.: University Park Press, 1975), p. 235.

Some may argue that an experimental design which prohibited reneging on a position leads to an upward bias in our estimates of α and β ; however, the absence of "bluffing" in our experiment may have set up an offsetting and opposite bias.

The estimates in Table 3 provide empirical support for the hypotheses denoted above as H—1 and H—2. All of the estimates are positive and the numerical ordering of the learning and discount parameter estimates is as required to insure a stable bargaining process. Cross's theory of the bargaining process may be subject to criticism on the grounds that its stability conditions are overly restrictive. Our results add support to Cross's arguments that the theory's stability assumptions are realistic.¹⁷

Given, as our results do, that the Seller is the more able learner, he will concede more rapidly for every value of $-\dot{q}_1$ than the Buyer will for every equal value of $-\dot{q}_2$. This implies that the negotiated settlement will favor the Buyer, ceteris paribus. However, the Seller also has a higher discount rate than the Buyer. This result triggers two opposing effects with respect to the parties relative bargaining behavior. First, from (1) it is clear that the higher discount rate for our Seller causes him to respond relatively more slowly for every value of \dot{r}_1 . Second, and opposing the first effect is that the relatively higher discount rate of the Seller will cause him to assume a more conciliatory opening posture because his preference for present goods over future goods will cause him to sacrifice some units of payoffs in order to foster agreement, ceteris paribus.

The particular structure of internegotiator learning and discount rates found in our results prohibits an a priori determination of the final split of M. However, given the estimated magnitude of these parameters, one may in principle compute the expected payoff for each negotiator. Cross

¹⁷ Cross, p. 52.

has shown that with a simple linear model, assuming that $C_i = 0$, i = 1, 2, the payoff to the Buyer may be computed by evaluating the relation $q_1 = M/[1 + (a\alpha/b\beta)^{1/2}]$.¹⁸ The payoff tables used in our experiment were not symmetrical; however, given that a majority of our teams settled at the joint-profit-maximizing level of \$10.80, we use that value to approximate M. An evaluation of the latter equation using the estimates in Table 3 and the value \$10.80 yields $q_1 =$ \$6.081 and $q_2 =$ \$4.715.

The predicted payoffs presented above are consistent with the actual average payoffs reported earlier. Both represent a non-Nash solution to the bargaining problem: a solution partially explained by differential learning and discount rates.

¹⁸ Cross, p. 80.

The Determinants of Union Wage Demands: Some Preliminary Empirical Evidence

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While there is an extensive empirical literature on the determination of wages in the union sector, little interest has been shown by applied researchers in the determination of either wage demands by unions or wage offers by management.¹ In this study a simple model of the bargaining process is used to isolate some of the determinants of union wage demands in United States manufacturing industries. Section I contains a development of the model, and the empirical specification is presented in Section II. Section III contains the empirical results, and the final section includes a summary of the results as well as conclusions.

I. The Theoretical Framework

The framework used in this study is based on the Ashenfelter-Johnson model of bargaining outcomes.² It is assumed that the union has a "concession schedule," based on the internal political structure of the union and the preferences of the individual members, which determines the minimum wage offer that the union will accept as a function of length of strike.³ The firm is assumed to act as a long-run profit maximizer in choosing the length of strike and the wage implied by the strike length and the concession schedule. The firm is thus trading off forgone earnings during the strike for a decrease in future labor costs. There will be no strike if the marginal reduction in future labor costs from a strike is smaller than the marginal forgone earnings.

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¹See Wallace Atherton, *Theory of Union Bargaining Goals* (Princeton, N.J.: Princeton University Press, 1973), for a recent attempt at a theory of union wage demands. Ch. I includes an excellent review of the literature in this area.

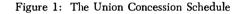
² Orley Ashenfelter and George Johnson, "Trade Unions, Bargaining Theory, and Industrial Strike Activity," *American Economic Review*, vol. 59 (March 1969), pp. 35–49.

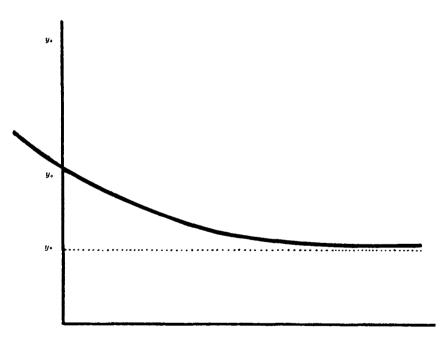
³ Hicks developed a similar construct in his classic discussion of industrial disputes. J. R. Hicks, *The Theory of Wages* (London: Macmillan, 1963), pp. 136–58.

Analytically, borrowing notation from Ashenfelter and Johnson,

(1)
$$y_s = y_{\bullet} + (y_o - y_{\bullet})e^{-\delta t}$$

is a possible specification for the union's concession schedule where y_s represents the minimum acceptable proportional wage change after a strike of length s, y_{\bullet} represents the minimum acceptable proportional wage change after a very long strike, y_o represents the minimum acceptable proportional wage change necessary to avert a strike, and δ is a parameter determining the rate of concession of the union. A typical schedule is presented in Figure 1. It is clear that y_o must be greater than y_{\bullet} and that δ must be greater than zero for the union to actually concede as a strike wears on.





$$y_s = y_{\bullet} + (y_{\bullet} - y_{\bullet}) e^{-\delta x}$$

The present value of the firm can be written as

(2)
$$V = \int_{a}^{\infty} [PQ - LW(1+y_s)] e^{-rt} dt + \int_{a}^{\infty} He^{-rt} dt$$

where PQ represents total revenue, LW represents total labor costs be-

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fore the wage change, and H represents fixed costs; r is the rate at which the firm discounts future income. Differentiation of equation (2) with respect to s after substitution of the concession schedule (equation (1)) for y_s into equation (2) yields an expression for the firm's optimal strike length of

(3)
$$s = -1/\delta \ln\{[1/S_{L} - (1+y_{\bullet})]/[1+\delta/r)(y_{o} - y_{\bullet})]\}$$

where S_L represents LW/PQ, or labor's share of total sales.⁴ If the right-hand side is less than zero, we will observe no strike.

Clearly, strike activity and wage changes are a function of the parameters of the concession schedule, but even if hypotheses were formulated concerning the determinants of δ , y_{\bullet} , and y_{\circ} , they are not directly observable. The rest of this section is concerned with techniques for handling this problem.

 y_o , or the minimum acceptable wage increase necessary to avert a strike, is a natural measure of the level of union wage demands. This is a function of at least three things. First, the profit rate of the firm may increase the union members' notion of the firm's ability to pay as well as the union members' desire for a larger "piece of the pie." This would be reflected in a higher wage demand or y_o . Second, the members' recent changes in real wages may have a negative effect on y_o . For example, if the union members have had their purchasing power deteriorate due to inflation, they may demand a larger wage increase. Finally, any outside pressure to moderate union wage demands such as wage guidelines or controls may be effective in achieving their purpose.

One approach to the problem of estimating the impact of these variables on y_o is to try to explain the observed wage increase (y_s) by these factors. While the determinants of y_o will affect y_{s} , their impact on y_s will be diluted by the firm's adjustment in the length of strike. If y_o increases for any reason, the firm will have an incentive to stand a longer strike or perhaps to stand a strike where they would not have originally. The longer strike will reduce y_s by moving down the concession schedule. The observed wage increase will probably be larger, but it will not rise by as much as the union demand due to the higher probability of and longer strikes.⁵

⁴ See Ashenfelter and Johnson, and Henry S. Farber, "Bargaining Theory, Wage Outcomes, and the Occurrence of Strikes: An Econometric Analysis," *American Economic Review*, vol. 68 (June 1978), for more detailed derivations of the optimal wage and strike outcomes.

⁵ In mathematical terms, this effect is observed by differentiating equation (3) with respect to y_o and noting that the resulting expression is positive. $\partial s/\partial y_o = 1/[\delta(y_o-y_{\star})] > 0$.

Another approach has been to attempt to locate points on the concession schedule by evaluating observed union wage offers at various points before and during a strike.⁶ The drawback to this approach is that there may be a tendency for the union to exaggerate its demands if they are not close to agreement.

The method used here to isolate the determinants of the union's wage demands is to utilize data on proportional wage changes and strikes for individual bargains in combination with the bargaining model described above. Hypotheses are formulated concerning the determinants of the parameters of the union's concession schedule, and equations (1) and (3) are used to relate these to the observed wage increase and strike in each case. Finally, maximum likelihood techniques are used to estimate the parameters of the model.

II. The Empirical Specification

In accordance with the earlier discussion of the determinants of y_o , it is hypothesized that

(4)
$$y_o = B_o + B_1 \bigtriangleup RW + B_2 \Pi + B_3 G$$

where $\triangle RW$ is the average annual rate of change of real wages over the life of the previous agreement, II represents the firm's net rate of return on assets at the time of negotiation, and G is a dummy variable to capture any effect on union demands of the voluntary wage guideposts in effect from 1962 through 1966.⁷ It is epected that $B_1 < 0$, $B_2 > 0$, and $B_3 < 0$. Due to space limitations and the fact that the focus of this study is on y_n , only the final specifications of the rate of concession (δ) and the minimum acceptable wage change after a very long strike (y_1) are presented here.⁸ They are

$$(5) \qquad \qquad \delta = A_0 + A_1 FNB + A_2 UR + A_3 S_L$$

and

(6)
$$y_* = C_0 + C_1 UR + C_2 EXT$$

¹⁵ See Yochanan Comay, Arie Melnik, and Abraham Subotnik, "Bargaining, Yield Curves, and Wage Settlements: An Empirical Analysis," *Journal of Political Economy*, vol. 82 (March/April 1974), pp. 303–13.

 $^{^{\}tau} \triangle RW$ is computed as the difference between the average annual rate of change in wages negotiated in the previous agreement and the average annual rate of change in consumer prices over the life of the previous agreement. If is computed by linearly interpolating rates of profit between fiscal years to the month of negotiation. G = 1for 1962–66 and is 0 otherwise.

⁸ See Farber for a more detailed discussion of the determinants of δ and y_* .

where FNB represents average union fund balances per member, UR is the national unemployment rate, S_L is labor's share of total sales, and EXT is the extent of unionization in the two-digit industry where the firm is located.⁹

The sample consists of 97 agreements for 12 firms in 12 U.S. manufacturing industries covering the period from 1954 through 1970.¹⁰ y_s is the average annual proportional increase in wages negotiated, including deferred increases.¹¹ Strikes occurred in 23 of the negotiations, and data on the length of the strikes were obtained from various U.S. Bureau of Labor Statistics Wage Chronologies as well as the Bureau of National Affairs Daily Labor Reports.

The model is estimated by substituting equations (4), (5), and (6) into equations (1) and (3) for y_o , δ , and y_{\bullet} and recognizing that everything in equations (1) and (3) is now observable.

In order to derive the likelihood function, it is assumed that equations (1) and (3) have independently normally distributed additive errors with zero mean. Solving for the errors yields

(7)
$$\epsilon_{i} = y_{s} - [y_{*} + (y_{o} - y_{*})e^{-\delta s}] = z_{1}$$

and

(8)
$$\epsilon_2 = s + 1/\delta \ln \{ [1/S_L - (1+y_{\bullet})]/[1+\delta/r)(y_0 - y_{\bullet}] \} = z_2.$$

Equation (8) holds only if there is a strike. There is no strike if

(9)
$$\epsilon_2 < 1/\delta \ln \{ [1/S_L - (1+y_{\bullet})]/[(1+\delta/r)(y_0 - y_{\bullet})] \} = z_2.$$

Thus, ϵ_1 and ϵ_2 are determined by the observables in equations (7), (8), and (9). The likelihood function corresponding to this model is

⁹ See Farber, "Bargaining Theory . . . ," and Henry S. Farber, "Unions, Bargaining Power, and Wages: An Empirical Analysis," M.S. thesis, Cornell University, 1974, for the sources and precise definitions of the data used.

¹⁰ The 12 firms are American Cyanamid, Armour and Company, Firestone Tire and Rubber, General Electric, General Motors, International Paper, International Shoe, PPG Industries, Simmons, Sinclair Oil, United States Steel, and Weyerhaeuser Timber Company.

¹¹ The author is grateful to Daniel Hamermesh for making the wage data available. For more details on the construction of the wage series, see Daniel Hamermesh, "Wage Bargains, Threshold Effects, and the Phillips Curve," Quarterly Journal of Economics, vol. 84 (August 1970), pp. 501–17. The wage series was adjusted (downward) for included automatic cost-of-living increases by including a variable (subtracted from y.) in all runs which was equal to the average annual rate of change of prices corr the life of the previous agreement where there was an escalator clause. and 0 otherwise. The coefficient of this variable always was approximately .4 regardless of specification. This implies that on average escalator clauses automatically offset 40 percent of any price changes. $\triangle RW$ was also adjusted with the same variable.

(10)
$$L = \prod_{i=1}^{n} f_1(z_{1i}) \prod_{i=1}^{m} f_2(z_{2i}) \prod_{i=m+1}^{n} F_2(z_{2i})$$

where f_1 is the probability density function of ϵ_1 , f_2 is the probability density function of ϵ_2 , and F_2 is the cumulative distribution function of ϵ_2 ; *i* indexes observations, and strikes occurred in the first *m* observations.

Numerical techniques are used to find those values of the parameters of equations (4), (5), and (6) as well as the value of the firm's discount rate (r) and the cost-of-living adjustment factor which maximize the likelihood function.¹² Intuitively, the maximum likelihood estimates of the parameters are those values which maximize the probability of observing the (y_s , s) combinations that actually occurred.¹³

III. The Empirical Results

The first column of Table 1 contains the maximum likelihood estimates of the parameters determining y_o .¹⁴ All of the parameters have the expected sign and they are all significantly different from zero on the basis of their asymptotic standard errors. The second column of Table 1 contains the parameter estimates corresponding to the same variables from ordinary least squares (OLS) regressions of the actual wage increase adjusted for the cost-of-living escalator (y_s) on all of the variables determining y_o , δ , and y_{\bullet} in equations (4), (5), and (6).

The rate of change of real wages over the life of the previous contract has the expected negative impact on union wage demands. On the other hand, when all of the variables in the system are included in what is essentially a linearized reduced form for y_s , $\triangle RW$ seems to have no impact on the actual settlement. This supports the contention that at least some portion of union wage demands are dissipated through strike activity.

The results also support the hypothesis that union demands are positively related to the profit rate, while in the reduced form equation for y_s the profit rate is unrelated to the actual wage change. Again there is

¹² The algorithm used is described in E. K. Berndt, B. H. Hall, R. E. Hall, and J. A. Hausman, "Estimation and Inference in Nonlinear Structural Models," Annals of Economic and Social Measurement, vol. 3/4 (1974), pp. 653–65.

¹³ See S. D. Silvey, *Statistical Inference* (New York: Halstead, 1975), ch. 4, for a discussion of the properties of maximum likelihood estimators.

¹⁴ The estimates of the other parameters are not presented both because the focus of this study is on y_{a} and because the results are qualitatively similar to those derived in Farber, "Bargaining Theory . . ." It is sufficient to note here that all of the parameter estimates are plausible in the context of the model. In addition, all of the predicted rates of concession $(\hat{\delta})$ were positive, and all of the predicted y_{o} were greater than all of the predicted y_{-} . The firms' rate of time preference (r) was estimated to be .0365.

Coefficient of:	Dependent Variable	
	y₀ Maximum Likelihood ^b	y₄ Ordinary Least Squares
Constant	.0459 (.0046)	. 1176 (.0156)
$\triangle RW$	2334 (.0986)	.0309 (.0977)
п	.0926 (.0430)	.0024 (.0524)
G	0138 (.0056)	0182 (.0042)
Unadjusted standard error of y_3	.0210	.0164

TABLE 1 Estimates of Wage and Wage-Demand Equations^a

^a The numbers in parentheses are (asymptotic for MLE) standard errors.

^b The maximum likelihood estimators are distributed asymptotically normally

some evidence that at least part of the union demands is dissipated through strike activity.

The wage guidelines are negatively related to both union demands and the wage settlement. There is no evidence that its effect is dissipated by strike activity, and it actually seems to be reinforced.¹⁵

The unadjusted standard error of $y_{\cdot,*}$ is $1/n \sum_{i=1}^{n} (y_{*i} - \hat{y}_{*i})^2$ where \hat{y}_{*i} is the predicted wage settlement.¹⁶ It is clear from a comparison of these numbers contained in Table 1 that the bargaining model does not predict wages as well as the reduced form. However, this is not surprising in view of the fact that the model is constrained by a rather rigid structure which must predict strike activity as well as wages.

In order to get a rough indication of whether the model has any ability to predict strike activity, the estimates were used to predict in each case whether there would or would not be a strike.¹⁷ Predictions based simply upon the fact that strikes occurred randomly in 23.71 percent of the negotiations correctly predicted 61.9 cases or 63.8 percent. The model predicts 73 of the 97 cases correctly, or 75.3 percent. Thus,

¹⁵ In order to explain this, the specification was modified to allow G to affect δ as well as y_n . However, this changed the results only slightly and it did not significantly improve the fit of the model.

¹⁶In the model developed here, $\hat{y}_{\cdot} = \hat{y}_{\cdot} + (\hat{y}_{\cdot} - \hat{y}_{\cdot})e^{-\hat{\delta}^{\lambda}}$, where \hat{s} is computed from equation (3). $\hat{s} = 0$ if equation (3)<0.

 $^{^{17}}$ The model was assumed to predict a strike if and only if s from equation (3) was greater than 0.

the model seems to outperform the random process. A linear reduced form probability model correctly predicts 75 cases, or 77.3 percent.¹⁸ This is only slightly better than the performance of the structural model.

As a final illustration of the notion that wage demands may be dissipated both through a higher incidence of and longer strikes, note that substitution of equation (3) into equation (1) yields a reduced form structure for wage changes that does not include y_o .¹⁹ However, this only is true where there is a strike. Where there is no strike, solution of equation (1) with s=0 yields the result that $y_s=y_o$. Since an increase in y_o increases the probability of a strike, it also must reduce the perceived average effect of y_o on y_s . This is consistent with the reduced form results in Table 1 where $\triangle RW$ and Π seemed to have little relationship with wage changes.

IV. Summary and Conclusions

The simple Ashenfelter-Johnson model of bargaining outcomes used in this study enabled us to examine the determinants of the normally unobservable union wage demands. Some rather inflexible functional forms were imposed on the model, but despite this handicap it has a positive amount of explanatory power concerning wage changes and strike activity. The most important result, other than the evidence that a simple bargaining theory is useful in an empirical context, was that union wage demands are related both to changes in real wages and to profits, while the actual wage changes are not very responsive to these factors. The conclusion is that higher wage demands can increase strike activity which in turn moderates the wage demands.

As a final note, the reduction of union wage demands through strike activity is obviously not costless. For example, a wage equation may show little relationship between wage increases and profit rates, but this lack of impact on wage inflation may have been purchased with the lost production and lost income of a strike.

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¹⁸ The linear reduced-form probability model is simply a regression of a zero-one strike dummy variable on all of the exogenous variables in equations (4), (5), and (6). It was assumed that a strike was predicted if the estimated probability was greater than one-half. There are some statistical problems with this technique, but it does provide a rough measure of the predictive ability of the reduced form.

¹⁹ See Farber, "Bargaining Theory" The reduced-form wage equation is $y_* = \{\delta y_* + \tau[(1/S_L) - 1]\}/(r + \delta)$.

DISCUSSION

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This mix of papers is unique, allowing a rather complete analysis of the bargaining process from start to finish. The paper by Professor Farber allows us to consider what the union demands in its negotiations, the paper by Messrs. Hall and Schriver attempts to look at the extent to which bluffing occurs during bargaining, and the Bognanno-Dworkin piece allows comparison of learning and concession rates leading to the reaching of a settlement. While most attention will be focused on the Hall-Schriver paper, comments will be made on the other manuscripts.

The process by which unions determine wage demands is a crucial one. From at least as early as the classic Ross-Dunlop debates of the 1940s, there has been attention focused on the wage-policy aspects of trade unions. Farber points out, "The union has a 'concession schedule,' based on the internal political structure of the union and the preferences of the individual members." He then claims this ". . . determines the minimum wage offer that the union will accept as a function of length of strike." The difficulty is that the real issue is often the minimum *package* that the union will accept. This means that the question to be answered is broader than that raised by Farber because tradeoffs within the negotiated package may make the measurement of wages alone an inaccurate picture of what occurred.

Another measurement problem complicates the results presented in Professor Farber's paper. He is using the negotiated wage settlement to obtain estimates of the firm's rate of concession and its discount rate (although these items are not directly reported). In doing this, he assumes that wage changes are spread uniformly over the length of the contract. This is contradictory to most discussions of bargaining where employers are typically more willing to give a large increase up front and smaller ones in successive years because of the greater uncertainty. Thus, the time preference of the union's demands would be crucial to the employer's discounting process and concession rate, and have a bearing on the outcome of the negotiations. By ignoring this, Professor Farber introduces an unspecified bias into his results. Hall and Schriver have tried to analyze bargaining behavior and arrive at measures of the union's resistance curve and the management's concession curve. They then try to measure the extent of bluffing and/or Boulwarism which was apparent during negotiations.

Significant concerns are raised by the procedure the authors used. Particular attention is directed to the limitation of the analysis to the first three rounds of negotiations. This becomes an issue when one considers the relative *amount* of negotiation (in terms of cents of movement) which went on before vs. after the third negotiating session. While it is not possible to determine the number of sessions from the author's manuscript, the difference in relative concession/resistance of the parties before and after this point is observable.

In 11 cases (crafts 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, and 16) the union demand was lowered more between the third session and final settlement than it was between the first session and the third. Similarly, in 14 cases (crafts 1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 14, 15, and 16), the management offer was raised more between the third negotiation and the final settlement than it was over the period of the first three sessions. What this means is that the authors are asking us to accept their conclusions when in 87.5 percent of the negotiations studied, the most important action was not subjected to measurement. This is a weak basis upon which to reach the conclusions these authors do.

This relationship raises a further comparison which should have been explored by Messrs. Hall and Schriver. Why is it that in some cases (crafts 1, 2, 3, 7, and 14 union and crafts 3 and 13 management) most of the concessions were made early in negotiations while in the rest, the bulk came after the third round? The answers to this question would explain the authors' results as much as the bluffing contention does.

Moreover, one has to question whether different concession rates actually mean differential bluffing. In fact, it really does not appear possible to identify bluffing here, if one defines bluffing as misleading by a threat, as the dictionary does. Only a recording of the actual negotiators' language, taken in conjunction with these data, would give a true insight into bluffing behavior.

In order to explore the authors' results a bit more extensively, and ignoring the fact that the data presented suffer from distributional properties which the authors have ignored, this reviewer tried to consider what would have happened if the bargainers were negotiating in a splitthe-difference mode. This was accomplished by adjusting the initial union demand to the same relative to the final settlement as the management's starting offer, with the union's reductions in demands adjusted to be proportional with the actual reductions.

These calculations show that management must be much more responsive to union demands when split-the-difference bargaining takes place. What this implies is, that the more realistic the union is in its demands, the more management has to give relatively to reach an agreement. This may be partial justification for the union "shooting for the moon" in its demands. It is necessary in order to allow management to convince itself it is yielding at an appropriate rate. In a sense, the parties start from different relative points and concede at different rates because they perceive the bargaining process differently, as the Bognanno-Dworkin paper shows.

The Bognanno-Dworkin paper examines the results of bargaining where each side knew the terms which would give the maximum profit to both and that differences would result in larger gains for one, and smaller rewards for the other. Under such a situation of "perfect" knowledge, one would expect a "split-the-difference" solution in every negotiation. However, this was not the case.

Professors Bognanno and Dworkin analyze their experimental data and estimate learning and discount parameters for both buyers and sellers. These results indicate that the sellers were, on average, more able learners—implying they will concede more rapidly for a given actual concession rate of their opposites, the buyers. The authors also point out that the sellers have a higher discount rate than the buyers, causing them (1) to respond relatively more slowly for every expected concession rate of the buyers, and (2) to respond relatively more quickly because of their preference for the present over the future. We are then told that the results yield a value of \$6.081 for the buyer's payoff, and \$4.715 for the seller's. Their difference is explained away as the result of the differential learning and discount parameters, *although* we are never told why the differential parameters exist. An answer might be suggested by comparing the other papers' results with those of Bognanno and Dworkin.

The conclusion that the seller concedes more rapidly implies that in labor-management negotiations, the union is in some sense "selling" labor and management is "buying," a not too startling conclusion. The results also suggest that unions have a relatively higher preference for present goods over future ones than does management. Again, not surprising, when considered in light of the fact that union members may have strong feelings about paying their outstanding bills. The conclusion that the seller is a more able learner is also interesting in light of the Farber and the Hall-Schriver results. One would have to argue that the seller (i.e., union) has more to learn in the bargaining process. This "learning" would involve the various "political" groups within the union facing the reality of limited achievable wants and the necessity for surrendering some of them to achieve a settlement. The union is, of necessity, forced to learn more rapidly because of the complexity of its "needs and wants" structure relative to that of management. This leads me to one last point which bears exploration.

Do management and unions perceive collective bargaining in significantly different ways? The question is raised because this reviewer believes they do, that these results show it, and that there is complimentary research which supports an affirmative answer.

A great many social psychologists are doing research on bargaining theory, almost completely ignoring the economics literature just as we ignore theirs. They have looked at bargaining as a psychological process and tried to gain some insight on bargainer's attitudes.¹

Their tests have suggested that buyers and sellers do view the bargaining process differently, and probably expect something different from it. The point of this is that the empirical tests presented so far only demonstrate the existence of the differences and have not explained them. A crucial research need now is to explain "why"? Even when this is done, however, the theorists will still be unable to tell us the exact dollar wage or price at which any two buyers and sellers will strike a bargain. As is true of the microeconomic theorist, we would be able only to predict direction and not magnitude. This is good for if we could predict accurately, we would put a large number of negotiators out of work and take all the fun out of it.

¹ For an excellent review of the bargaining literature in this area see J. Z. Rubin and B. R. Brown, *The Social Psychology of Bargaining and Negotiation* (New York: Academic Press, 1975).

DISCUSSION

CARL M. STEVENS Reed College

As suggested by our chairman, I will give most of my attention to the Bognanno-Dworkin paper. Pursuant to the theme set by these authors, the question before the house would seem to be: Just what, in consequence of the instant empirical inroads forged by Bognanno and Dworkin, have we learned about bargaining behavior?

Their main findings on bargaining behavior seem to me to be the following. That, for a (quasi) tacit, "pure"-bargaining game of the kind investigated in their exercise: (1) Told that agreement will be rewarded and that impasse will not be rewarded, virtually all bargaining pairs will reach agreement. (2) The large majority (66 percent) of such pairs will settle for a 50-50 split of the maximum joint payoff available in the game.

As Bognanno and Dworkin would no doubt agree, except, perhaps, for the relatively small number of bargaining pairs that managed a 50-50 split of the maximum joint payoff, these results are not surprising.

The foregoing does not, of course, completely state the results obtained by Bognanno and Dworkin. They found that information about the parties' concessions on two bargaining rounds and information about what each party expects opposite number's concession to be on the next round will account for about 36 percent of the variance in the differences between the parties' concession rates on the next round. They used their regression results to estimate the parameters (for learning rate and discount rate) in the structural equations representing their version of Cross's theory. The parameters turned out to be in accord with expectations and, in a formal sense, the test of Cross's theory was deemed successful. The analysis struck me as interesting and accomplished in an orderly way.

At a more substantive level of evaluation, however, this test of the theory still leaves open the question of what we have thereby learned about bargaining behavior. I must confess to feeling that I have, thereby, learned very little about bargaining behavior. The reason is that I find it hard to regard the "learning rate" and "discount rate" parameters

(given their relevant behavioral constructions) as serious explanations of the behavior observed in the instant experiment. In the instant experiment, the total elapsed time between the start of bargaining and its conclusion could scarcely have been more than a few minutes. This strikes me as a rather short interval for time preference (the discountrate parameter) to be a significant factor, even for impatient undergraduate-student subjects. With respect to the learning-rate parameter, for representative collective-bargaining negotiations, bargainers may learn something from the rate at which their opposite numbers make concessions-e.g., about available, no-strike outcomes. But what, in the instant experiment, are parties to learn from their opposite numbers' concession rates? As I will suggest in what follows, for (quasi) tacit, "pure"-bargaining games of the kind represented by the experiment, the parties' expectations about outcomes are most probably determined by the structure of the game and extra-negotiation-behavior considerations -such that it is unlikely that the parties would (except in special cases) learn much about probable outcomes from observing opposite numbers' pace of concession.

I may remark in passing that it is probable that we could learn more about bargaining behavior from the instant experiment if we had more information than the authors supply to us about the bargaining records generated by those bargaining pairs who failed to reach a 50-50 split of the maximum payoff. For example, was there any systematic relationship between the number and character of the rounds the bargaining pairs went and the ultimately agreed-upon settlement?

Although Bognanno and Dworkin afford a rather disarming explanation of their resort to experimental data, I remain in doubt that one can, even "in principle" obtain data of the kind obtained in the instant experiment from observations on actual collective bargaining negotiations. This is so for various reasons, e.g., actual bargaining characteristically entails a multi-item package and is not compartmentalized into discrete "rounds" as in the experiment.

And there is a related difference I want to emphasize. Actual bargaining is very much "explicit" bargaining, i.e., there is full exchange of information as the parties assay tactics of persuasion, bluff, threat, rationalization, and so on. The instant experiment, on the other hand, features (quasi) tacit bargaining—physically separated parties exchange information only on offers and counteroffers. Those who analyze tacit or quasi-tacit bargaining games would assist our understanding of bargaining behavior if they would explicitly address the problem of the applicability of their results to explicit bargaining.

Some 20 years ago. Tom Schelling produced some illuminating analysis of tacit bargaining behavior and ran a few informal (hypothetical) tacit bargaining "experiments."¹ The results from a number of games requiring the parties to concert their expectations and converge on a common solution without communication (e.g., each party gets the share of \$100 he claims, provided the claims don't total more than \$100-Schelling reported that about 80 percent concerted on a 50-50 split of the \$100) led Schelling to the view that such properties of an outcome as its prominence, uniqueness, simplicity, precedent, and so on served the coordinating function. Schelling argued that such behavioral phenomena also play a role in certain kinds of explicit bargaining gamese.g., they help to explain how it is possible for the parties to apparently indeterminate "pure" bargaining games to converge on a particular solution. The Bognanno-Dworkin experiment was a (quasi) tacit bargaining game. It was also a "pure" bargaining game in the sense that any of a wide range of outcomes would be preferred by both parties to impasse and both parties knew this. The constructs adduced by Schelling, I would argue, go much farther in explaining the main results of the bargaining behavior observed by Bognanno and Dworkin than do such constructs as "learning rate" and "discount rate."

A few brief comments now on the other papers:

For the Hall-Schriver analysis of the interesting but atypical TVA bargaining situation, a major question is in order whether the kinds of observations undertaken by these authors can, in any case, say much of significance about the bluffing behavior in which they profess interest. If a party asserts or implies that he will do, in some contingency, that which, at the time of the assertion he does not in fact intend to do, the party is said to be "bluffing." But it is not true that all offers or demands in excess of party's final offer can be regarded (as these authors seem to do) as evidence of or instances of bluffing. For example, typical initial bargaining demands (and the exploratory demands which follow) are "large" in the sense that they are in excess of what party expects to get and party knows that opposite number knows this. The parties would never regard these demands as "bluffs." Since "bluffs" which are perceived as "mere bluffs" are of no avail, bluffing entails tactics of apparent commitment and an understanding of bluffing behavior requires mainly an investigation of these tactics.

In reading Farber's paper, I was struck both with the staying power

¹See T. C. Schelling, "Bargaining Communication and Limited War," Journal of Conflict Resolution (March 1957). [Appears also in T. C. Schelling, The Strategy of Conflict (Cambridge, Mass.: Harvard University Press, 1960).]

of the ancient wisdom in this domain (e.g., the Hicks concession curve concept) and with what has been the advance in the state of the art of analyzing the determinants of union wage policy since I took a look at this same problem some 25 years ago.² I agree with Farber that the least favorable terms the union will accept without going to strike is a natural measure of the level of union wage demands. The main problem with analyzing the determinants of union wage policy has always been that this natural measure is not in general directly observable. Farber's signal contribution is, it seems to me, to come up with an ingenious way to make some indirect observations on this (and other) directly nonobservable wage variables relevant to evaluating union wage policy. However, I must confess to some doubts about the empirical significance of his findings, mainly because these findings depend upon a model which makes the *length* of strike a central variable in the calculations of the parties. This has never seemed to me a plausible assumption.

² "Regarding the Determinants of Union Wage Policy," Review of Economics and Statistics (August 1953).

DISCUSSION

DANIEL S. HAMERMESH Michigan State University

It is gratifying to see this sudden burgeoning of interest in applying theories of bargaining to the analysis of real-world behavior. I tell students that bargaining theory has produced only two substantive results in the 45 years since Zeuthen's book: (1) the notion of the Nash equilibrium solution, which, in the case of symmetric utility functions, reduces to what one of the papers calls the "split-the-difference" model; and (2) the explicit incorporation of bargaining behavior in a dynamic model of adjustment of expectations and offers, by Cross. Unlike all previous work, the Cross model explains the existence of strikes.

The Farber piece takes the Ashenfelter-Johnson explanation of strikes and attempts to use it to deduce union wage offers at some point earlier than the time of settlement. In some senses, this is what I call "Mission Impossible" economics-build the most complex model to deduce information that exists already in a different, but useful data set. (For example, that used by Hall and Schriver.) However, the model is elegant, and Farber deserves points for that. It is not, though, a model of bargaining, for there is no reaction of the firm to the union's concessions other than the reactions that are expected ab initio by both parties. In this model, and the Hicks model that is its intellectual antecedent, one wonders why strikes ever occur, since there is no uncertainty, no deviations of expected from actual concession rates. The virtue of the Ashenfelter-Johnson piece is not theoretical, therefore; rather, its novelty is that it was the first to introduce price variables in the explanation of strike behavior. (That the theory used cannot explain why strikes occur is important, but it does not detract from the empirical work.) Farber's work, an extension of that model into a simultaneous system, should be judged on the same empirical basis rather than be faulted for using a theory that is inherently inconsistent with the phenomenon being explained. Accordingly, my comments hereafter deal with the empirical problems only.

While the assumption of independence of errors in equations (1) and (3) makes the estimation of the model much easier, the assumption is quite inconsistent with the theory under which equation (3) was

derived. Since equation (1), the union concession curve, was substituted into equation (2), the firm's profit stream, to derive equation (3), the optimal length of strike, any random errors in (1) must surely be present in (3) also. I realize this complicates the empirical work, but after all the care lavished on the theoretical model, it makes little sense simply to slap on error terms whose relationship in the two estimating equations can be derived and put to use in providing better estimates of the parameters. If Farber did this, the performance of the model might well be improved, but in any case the link between the mathematics and the estimation would be enhanced.

I am somewhat bothered by the equation designed to explain y^* , the minimum acceptable wage change. While the unemployment rate in equation (6) has a long, if somewhat dishonorable, tradition in the Phillips-curve literature, the fraction unionized in the industry appears to be incorrect in the cross-section. Since in the cross-section relative wage studies à la Lewis, this fraction determines wage levels, other things equal, surely the appropriate term in (6) is one on the change in the extent of unionization since the previous contract was negotiated. Implicitly, Farber is saying that acceptable wage changes are higher (in percent) where the extent of unionization is greater. If true, this would either imply that union relative wage differentials would rise over time, if the acceptable changes are translated into wage gains, or that union bargainers in heavily organized industries are repeatedly more disappointed than their brethren who are in sparsely organized industries.

Turning from specification to results, the latter are deeply disappointing. The reduced-form estimates do better in explaining both the probability of a strike and the settlement than do the structural estimates. While the structural equations need not predict better than a reducedform approach, their superiority would be an indication that the model is worth pursuing; that this does not occur should give more pause for reflection than is indicated in the paper.

Two final points on the Farber piece: (1) George Meany would be delighted with the results on the guideposts term, as they reinforce his priors. Not only is the union demand lowered, but the outcome is still lower, suggesting that the guideposts operated throughout the bargaining process to reduce wage gains. (2) The sharp differences in the results on the wage-change and profit-rate variables between the two equations in Table 1 are very gratifying to me. They suggest that there is a rationale for believing that profit rates are relevant for wage bargaining, as has long been argued. It also indicates, though, that, as I and a few others have argued, they are unimportant in determining wage changes, and thus do not belong in Phillips-type relations. Farber's results nicely resolve this apparent anomaly.

The Bognanno-Dworkin piece, which one might title, "Time in the Cross (Model)," is the first attempt I know of to specify and test some of the hypotheses in Cross's work. This is moreover a very neat application, and I only wish it could have been based on actual rather than simulated bargaining, as I am not sure how much trust to place in observations of economic behavior in vitro. Given this inherent difficulty, though, two changes suggest themselves in the empirical work. First, there is a serious problem in that the concession rates and the entire pattern of underlying behavior must differ among those who reach agreement at different times. At the very least, a set of dummy variables representing the round at which agreement is reached (or a range of rounds) should be included in interaction form with the four variables of interest. This would enable the authors to hold constant for the differences in behavior producing earlier agreements and to test whether in fact such differences are important. Second, one of the major propositions of the Cross model is that concession rates differ over the duration of the bargaining process, with rapid concessions coming as the strike date approaches. This can and should be embodied by Bognanno and Dworkin in their model; by looking at the magnitudes of coefficients of interactions of the four variables on lagged changes in q_1 , r_1 , q_2 , and r_2 with dummies representing each round or group of rounds, they can deduce how the four behavioral parameters in their underlying model change during bargaining. This would enable them to make an even richer test of the Cross model.

The Hall-Schriver study looks at problems of testing the Nash model of bargaining outcomes. The tests performed are a useful integration of that hypothesis with the literature on concession rates during bargaining. They have shown that, not only does the union appear to "give in" more, its rate of concession deviates from that of management more at different stages of bargaining. This is useful information, both for us sterile academics and for those involved in dispute resolution. However, I do not believe that Hall and Schriver have, as they imply several times, tested whether bluffing is symmetric. Bluffing means making offers that differ from what you would offer if you did not think your response would affect your opponent's behavior. Since we cannot observe this second quantity, we cannot measure the extent of bluffing. Accordingly, it is not possible to test whether bluffing is symmetric, whether unions "win" or "lose," or whether underlying utility functions differ. What one can do, and what Hall and Schriver have done neatly, is show empirically some interesting complexities in the bargaining process.

X. DISSERTATION ROUND TABLE

Union Effectiveness: An Industrial Relations Systems Approach^{*}

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The objective of the research was to identify the important components and determinants of local union effectiveness. Based on a modified version of the industrial relations systems framework, a conceptual approach to union effectiveness was developed and the major classes of variables impacting union effectiveness were identified. A review of the literature in economics, industrial relations, and organizational behavior helped to identify the characteristics of the union's economic, political, legal, social, and task environments, the characteristics of union and management organizations, and the conversion processes which were theoretically important to union effectiveness through collective bargaining, grievance processing, joint union-management committees, and political action.

Measures of the independent and dependent variables were developed and interviews were held with officers of 95 local unions representing police officers, firefighters, manual and clerical municipal employees in 26 cities in Canada. The sample included all cities over 100,000 in population and was supplemented to ensure that at least the largest two cities in each province were represented.

The results suggest that the major determinants of union effectiveness through collective bargaining are environmental and managerial. The more favorable the environment to the union's position, the more power it has vis-à-vis management and thus, the more effective it is. The

^{*} This dissertation was completed at the New York State School of Industrial and Labor Relations, Cornell University, under the direction of Lawrence K. Williams (chairman), Thomas A. Kochan, and Robert N. Stern.

more prepared and professional management is in its approach to labor relations, the less effective the union. Characteristics of the union and the bargaining process researched were not found to be significant.

The union is most effective in processing grievances in the early stages of the procedure, quickly and in the griever's favor when: the supervisory personnel are of high quality and skillful in labor relations; the union steward system is well developed; there is a great degree of informal resolution of grievances; and the union-management relationship is not perceived to be hostile.

Where management was committed to the industrial relations function, the union leadership was competent, and environmental conditions were good, there appeared to be no need for the existence of a joint union-management committee. Certain other preconditions were important to the effective functioning of an established committee: the economic environment may be unfavorable to management, the relationship between the parties should be friendly, and the committee process should be standardized.

Because of the difficulty of attributing legislative or social changes to a single union, political action was used as the criterion of effectiveness. The more favorable the political environment, the more support from the task environment, and the more developed the bureaucratic structure of the union, the more politically active it is likely to be. Having paid staff is also related to increased political activity. All of these factors indicate the potential ability of the union to mobilize political support.

The results of this research and previous theory are used to reevaluate and reconceptualize the models of determinants of union effectiveness through each conversion process. In particular, the possible tradeoffs and strategic interactions between the criteria of union effectiveness are discussed. Moreover, a growth model of union effectiveness is presented which helps to explain the importance of various dimensions of effectiveness at different stages of the union-management relationship. Finally, the relation of union effectiveness at the local level to effectiveness at the level of the national union and the labor movement as a whole is outlined and discussed.

The Impact of Collective Bargaining on School District Expenditures An Analysis of Illinois Unit School Districts^{*}

DANIEL G. GALLAGHER University of Iowa

The primary objective of this study was to examine the relationship between teacher-school board negotiations and the allocation of district funds among various teacher and nonteacher expenditure areas within the district's operating budget. In particular, the study was concerned with examining the often-speculated effect that collective bargaining by teachers will produce an internal reallocation of district funds from nonteacher to teacher expenditure areas of the budget in response to compensation demands made by teachers through the collective bargaining process.

Based on a review of past speculative and empirical studies, the first section of the dissertation concentrated on developing a detailed theoretical model concerning the alternative impacts that collective bargaining may have on school district resource allocations. The theoretical model examined various factor input mix alternatives available to school administrators when the unit cost of teacher inputs increases as a result of negotiated salary settlements.

In response to the literature and theoretical model, a number of hypotheses concerning the relationship between bargaining and expenditure levels within various categories of the operating budget were developed. It was hypothesized that the presence of collective bargaining within a school district would be associated with relatively higher per ADA (average daily attendance unit) expenditure levels in teachercompensation budget categories compared to nonbargaining districts. It was also hypothesized that collective bargaining would be related to lower per ADA expenditures for nonteacher input expenditure areas of the budget (e.g., instructional supplies and equipment, capital spending, building operations and maintenance, administrative support services,

[•] This dissertation was completed in 1977 at the Institute of Labor and Industrial Relations, University of Illinois at Urbana-Champaign.

etc.) in order to fund teacher compensation gains attained through collective bargaining. In addition, ancillary questions concerning the relationship between collective bargaining and both district taxation levels and the employment level in various functional areas were presented and empirically tested.

The sample for the study consisted of 133 unit (K-12) school districts in the State of Illinois ranging in size from 500 to 4,000 ADA. An approximately equal number of bargaining and nonbargaining districts, as evidenced by the presence or absence of a written collective bargaining agreement, were selected. Both bargaining and nonbargaining districts were closely matched on district size and geographical location within the state to avoid the analytical problem of spurious correlations based on size and location. Detailed categorical district revenues and expenditures were obtained from the 1974 fiscal year Annual Financial Report Statements submitted by each school district to the Illinois Office of Education. Related socioeconomic, employment, and taxation data used in the study were collected from both published and unpublished sources made available through the IOE and Census reports, while information concerning bargaining history and the salary schedule adoption process was collected through a mailed-questionnaire survey of the sample districts.

To test the major hypotheses concerning the relationship between collective bargaining and district expenditures as well as the ancillary questions regarding taxation and employment, the multiple regression technique was employed for each of the models developed. A regression design was utilized to control for the various socioeconomic factors that traditionally have been found to affect district expenditures, employment and taxation levels. For the major hypotheses, the dependent variables were the total operating expenditures and 14 budget subcategories on a per ADA basis for both the teacher and nonteacher budget expenditures. To test the ancillary questions regarding employment and taxation, the dependent variables were seven component employment functions and various millage rates. Included as independent variables, depending on the form of the regression model, were such factors as equalized assessed property value, state and federal aid, median family income, adult educational attainment, district size, quality of certified staff, percentage high school enrollment, and school district growth rate. In order to test the relationship between collective bargaining and each of the dependent variables under consideration, a dummy variable was entered into the regression equation representing the presence or absence of a written collective bargaining agreement within the district analyzed.

The regression analyses produced the following general results:

1. Teacher collective bargaining activity was related to significantly higher levels of total operating expenditures in those districts than in nonbargaining districts.

2. Bargaining was associated with higher levels of per ADA expenditures for teacher compensation areas of the budget.

3. In a limited number of budget categories, bargaining was associated with lower expenditures in nonteacher expenditure areas of the budget. But in most areas bargaining was associated with higher nonteacher input expenditures.

4. The disemployment effect associated with bargaining was insignificant. Bargaining was related to only minor reductions in noncertified staff employment.

5. Collective bargaining was significantly related to higher district taxation levels in bargaining as compared to nonbargaining districts, suggesting that budget expansion was the most likely response to higher teacher-input costs resulting from collective bargaining.

6. But some evidence suggested that collective bargaining was associated with lower expenditures for nonteacher expenditure categories of the budget in those school districts which were taxing at a rate close to the maximum allowed by state statute.

Wage-Price Expectations and Cyclical Strike Activity^{*}

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The subject of the dissertation is the role of inflation in generating cycles of strike activity. The number of strikes and the number of workers involved have increased markedly in the United States in the past 10 to 15 years. Concurrent with this rise in strike activity has been a distinct acceleration in the rate of inflation. The research reported here seeks first to establish through the use of bargaining theory the nature of the association between inflation and strike activity, and second, to then investigate this relationship empirically.

In terms of economic theory, an explanation of how inflation or other economic variables affect the decision to strike would seem to involve the use of bargaining models. A review of this literature, however, reveals little in the way of theoretical predictions or empirically testable hypotheses.

A major goal of the research, therefore, is to derive the theoretical relationship between inflation and the decision to strike. The main variables of interest in the analysis are the expectations of the union and firm with respect to future rates of inflation. A basic feature of collective bargaining is that the employer and the union bargain in terms of a money wage that will then apply over a fixed contract period of several years. Yet it is not a money wage, but a real wage, that is important to both sides. Therefore, when bargaining over a new contract, each side must make two calculations—(a) their desired real wage rate, and (b) a forecast of the expected inflation rate—so they can adjust their moneywage demands made in bargaining to achieve this desired real wage over the life of the contract. If the price expectations of both sides are not identical, the result is a divergence of opinion between the union and firm concerning the perceived costs of agreeing and disagreeing and, hence, over the benefits and costs of a strike.

[•] The dissertation was undertaken at the University of Wisconsin and was supervised by Gerald G. Somers.

This insight into the bargaining process is developed in terms of an explicit model. We proceed in two steps: First, we show how different assumptions concerning the generation of price forecasts by the union and firm affect their initial money wage demands in bargaining. To do this a recent model of inflation is incorporated with the traditional bilateral monopoly bargaining model. Two regimes of price expectations are analyzed: (a) rational expectations, and (b) adaptive expectations. Each method of expectations formation implies a different level of money wage demands for both sides and a change in the distance separating the two sides.

The second step is to show how this change in initial demands is translated into a systematic change in strike activity. This is accomplished by introducing price expectations into a version of Cross's model of the bargaining process. From this analysis we show how inflation generates a systematic cycle of strike activity. It is shown that numbers of strikes and length of strikes are affected by inflation regardless of the method of price forecasting. The amplitude and timing of the strike cycle relative to the business cycle is dependent on the regime of price expectations, however. Finally, the effect of escalator clauses on the inflation-induced strike cycle is also analyzed.

The second part of the dissertation is devoted to an empirical examination of a number of hypotheses derived from the model described above as well as from earlier studies. This work involves a multiple regression analysis of strike activity—number of strikes and workers involved—in the manufacturing sector and then within the major (two digit SIC) industry groups. The period of analysis is 1954–75.

For this study quarterly strike data disaggregated by major industry group, major issue, and contract status were made available by the Bureau of Labor Statistics. The availability of these data made possible several improvements over past empirical work. First, the analysis could be limited to only the more homogeneous manufacturing sector, thus eliminating the mining and construction industries in which strike activity is in many ways unique. Second, the differential impact of inflation and other variables could be examined for strikes over economic versus noneconomic issues and by size of strike.

Equally important to this study was collection of data on the number of major collective bargaining contract expirations per quarter. The appropriate dependent variable is the number of strikes or workers involved relative to the number of opportunities to strike, i.e., the number of contract expirations or workers covered under those contracts. If these variables are not controlled for, it may become impossible to separate the independent effects of changes in the bargaining calendar from changes in economic variables.

The third major improvement on past empirical work made in this study is allowance for the changing duration of collective bargaining contracts. The effect of inflation on strike activity will depend in part on how long union members are locked into a given nominal wage rate. Therefore, for several explanatory variables for which the appropriate unit of observation is the contract period, the increasing length of contract is explicitly factored in.

Preliminary regression work for the entire manufacturing sector indicates the number of contract expirations, the rate of unemployment, the change in profits and change in real wages over the last contract, the anticipated rate of future inflation, and the interaction between unemployment and real wage changes are all significantly related to the decision to strike. The empirical analysis for each of the major industry groups has yet to be completed.

Registered Nurses and Collective Bargaining: An Analysis of Job-Related Goals^{*}

ALLEN M. PONAK University of British Columbia

The study had two objectives. The first was to assess the importance hospital registered nurses attached to different job-related goals that were actual or potential subject matter for collective bargaining. The second was to identify determinants of the importance attached to the goals. The research was intended to provide a basis for evaluating the likelihood of collective bargaining involving nurses expanding to include professional concerns. A common theme in the literature on collective bargaining by professionals is that such an expansion will take place.

The study proceeded by examining the work-related concerns of hospital registered nurses; on the basis of the examination, 12 goals relevant to them were chosen, and a sample of nurses was asked to indicate the importance of each of the goals. Using a classification scheme elaborated elsewhere, the 12 goals were divided into two categories: goals that reflected concerns over the *traditional* collective bargaining objectives of wages, hours, and working conditions, and goals that related to *professional* concerns that had not previously been pursued at the bargaining table. In addition, a list was compiled of 18 factors that potentially could have an impact on goal importance, and their effect on the importance attached to the goals was investigated. The research was carried out at a 1000-bed acute-care hospital in Ottawa, Ontario. The responses of 500 registered nurses were analyzed (out of 900 nurses to whom a questionnaire was sent).

The principal findings of the research were as follows: First, data gathered on goal importance were used to test the extent to which the proposed traditional/professional goal dichotomy had empirical validity; i.e., had the respondents in fact viewed the array of goals in the way the theory predicted they would? The answer to this question was "yes."

 $^{^{\}bullet}$ The dissertation was completed in 1977 at the University of Wisconsin, under the direction of Richard U. Miller.

DISSERTATIONS

The sample of unionized registered nurses did make the perceptual distinction between professional goals and goals related to wages, hours, and working conditions that it was theorized that salaried professionals would make. Thus, a preliminary empirical basis was established for a distinction that researchers examining collective bargaining experiences of professionals have long made on theoretical grounds.

Second, the research showed that significantly higher importance was attached to professional goals than to the traditional collective bargaining objectives which heretofore had received principal attention during negotiations. While recognizing that the relationship between attitudes and behavior is a complex one, it was inferred from the results that collective bargaining involving nurses was likely to expand into professional areas in the future. The conclusion, therefore, was consistent with and reinforced the "expansion of bargaining" proposition directed generally at salaried professionals. The conceptual basis for the conclusion in this study, however, differed from that of past efforts. Previous research on collective bargaining and professionals has paid scant attention to *relative* goal importance. The focus usually has been restricted to demonstrating that professional goals are important and inferring that because they are important, they will be pursued in negotiations. This research, on the other hand, explicitly took into consideration the effect that other, nonprofessional, issues might have on the expansion of bargaining, arguing that their importance, relative to the importance of professional goals, was a critical element in the situation. Thus, although the end results of this and past efforts were consistent, the conclusions here were based on a wider and, it is believed, more realistic set of dynamics than previously had been considered.

Third, the research identified factors that could explain variation in the importance attached to the goals. The importance attached to professional goals proved to be a positive function of five factors—pay level, professional orientation, general attitudes toward unionism, frequency of union meeting attendance, and religion (Catholics attached higher importance than non-Catholics). The importance attached to traditional collective bargaining goals was positively related to union militancy and general attitudes toward unionism and negatively related to extrinsic job satisfaction. As well, nurses with diploma degrees and those with full-time employment status attached higher importance to traditional goals than did nurses with baccalaureate degrees and those who worked part time, respectively. Because factors that contribute to the importance of traditional or professional goals, or both, invariably affect the comparative importance of these goals, identification of these factors permitted an assessment of why professional goals proved more important and allowed some speculation as to how continuing developments in nursing might inhibit or promote the expansion of bargaining in the future.

Duration and Outcomes of Spells of Unemployment

JANET SCHOLL Bureau of Labor Statistics

This research analyzes the duration and outcomes of individual spells of unemployment. The objective is to determine to what extent differences in length of time unemployed and in labor force status after unemployment can be explained by a model based on theory of choice. A second objective is to determine which parameters in the model are the most important sources of variation among individuals in duration and outcomes of unemployment.

For a cross-section of unemployed individuals, the model suggests that the decision to take employment or to leave the labor force by a future point in time is a problem of utility maximization. The model is formulated to represent the constraints imposed on unemployed individuals by market and nonmarket alternatives and by family needs and resources. A partial listing of the explanatory variables includes education, work experience, earnings history, ascribed status (age, sex, race), family size and income, and the presence of young children and other earners in the family. Variations in aggregate demand for labor are naturally controlled since the research problem is concerned with labor force status at a point in time.

The model is estimated by a logit system of two equations representing the joint probabilities of leaving the labor force and of becoming employed relative to the probability of remaining unemployed. The hypotheses state that those factors which lower the individual's expected net return to employment will increase the relative probability of leaving the labor force; those factors which increase the expected net return to employment will increase the relative probability of becoming employed. The effects of current unemployment duration are controlled in the logit analysis.

The model of transition from unemployment also serves as a model of completed spell duration. It is estimated by separate regression equations for individuals who left the labor force and individuals who became employed. Variables which increase the expected net return to employment are hypothesized to shorten duration for those who become employed and to lengthen duration for those who leave the labor force.

Data for this research come from the February and March 1973 Current Population Surveys. The study sample includes all persons reported unemployed in the February survey whose households were interviewed in the March survey. A matched file of the February and March records for these individuals makes it possible to determine length of unemployment and subsequent labor force status. The March survey record also provides information on work experience, earnings, and family income for the 1972 calendar year.

The matched file contains 1,522 records, about two-thirds of the unemployed individuals interviewed in February and again in March. Slightly less than half were still unemployed in the March survey; onefourth had become employed; and one-fourth had left the labor force. A preliminary examination of the data confirms expectations regarding the independent variables. Unemployed persons with more recent work experience or with higher personal earnings in 1972 were more likely to be employed in March. Those with higher amounts of other family income in 1972 were more likely to have left the labor force. Persons in the middle-age groups, men, and whites had higher probabilities of becoming employed; persons in the youngest and oldest age groups, women, and nonwhites had higher probabilities of leaving the labor force.

The discussion of the logit and regression analyses focuses on the probable effects of explanatory variables on outcomes and duration of unemployment spells. The results are interpreted in the context of manpower policies designed to assist unemployed persons.

DISCUSSION

MILTON DERBER University of Illinois

The two discussants (Professor Fogel and I) were asked by the cochairmen of this session to "appraise the extent to which (these) dissertations are addressing critical problems in the field and whether their methodologies are suited to the problems addressed." More broadly, assuming that these five theses are reflective of theses that are generally being produced in the field (and not merely a reflection of the personal values of our co-chairmen), what do they tell us of current Ph.D. programs in industrial relations?

To carry out this assignment, I examined the two- to three-page abstracts in terms of ten criteria: the importance of the subject, the use of theory, the disciplinary orientation, the method of data collection, the size of the sample, whether quantitative methods were used, whether historical developments were considered, the extent to which environmental factors were taken into account, the degree of detail on individual cases, and the overall quality of performance.

The results may be summarized as follows:

1. Each topic seemed to me worth investigating either because of a potential addition to knowledge, the testing and elaboration of theory, or as a contribution to public policy-making. None broke new ground, but all were appropriately related to prior research. They evidenced a serious concern with scholarship and were not superficial responses to current headlines or fads. Three dealt with the public or nonprofit sector, one with manufacturing, and one with the labor force as a whole.

2. Four of the five reported use of theoretical models either existing in the literature or derived from the literature. The fifth apparently derived a basic hypothesis from the literature and the findings reportedly had implications for the theory of bargaining scope.

3. Three of the five theses appeared to be grounded in the discipline of economics; two were more or less interdisciplinary in character, combining economics, organizational theory and industrial relations, or industrial relations and psychology. 4. Data collection methods varied, but three of the five relied primarily on government data sources (in one instance supplemented by a mail questionnaire), one used personal interviews, and one a mail questionnaire.

5. The samples were all sufficiently large to permit extensive statistical analysis.

6. In three theses, multiple regression analysis and other sophisticated statistical techniques, such as factor analysis and logit analysis, were reported. In the other two, the abstracts were not explicit, but I would infer that the authors also used either regression or similar statistical techniques.

7. In terms of the historical dimension, three were wholly current studies, one was predominantly current, and only one covered a period of years (1954-75).

8. The concept of "environment" influencing the decisions and behavior of the focal actors was applied comprehensively in one thesis, on a limited basis in two theses, and not at all in the remaining two.

9. None, apparently, provided the in-depth analysis of a case or a comparative study.

10. All five appeared to combine comprehensive examination of the relevant literature with systematic empirical research.

Were the methodologies appropriate to the problems addressed? A two- or three-page abstract does not provide much of a basis for an answer. I assume that the faculty members evaluating each thesis did judge the methodology to be appropriate. Whether an alternative or elaborated methodology would have been more fruitful is not easily determinable with the available materials.

However, some speculation about the broader implications of the abstracts is possible. On the one hand, I find the spread of topics encouraging. Union effectiveness, bargaining and budget-making in the public sector, inflation and strikes, professionals and the scope of bargaining, choice as to the duration and outcome of unemployment—these are signs of a field with a wide variety of intellectually demanding issues. They pose good middle-range problems, closely tied in with prior theorizing and/or research, and appropriate in terms of both challenge and manageability for a Ph.D. dissertation. Each thesis should enlarge our body of knowledge—perhaps not to a major extent, but by an observable measure. That is what Ph.D. theses are designed for in addition to providing research training for new members of the profession.

On the other hand, the predominance of primarily uni-disciplinary approaches disturbs me. Each of the three theses that fell in this category dealt with topics with major interdisciplinary aspects. I do not quarrel with the individual author's right to select a disciplinary orientation that he or she prefers. From an industrial relations perspective, however, I would like to have seen studies of bargaining/budget-making relations and of inflation and strikes giving substantial weight to political and social factors, and the study of employment/unemployment choice to encompass psychological and sociological variables.

I am impressed by the sophisticated quantitative analyses that these theses reflect, although I have some apprehension that concern with methodological technique may overshadow concern with the substance of the problem. I am disappointed by the absence of detailed case and comparative studies and the limited attention to historical (time-change) forces. One of the principal weaknesses of survey methods applied to a single point in time is that they do not yield an adequate analysis of process. To be sure, it is valuable to determine levels and degrees of association among variables, but unless the connecting processes and the forces creating degrees of stability or change are explored, we shall not make much progress in understanding what goes on in the field or in predicting future developments. Overall, however, I find the theses reassuring to the field because of the interesting problems that they deal with, the concern displayed for combining theory and empirical data, and the apparent quality of the research and analysis.

I should like to conclude this brief commentary by suggesting that at no time have the research opportunities of the industrial relations field been more challenging. As a small personal sample, I would list the comparative study of public, quasi-public, and private-sector bargaining; case analyses of varied union and management decision-making structures and processes; assessments of governmental regulatory programs and of the role of governments in general in the industrial relations field: examination of industrial democracy experiments in the U.S. and abroad at the various levels of workplace, corporation, and industry; and studies of the interplay between industrial relations systems and the excluded or underprivileged groups in society. Such a listing obviously covers only a segment of the problem universe and reflects my biased interests in policy-making, institutional and organizational interactions, and change over time. The distinguishing methodological characteristics of the list are that (1) they require an interdisciplinary approach, and (2) they call for a sensitivity to different levels of behavior from the interpersonal to the societal. If contemporary graduate education programs in industrial relations fail to promote such principles, they are not fulfilling the function that led to their origination some 30 years ago.

DISCUSSION

WALTER FOGEL University of California, Los Angeles

My instructions for this discussion are to spend most of the time on graduate education in industrial relations as its nature is indicated by the dissertation summaries you have just heard. This is certainly appropriate since the two-and-one-half page abstract of each dissertation which I received is too brief to permit any kind of critique of the dissertations themselves. But to assure each of these newly minted "doctors" that his or her work is perceived as an individual effort and contribution and not merely an unindividuated part of the grand mosaic of industrial relations—whatever that may be—I shall say just a word or two about each before proceeding to my general remarks.

Anderson's work appears to be the most interdisciplinary and, on those grounds alone, may be an important contribution, although, also on those grounds, it runs a risk of being muddled, since interdisciplinary research is so hard to do well and often turns out to be nondisciplinary. Of course, I know that Anderson's work is not muddled; otherwise we would not have hired him at UCLA. If he has convincingly defined, measured, and explained union effectiveness, that is certainly a major contribution. I suggest to him that use of the concept "environment" for explanatory purposes is too general to further this objective.

Kaufman's dissertation must have been very theoretically challenging at least, combining, as it does, elements of economics, abstract bargaining theory, and social psychology. I wish, however, that his abstract had said a little more about the results of this work.

Gallagher's thesis may be the most topically interesting since millions of taxpayers are now concerned about what the emerging teachers unions will do to school expenditures and taxes. He provides, even in his abstract, some definite answers, but I suspect that due to the complex analytical work which this question requires, most people will want to examine the research methods before accepting his answers as established facts.

Scholl's work, which is not yet completed, is directed toward one of society's most important and intractable problems, that of unemploy-

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ment, and appears to employ sophisticated research methods. Her research, however, seems to me to run the greatest risks of turning out to be simply methodological exercise, for a variety of reasons—we already know something about the problem she is addressing, through research and intelligent analysis, and her model specification may be too narrow to be useful for policy. But riskiness is inherent in much of the research that is most sorely needed, and Scholl may be able to make an important contribution.

Ponak's dissertation examines personal goals and their influence on the content of collective bargaining in a professional setting. He also has something to say about the perceptions and attitudes which produce the goals to be pursued in the bargaining process. The results appear to be interesting, especially the finding that religious preferences play a part. I would like to hear more about that connection.

So much for these dissertations individually. Taken as a group, what do they tell us about the current state of doctoral education in the field of industrial relations?

First of all, an overall judgment: the dissertations discussed here appear to speak well for the quality of industrial relations Ph.D. research. In that judgment, I rely to some extent on Professors Juris and Kochan who selected them for presentation, but I also rely on the written and oral presentations themselves. Brief as they were, the abstracts still gave me confidence that these five people have reasonably deep knowledge about the important matters they have attempted to deal with and about effective methods of inquiry for adding to that knowledge. Lamentably, this has not always been so in our field. Thus, I take this group of research efforts as a positive indication of the state of graduate education in industrial relations, even with the realization that these dissertations are probably the best of those produced in IR during 1977.

In my view, the theoretical knowledge, methodological sophistication, and general intellectual capacity of new Ph.D.'s in industrial relations is improving. The only negative note on this score is that I'm not sure the same can be said for knowledge of industrial relations institutions and particularly of their history. I must be in the older generation because I think that knowing history is important for the advancement of current knowledge. There is much history to know in industrial relations and, if students ignore it out of topical fashionability, their own work and the usefulness of the field will ultimately suffer.

Let me speak more specifically about the positive aspects of the dissertations represented here and of current research in industrial relations generally. Perhaps the most striking characteristic is that of methodological sophistication. Perhaps even doctoral programs are best at teaching how-to-do-it subject matters, as contrasted to how-to-think courses. Industrial relations methods have come a long way in the last 20 years and now rank fairly high among the social sciences in methodological sophistication. And, fortunately, the field continues to employ a variety of methods of research, as appropriate, rather than succumbing to an obsession with one or two specific methods. This variety can be seen in the dissertations presented today.

The other strong characteristic of these dissertations and, I think, of the field generally, is the applied nature of the research. All of the topics investigated are important to real people and institutions out there in the real world, as graduate students are fond of saying. And as far as I can tell, the results of each investigation may be useful for guiding policy and action, although a reading of the full dissertations would be necessary to verify that judgment. It is important, I believe, to maintain the "practical" nature of industrial relations research because the field itself owes its existence to a societal need to deal with difficult socioeconomic problems, problems which are divergent rather than convergent, to use Schumacher's terminology. The emergence of industrial relations scholars who could recommend mechanisms and processes for the improved reconciliation of opposites, rather than provide specious determinant solutions, has been the major contribution of the field and the element which has made it viable. Industrial relations training, as I know it, is not likely to produce people who will make contributions to basic disciplinary theories, and the field would be diminished if we attempted to do that, or even if we became greatly concerned about contributions to industrial relations theory itself, whatever meaning is attached to that slyly elusive concept. On the other hand, new industrial relations people, happily, are more cognizant than they used to be of the importance of conducting research from a solid foundation of appropriate theory. But their perspective, as I see it, is well balanced: know the theory well enough to use it for hypotheses about real-world behavior. This contrasts with the complete immersion in theory which seems to be necessary to make contributions to it in many disciplines.

So the applied, theoretical, and methodological aspects of the research presented today reflect positively on graduate education in industrial relations. On the other hand, there is one aspect of this research which is not encouraging and which reflects negatively not only on industrial relations training, but also on a good deal of research in the social sciences generally. I refer to the relatively weak emphasis on research results which exists in much industrial relations, as well as other DISSERTATIONS

social science research and is also present in the dissertations before us today. While the portion of their abstracts that is devoted to results varied among the five authors from almost nothing to nearly one-half the utilized space. (and, in all fairness, Ms. Scholl's work is not far enough along to have produced many results), my judgment is that the presentation of the results was generally not fully satisfactory, either because the exposition was too brief or was underarticulated.

Understand that the exposition of results I refer to is in the two-andone-half page abstracts sent to me for purposes of this discussion and may or may not exist in the dissertations themselves. Assuming that the instructions for preparation of the abstracts provided to the authors by Professors Juris and Kochan did not dominate their content, I think that the deemphasis on results found in them says something about graduate education in industrial relations (savs more about that subject. I might add, than it does about the authors themselves, all of whom look to be competent and promising). I think it says that graduate education tends to emphasize research methods over research results. I find this ordering, which is the academic counterpart of society's tendency to put form before substance, to be objectionable, in Ph.D. dissertations as well as in the research of established scholars. My view is that research should produce knowledge, and since the Ph.D. is major research, usually involving one or more years of a person's life, it should also produce and emphasize additions to knowledge. Some people may look upon the Ph.D. as primarily a chance to exercise research methods, but that view. to the extent it exists, has helped to produce the obsession with methodology which plagues so much of the social sciences today.

If I could dictate the organizational layout of dissertations and other research pieces as well, I might add, the following section headings would be used:

Section 1. This is what I found out about the research question I posed:

Section 2. My findings add to or change existing knowledge in the following ways:

Section 3. What I found out is important because:

Section 4. What I found out is accurate and reliable because of the following procedures and methods which I used.

I think that that kind of organizational format would revolutionize the academic research industry (which is one reason I don't expect instant adoption of my proposal). Think of how much less research we would have to read, because the fact is that a fair amount of now published research does not produce findings that add to existing knowledge and are important to someone outside of a small academic cell. Instead of wading through the tedious methods sections of each piece of research we read, under my proposal we would read the methods sections only when the exposition of findings interests us sufficiently to want to know if they are accurate and reliable.

I think I have made the point that our field is in danger of succumbing to the seductive idol, methodology. Fortunately, we lag behind other fields in this respect, but then we should since our entire reason for being is the existence of some mundane socioeconomic problems, not very metaphysical in nature at all. I think it would be well for graduate education in industrial relations and for the field generally to reemphasize the production and dissemination of useful knowledge. That emphasis will not only enhance the viability of the field, it will also make us more interesting to others and possibly even to ourselves.

XI. VIEWPOINTS ON THE WRITING OF LABOR HISTORY

Philip Taft, Labor History, and the Wisconsin School

JACK BARBASH University of Wisconsin-Madison

Philip Taft was the premier labor historian of our generation. No other scholar ranged as broadly over the trade union terrain nor penetrated as deeply into the workings of unions. Taft was, therefore, not only a distinguished historian of labor, he was also the leading student of the union as an institution—as John R. Commons might have said, of the union as a going concern.

The Wisconsin school of labor studies—so-called—was founded by John R. Commons, given a theory by Selig Perlman, and brought into the world of the post-1930s by Philip Taft. Taft shared with his intellectual forbears a belief in the fitness of American trade unionism to the American environment. But unlike them, he neither attempted nor offered a "theory" except for reaffirming the general validity of the Wisconsin perspective. Taft preferred to let the record of his research speak for itself.

With adaptations and modernization, Taft held to the Perlman theory that "the essence of unionism is to seek a voice in the determination of the terms of employment."¹ Business unionism, in fact, has been the goal of American trade unionism throughout its history. To Taft, business unionism was still "highly suitable for enlarging the rights and liberties of the individual and for protecting him against changes in the supply of and demand for labor."²

¹ "Reflections on Selig Perlman as Teacher and Writer," Industrial and Labor Relations Review (January 1976), p. 256.

² Organized Labor in American History (New York: Harper & Row, 1964), p. xvi.

If Taft did not present himself as a formal theorist, he was nevertheless something of a polemicist in behalf of American trade unionism. The critics of unionism's business unionism, democracy, honesty, and responsibility found Taft their most redoubtable antagonist. Taft argued from the Wisconsin standpoint that the trade unions have a right to be understood on their own terms. There was little in the critics' intellectual analysis to make their position necessarily superior to the paths which trade unions have historically hacked out for themselves. This rejoinder came with special force from Taft because nobody had probed the nooks and crannies of the American trade union experience with greater diligence, insight, and preparation.

Taft was not, however, an uncritical observer and recorder of the trade union performance. He noted (with Perlman) the "strategic blunders"³ of the AFL in the steel industry, first in 1901 and again during World War I, when broader labor movement solidarity might have breached the antiunion fortress that the steel industry presented up to the first third of the 1900s. He dismissed union autonomy as a ground for "overrid[ing] moral considerations in instances of graft and dishonesty" and decried the "surrender to business philosophy during the Coolidge period."⁴ The AFL leadership brought the "great crisis" of the 1930s on itself through a series of errors and "the ignoring of the spirit, practice, and constitutions of the AFL."⁵ Contrary to the notion that Taft was "pro-AFL," Taft may have written the first article on the CIO in an academic journal.⁶

Selig Perlman was the dominant intellectual influence in Taft's career. But as Taft began to evolve a critical standpoint toward his teacher and later collaborator, he believed that Perlman had exaggerated the relationship between ideology and behavior. It was not clear to Taft why middle-class commitments to antimonopoly or cheap money were necessarily antithetical to unionism. Nor was it clear why commitment to socialism as an ideology necessarily affected the *practice* of unionism. As long as workers have a "common interest" in job protection, their antecedent origins need not affect their unionism. Taft also found Perlman's economic group psychology—"a separation between those who prefer a secure, though modest return . . . and those who play for big

³ With Selig Perlman, History of Labor in the United States, 1896–1932, Vol. IV, Labor Movements (New York: Macmillan Co., 1935), p. 635.

⁴ History of Labor . . . , p. 636.

⁵ Organized Labor . . . , p. xx.

⁶ "The Problem of Structure in American Labor," American Economic Review, vol. 27 (March 1937).

stakes . . . "—a dubious proposition.⁷ Similarly, Perlman's definition of intellectual was almost "meaningless."⁸ But Perlman's basic proposition —"that the essence of unionism is to seek a voice in the determination of the terms of employment"—has stood the test of time.⁹

Taft the scholar was inseparable from Taft the man. No man who knew him well will forget the intensity of his commitment to labor scholarship, and the absence of cant and pretense which was mirrored in every word he spoke and wrote. On the theory that Taft was his own best witness, herewith then a random sampler of his thoughts:

On Voluntarism

The "voluntarism" or anti-governmentalism of the Gompers group was not the result of an assiduous study of Herbert Spencer but of Attorney General Olney's invoking the Sherman Anti-Trust Law and the Interstate Commerce Act against striking railway men. Throughout history every group with a "minority consciousness" feared strong government.

Selig Perlman and Philip Taft, History of Labor in the United States, 1896–1932, Vol. IV, Labor Movements (New York: Macmillan Co., 1935), p. 6.

On Socialists and Communists

The difference between the policies of the socialists and the syndicalists, as contrasted with the Communists is clear. Socialists and syndicalists acted as individuals with a common philosophy and frequently did not agree on specific trade union problems. The Communists acted not only as a bloc within the union, but the policies were made by non-union political commissars who directed every change and action of the disciplined minority in the union. The policy itself was not made in the United States, but by the Third International, Comintern.

The Structure and Government of Labor Unions (Cambridge, Mass.: Harvard University Press, 1954), p. 15.

On Crisis

The existence of a crisis in the labor movement is mainly the intellectual creation of the old left winger who misses the drama and excitement which a movement struggling for survival or

⁷ "Reflections on Selig Perlman," p. 255.

⁸ "Reflections on Selig Perlman," p. 256.

⁹ "Reflections on Selig Perlman."

new territory gives to the participants as well as to the sympathetic observer.

What must always be borne in mind is that the leader of labor is elected and paid to represent a given group of workers, who may be interested in their own advancement. He is not raised to office to be a statesman, industrial or social, or even a price economist.

> "Reflections on the Present State of the Labor Movement," in *Proceedings of the Fourteenth Annual Meeting*, Industrial Relations Research Association, New York City, December 1961, pp. 2, 13.

On Business Unionism

Business unionism is scarcely the harsh and selfish doctrine it has been pictured by its critics. The men who formed unions were frequently called upon to make sacrifices, to face the blacklist and discrimination. Nor was it without idealism. Unions have frequently helped each other and responded to the cries for aid from workers outside of the craft and even in other sections of the world.

"On the Origins of Business Unionism," Industrial and Labor Relations Review (October 1963), p. 38.

On Government

Government has always influenced the progress of the labor movement. From the conspiracy trials to the Landrum-Griffin law, government has defined the rights and duties of labor and management; nonintervention is largely a myth. Deputizing sheriffs during strikes and lockouts, granting employers the right to maintain private police forces, limiting picketing, protecting yellow-dog contracts, and aborting organizing campaigns and boycotts by court orders are forms of intervention which were exceedingly effective. Government has in the past been as effective in inhibiting labor organization and collective bargaining as the New Deal labor laws have been in protecting the right to organize.

Organized Labor in American History (New York: Harper & Row, 1964), p. xvii.

On Wisconsin

Aside from providing information on organizations, their problems, relationships, and methods of operation, the students in

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Wisconsin, from Professor Commons and his students to the large number of others who came under their influence, shared a belief approaching, but some distance from, a faith that the trade unions would survive and prosper in the American economy, and this prospect was desirable. They believed that unions had an important role, not to train the working class to accept the leadership of a revolutionary intelligentsia, but in enlarging the rights of individuals at the place of work. They recognized the conservative character of the trade union, but did not despair of its eventual ability to adapt itself to a changing technology.

"American Labor's Origins and Ideology," in *The Labor Movement: A Re-examination*, A Conference in Honor of David J. Saposs, ed. Jack Barbash (Madison: Industrial Relations Research Institute, Department of Economics, University of Wisconsin, and the State Historical Society of Wisconsin, January 14–15, 1966), pp. 69–70.

On the American Labor Movement

In closing I may say that with all its faults, and it has many, the American labor movement is the most effective and therefore the best in the world. It has done more for its people; it has understood its social and economic environments; and it has a better record, yes and I include the craft unions, in supporting good causes, the oppressed abroad and the exploited at home. It is a movement of workers, officered largely by men and women risen from the ranks. It is not necessarily wiser than other segments of our society, nor are its prescriptions for change always just, equitable or desirable. Yet, it is a vigorous movement directing its major efforts towards protecting rights on the job. It is needed if democracy is to continue and prosper.

> "Reflections on the Present State of the Labor Movement," p. 13.

A Labor Leader Looks at Labor History

BERTRAM MCNAMARA United Steelworkers of America

The day that I heard of Phil Taft's death last November, I recall taking down a volume from my office library dealing with the history of the British labor movement. The title was *Magnificent Journey*. The book's title and the death of a man who was an inspiration to so many of us in the labor movement seemed at the time interwoven, for while I knew Professor Taft only through casual meetings, his reputation had preceded him and hearing him speak was a confirmation of the admiration that had been accorded his work.

As a one time student of Selig Perlman, I came to understand the scholarly integrity that had become synonymous with Philip Taft. Taft was of course America's leading labor historian; more than that he was a bridge between the academic world and that of labor whose spokespersons have always seemingly felt that their history had been largely untold—and distorted when it was told—in the classroom.

As a former student in the University of Wisconsin's labor programs and later as a regent of the University system, I had a particular feeling about my own union and the history of labor, and also about the university system and how the two might mesh in a democratic society.

Professors Taft and Perlman co-authored one of the first scholarly works of American labor history back in 1935, the year before I joined the CIO Steel Workers Organizing Committee. While they were completing their study of what had been the American Federation of Labor up to that year, I was finding out what it was to work in industry without any sort of a union at the Fort Wayne, Indiana, plant of the Joslyn Steel Mills.

For the next four decades, my life would be the union. During the same period, the history of unions would become a fascinating professional interest for Taft and Perlman. In many ways I was part of a new industrial movement which would be a dominant influence on the more traditional schools of craft unionism. Some of you have differed with some of their interpretations of the basic conflicts within trade and industrial unionism, but whatever their conclusions, their work was that of scholars. And their impact on the analysis of the study of American labor history has contributed profoundly to labor's own understanding of some of the unique qualities of the American labor movement.

Some of my colleagues on this program were part of this movement, notably Abe Raskin of *The New York Times*, whose insight into the evolution of labor has had an especially sharp cutting edge, with an overview of political and social considerations that many of us in labor have recognized but have not paid sufficient attention to, and Jack Barbash, with whom I share a special closeness not only because of our years of association in the labor movement and in the University of Wisconsin, but because of the common-sense contributions he has made to labor economics.

Last July, in *The Federationist*, Jack recalled that Perlman, as a student of John R. Commons, had defined what many academics today are calling a new ideology—the "humanization of work." In his distinguished 1928 book *A Theory of the Labor Movement*, Perlman distinguished between the theories of freedom of the workingman and of the intellectual: "To the workingman, the freedom that matters supremely is the freedom on the job, freedom from unjust discrimination which enables him to face his boss 'man to man.' Compared with this tangible sort of freedom, the 'higher' freedom, the freedom to elect the managers of industry who are to supplant the present day private boss, or the freedom which the intellectual talks about, appears too remote to enter into actual calculations."

This discussion is really as old as is the union movement—for the worth of the individual worker was the central ingredient of trade and later industrial unionism, evolving into the process of collective bargaining as we know it today. And that is essentially what Taft did in his contributions to the long-neglected field of the history of labor—relating the success of human relations in the workplace, despite all the adversary forces which confronted unions in their quest for economic justice.

The nation's bicentennial provided an impetus for the many diverse groups who had built America to delve into their beginnings and inquire about their origins. So it has been with my own Steelworkers Union. In 1976 the United Steelworkers of America paused to recall two significant dates—one, a hundred years in its past, and the other, just four decades ago. The first was the centennial of the founding of the first steel union in the United States—the Amalgamated Association of Iron, Steel and Tin Workers of North America in 1876.

After a history of great promise and then lessening impact, the Amalgamated went through a turbulent era of bitter strikes and crush-

ing defeats, finally convening only a shadow of its former glorious self to merge with the fledgling Steel Workers Organizing Committee in 1936 to form our present industrial union, the largest within the parent AFL-CIO in this country and the largest union in Canada. Since we are doing honor in this conference to a labor historian, it may be appropriate to recall some of that dramatic history of the Steelworkers, and to trace its evolution out of the economic jungle that was labor and capital prior to collective bargaining, the instrument which Professor Taft so often referred to as "that civilizing aspect of American economic life."

In the late 19th century, the steel industry was centered in Pittsburgh because of the accessibility of the needed natural resources, its river system, and its labor pool. It was in this city, at a fraternal hall called Emerald Place—today located in the shadow of the towering corporate headquarters of U.S. Steel—that five small craft unions met in August 1876. They were the Roll Hands' Union, the Heaters' Association, the Boilers Union, the Nailers Association, and the Sons of Vulcan, and they founded at that meeting America's first steel union—the Amalgamated Association. Interestingly enough, I joined the Amalgamated Association the year before the CIO was formed, and I was privileged to work with and hear the reminiscence of an old steel worker who had been a member of the Sons of Vulcan when a boy. My personal contact therefore, with those who made labor history in steel goes back to over 100 years.

The Amalgamated Association of Iron, Steel and Tin Workers, whose centennial we marked last year—along with the bicentennial of our nation and the 40th anniversary of the Steelworkers—was by the early 1890s the largest affiliate of the American Federation of Labor and considered the strongest among the unions in the emerging industrial sector. By that time, too, however, those in control of the American steel industry had become determined to keep anything resembling a union off their properties.

It was in the strike of 1892 at Homestead, Pennsylvania, that one of the classic confrontations of U.S. labor history took place. On July 6, under cover of darkness and fog, two barges with 300 armed Pinkerton guards were brought up the Monongahela River from Pittsburgh, on orders from Henry Clay Frick. Mill-owner Andrew Carnegie had gone off to his native Scotland for the period during which the struggle was to be waged. He had assigned Henry Frick to cut wages and break the union which three years earlier had won a contract at Homestead. The "Seige of Homestead" raged for 12 hours that day, and when the battle ended, three Pinkerton detectives and 10 steel workers had been killed. Under the protection of the state militia, scab labor gradually reopened the mills in the Pittsburgh area. Frick was later to boast: "We had to teach our employees a lesson, and we have taught them one they will never forget."

On the eve of the 1892 strike in Homestead, the Amalgamated Association had almost 300 lodges and a dues-paying membership of over 24,000—almost one-tenth of the membership in the American Federation of Labor, as Phil Taft observed in his classic *History of Labor in the United States*, published the year before the USWA was launched.

With the collapse of the 1892 strike, it was a rapid slide down hill for the Amalgamated Association, which by 1910 had workers under contract in only one small open hearth plant. The workers had but one remaining right left to them. "If a man is dissatisfied," said President F. N. Hoffstot of the Pressed Steel Car Company, "it's his privilege to quit."

New generations need to be reminded that the trade union moveinent was born out of misery and despair, defeat upon defeat. So, it might well be appropriate to recall that at the turn of the century and for many years thereafter, those who labored in the steel mills existed in a state of industrial slavery. If those early workers did not belong to a union, they nonetheless paid their dues . . . in the form of their blood, their limbs, and their very lives.

One early 20th century study indicated that one result of industrialization was the destruction of family life—not in any imaginary sense, but simply because of the demands of the day's work, 12 hours a day, seven days a week made a meaningful family life impossible. Preventable illnesses and industrial accidents cost Pittsburgh in a single year considerably more than a thousand lives. Human beings were the cheapest raw material that went into the making of steel.

The formation of the Carnegie-Illinois Steel Corporation in 1901 concentrated the economic power which shaped and dominated the antiunion policies of the industry, bringing about a reversal in relations between employer and employee in the industry. While, in the late 1800s, there had been a national union which dealt with individual employers, now here was one great corporation whose negative actions fixed the standards for the whole industry.

Although another attempt to organize steel took place in 1919, it was once again beaten back by the steel barons, and American workers reached the thirties in the hopelessness, frustration, and privation of the Great Depression. It wasn't until 1935 that the Wagner Act helped balance the scales of labor-management justice which had long been so badly tilted in favor of industry and against its workers.

Phil Murray and his father, both of whom had worked in Scottish collieries, came to America in 1902. They cleared through Ellis Island on Christmas Day and set out for the bituminous coal fields of Pennsylvania, carrying international coal union transfer cards in their pockets. Two years later, while at work for the Keystone Coal and Coke Company in the Westmoreland County coal town of Madison, Murray was involved in an incident that perhaps more than any other made him a confirmed trade unionist.

One night, when he came out of the pit, he stopped at the weighman's office to complain about the money he suspected he and other miners were losing every day by having their coal shortweighted. Words led to a knock-down, drag-out fight, and the next morning, Murray was fired for "engaging in a brawl on company property." The whole workforce of 600 miners immediately laid down their picks and shovels to join Murray in a fight to get a checkweighman, someone paid by the miners themselves, who could watch the scales with the company man to "check" the weight of the coal mined and see that the miners got an honest count.

A strike meeting was held, and Murray's father, who had joined in the walkout, helped elect the young man president of a local unit of the United Mine Workers of America. When hunger ended the strike after four weeks, Murray, surrounded by deputy sheriffs, was taken by train to Pittsburgh and told never to return to Westmoreland County. Phil Murray would always say that that episode determined what he wanted to do with his life.

In Pittsburgh, he rose rapidly in the United Mine Workers District 5, the Pittsburgh District, and by 1912 he had been elected an International Board member. From out of this crucible of militant mine unionism, Murray in 1936 would become part of the catalyst, along with John L. Lewis, to bring industrial unionism to the American Federation of Labor, which it was to reject initially. After residing in a house divided for more than two decades, both the AFL and CIO would accept industrial and craft organization as part of the historical process of unionism. Thus did a Scottish immigrant make what has been described as a "Magnificent Journey" in the evolution of unionism. It was the sort of history which Phil Taft could tell with relish, insight, and compassion.

This past year many historians recalled the Great Strike of 1877, known by some as the Bunker Hill of American Labor, a most amazing and dramatic event in which for the first time a national strike occurred and the problems of the working people of the emerging industrial society were brought with full force to the attention of the propertied and political leadership. And other anniversaries were marked by our members this past year; two solitary monuments recall events in the turbulent year of 1937, one in South Chicago and the other in the Ohio River Valley of Western Pennsylvania.

One event was the narrow 5-4 U.S. Supreme Court decision upholding the constitutionality of the Wagner Act. The case involved 54 steel workers who had been fired by the Jones and Laughlin Steel Corporation at the Aliquippa Works during a 1936 organizing drive. After a hearing that year by the new NLRB, the Board ordered the reinstatement of the workers—a verdict the Court upheld.

A monument that stands today in downtown Aliquippa, Pennsylvania, lists the 10 workers named in the case—officers and rank-andfile members of the Amalgamated Association of Iron, Steel and Tin Workers of North America, Beaver Valley Lodge No. 200, now known as USWA Local 1211.

It was at that plant and J & L's property in Pittsburgh, involving a total of 25,000 workers, that the SWOC undertook its first strike on May 12, 1937. Thirty-six hours later it was over, with the company agreeing to a Labor Board election and a signed contract if the union won, which it did by a margin of 3 to 1.

Later that month, during a Memorial Day union parade and meeting in a field near the Republic Steel plant in Chicago, more than 1,000 workers were peacefully demonstrating. A holiday spirit prevailed until Chicago police confronted the paraders, ordering the workers to disperse. A moment later, on signal, the police attacked—using guns, clubs, and tear gas. Ten men were killed from gunfire—all of them shot either in the back or in the side. Thirty others, including a woman and three children, were wounded by gunfire, and 28 more were beaten so badly they required hospitalization.

The incident is known as the 1937 "Memorial Day Massacre," rightfully so. A newsreel film of the event was so shocking it was suppressed, but was later subpoenaed by the La Follette Committee. Six SWOC members also lost their lives on union picket lines in Massillon and Youngstown, Ohio, and Beaver Falls, Pennsylvania, during this bitter strike.

The monument which stands in front of a local union hall in South Chicago also lists ten names—ten who gave their lives on that open field so that there might be a union to help them out of that industrial jungle. This is the history that we are proud of, and which we seek to pass on through the college and university system which labor was so instrumental in launching as a logical extension of one of its first great social crusades—free public education. The budget battles which are going on today in state legislatures in Pennsylvania, Wisconsin, California, and many of our other populous states are evidence that the fight continues—and that there are those who would remove the possibility of an education by pricing it outside the realm of those who have in effect built our society.

It was Taft, who saw the phenomenon of blue collar-professional unity in economic goals despite the "New Class" theories which were in vogue at the time, all of them suggesting that this emergence of professionalism in the workforce would spell the decline of the labor movement. Said Taft: "A Ph.D. who joins a labor organization does not affiliate so that he can carry the torch of enlightenment, but he enters for reasons similar to those of a laborer who makes the same decision." The experience of my own union has proven how correct he was, and today we have people with university degrees on our negotiating committees, who come from a workforce where their technological skills are now part of the changing occupational landscape.

Phil Taft understood the forces which were at work in our nation, and through his gift of effective written and spoken articulation he carried the message to thousands, who in turn carried it to millions. In closing I can think of no more effective and meaningful tribute to Taft than repeating the eulogy that labor commentator John Herling made last year after his friend had died:

"Phil Taft was not only an indefatigable scholar, he was a generous friend. He inspired his students and his contemporaries. He shared his knowledge unstintingly. He was a vivid figure. When you walked down the street with him, you felt you were going in to battle for the good, the true and sometimes the beautiful. He was a man of passionate concern. He loved the labor movement and was scornful of those who perverted it by corruption or totalitarian shenanigans."

Knowing him, I feel that Phil Taft would have had us make only one memorial to him: To continue walking down that same street, to continue to make the good fight.

The Journalist as Labor Historian

A. H. RASKIN

Associate Director, National News Council

The labor movement has always felt surrounded by enemies. This sense of beleaguerment was understandably strong through all the decades in which unions were classed as illegal conspiracies, obliged to fight the courts, the police, and often the militia, all lined up with the bosses in brutal resistance to unionism. Even after the Norris-La Guardia Act outlawed the yellow-dog contract and the Wagner Act put a bedrock of federal law under collective bargaining through unions of the workers' own choosing, such excesses of "law enforcement" as the Memorial Day Massacre of 1937 kept alive the same atavistic union sense of having always to contend with a hostile climate of community opinion that fortified the employer in his opposition to labor's demands.

Labor's self-image as an orphan of the storm, misrepresented and misunderstood by the public of which it makes up so large a part, still remains strong even in this period when unions exercise stop-or-go power over many of the biggest of big businesses and the most vital of public services; administer billions of dollars in treasury, strike, and trust funds; and operate political and lobbying mechanisms of great sophistication and effectiveness.

There is little question in the minds of most top unionists about where to fix culpability for labor's depressed state in public esteem. Whatever cleavages may exist among them on philosophy or tactics, union leaders have little difficulty in agreeing that through all of American history the country has received from the press a distorted view of the role of labor in society.

As unionists see it, the whole thing is an elementary matter of economic determinism. All the instruments of mass communication—newspapers, magazines, television and radio—are business enterprises, and their owners automatically identify with other employers whenever the interests of labor and management collide. That identification finds expression in use of the press as a vehicle for systematically defaming labor and vilifying its leaders. So goes the union jeremiad, and it has gained intensity in recent years as monopoly control has become more general in both print and electronic journalism. Obviously, I could not conscientiously have devoted four decades to reporting and analyzing the course of labor-management relations and the proliferating range of labor's activities in every aspect of human affairs if I felt there was basic validity to this indictment. Nor would there be much point to exploring in this session—dedicated to celebration of the memory of our revered friend, Phil Taft, at once the most rigorous of labor historians in fidelity to scholarly standards and the most sympathetic in personal appreciation of labor's ideals—where journalism rates as a guide to intelligent understanding of the past, present, and future of unionism.

Since the concept of media unreliability as chronicler of labor enjoys an acceptance within the movement rivaled in dogmatism only by the worship labor accords the Gompers maxim of "more," it may be helpful by way of precede to explain why I feel scant merit attends the charge that the increasing concentration of press ownership spills over into bias or brainwashing in the presentation of labor news by the agencies of public information.

The best story I ever wrote is one I never would have been asked to write if publishers did, in fact, operate with callous conviction that their mission was to protect themselves and their class rather than to inform. It dealt with the 114-day strike that shut down all New York City papers in 1962 and 1963. Though I was then a member of the editorial board of *The Times* and technically a part of management, I had elected not to come through the picket line, and the publisher refrained from any insistence that I join other executives inside.

Midway through the long tie-up, I got a call from Ted Bernstein, then our assistant managing editor, and Frank Adams, our metropolitan editor, asking me to start collecting material for a long background article to run the day publication was resumed, explaining what the strike was all about. We had never done anything of comparable exhaustiveness on any other strike, even the 116-day steel strike of 1959, and I was much intrigued by the paper's willingness to turn a spotlight of utmost intensity on something in which it was itself so directly involved.

I felt, however, that fairness required me to run up a modest caution flag before I undertook this surprise assignment. I warned the editors that the story would almost certainly occasion considerable personal embarrassment to the chief negotiator for the Publishers Association, who happened also to be the vice president and general manager of *The Times*. The instant response was: "All we want you to do is to tell the whole story, and don't pull any punches." Thus instructed, I dug so hard that what was supposed to be a fourcolumn story grew to 18 columns, far and away the longest story *The Times* had ever run on any labor dispute. It did not spare anyone on either the union or management side or among the bumbling army of third parties, up to President Kennedy himself, who sought vainly to end the long sleep of the printing presses. But by all odds the biggest black eye was the one left on the aristocratic face of our general manager. The upshot was that he soon became our ex-general manager.

I do not dredge up this self-congratulatory recital as evidence that the press is vigilant in sharing acknowledgement of self-fallibility with the outside world. On the contrary, I feel it is often so derelict in holding up to itself the same exacting mirror it focuses on everyone else that I have long urged that every newspaper and TV station have an ombudsman with authority to set the record straight when he is convinced that error has been committed.

The important thing for purposes of our immediate discussion, however, is that the general press approach to covering developments in the labor field is essentially the same as its approach to any other significant area of coverage, free of any element of calculated distortion, whether ordered by the publisher or inserted by editors or correspondents out of sycophantic eagerness to indulge the owner's supposed class prejudices or to appease powerful advertisers. Today, with rare exceptions, publishers shun any attempt to influence the handling of labor stories, and charges of ingrained pro-employer bias are hard to sustain.

Indeed, I would argue that unions locked in battles with industry win more often than they lose in the propaganda exchange. That is not because reporters as members of the Newspaper Guild or the American Federation of Television and Radio Artists are loading the deck in labor's favor, but because unions have become adept at getting their story across whenever anyone is interested enough to listen. Union heads are almost invariably more accessible than their industrial counterparts, who still wall themselves away behind public relations departments operating under instructions to say nothing that could possibly illuminate the situation.

But exonerating newspapers and television commentators of systematic antilabor coloration in their news accounts about unions, whether in the narrow field of labor-management activities or in the full sweep of labor's relations with the total society, evades the central element in the assessment I am called on to make: How valid are such accounts as guideposts to chroniclers of labor history?

By the measuring rod of Phil Taft, I am afraid that the answer must

be much more negative than positive. The reality is that even in the most conscientious of publications the coverage of labor affairs tends to be episodic and in many respects nonexistent. That is unquestionably why, to cite an instance very pertinent to this particular discussion, one finds that Taft himself placed almost no reliance on journalistic sources as reference points in his own encyclopedic writings about organized labor in American history.

Part of the difficulty lies in the very definition of news as something out of the ordinary. That means the aberrational commands attention, while no note at all is taken of the norm that is 98 percent of life. In the case of labor, it means that strikes, especially those that result in widespread disruption of essential services or massive industries, become almost the totality of press interest to the exclusion of everything else unions do, including the tens of thousands of contracts peacefully negotiated through collective bargaining.

The worst part of this obsessive focus on the breakdowns in bargaining as a vehicle for sensible accommodation, quite apart from its inherent imbalance, is that the media tend to lose interest at precisely the point of maximum concern for the historian, the settlement and its aftermath in both economic and attitudinal terms. In most cases big stories will be carried when the handshake agreement is reached and the union schedules a ratification vote preliminary to sending its members back to work. At that point the details are usually still secret; by the time they can be released the news interest has drained out of the dispute and the papers carry a paragraph or two giving the broad outlines of the new contract. If a price boost rides along with the package, the story may be a bit more adequate, but rarely will it carry the kind of detail needed for full understanding of anything that may be tucked away in the contract's fine print.

As one small example of what can slip by undetected under these circumstances of quick exit, let me recall a "me too" situation that arose among New York City's civil service unions nearly a decade ago that wound up costing the taxpayers a quarter of a billion dollars in one fell swoop—a situation no one outside the inner circle of bargainers for the city and the municipal unions knew anything about until the heist had been completed. The problem arose in the mayoral administration of John V. Lindsay when a lot of strange things had a way of happening in relations between the city and its muscular unions.

This particular miscarriage arose out of a parity-pay dispute involving police sergeants and patrolmen. Some of the country's most prestigious arbitrators, all acting out of the noblest of motives, managed to sew the city into a sack from which it would have been hard to escape without a seemingly endless chain of pay increases for everyone on the civic payroll.

Then, in line with its genius for making a bad situation infinitely worse, the city secretly committed itself to a formula that tied various police and fire grades together in parity relationships that even an Einstein could not have brought into balance. The whole thing was done in a letter of understanding that eluded press attention until the policemen went to court to force the city to pay a big chunk of back wages the citizens never knew they owed. By the time every other unionized group had been bought off, the city had taken a long step further down the trail that compelled it to become a financial ward of Uncle Sam. To this day, the historian will find little in press accounts that would enable him to make sense of how New York acquired this heavy anchor dragging down the foundering city treasury.

The rare times in which the media are of conspicuous benefit to researchers tend to be those in which investigative talents are applied to putting the whole story of a strike or an adjustment to technological change into perspective after some major turning point in relationships. When well done, as they have been in a number of instances involving railroads, the waterfront, steel, and the newspaper unions, such accounts have all the dimensions of history, plus a special richness that cannot be derived from a study of contracts, executive board minutes, or accounts in labor and business journals. They provide a feel of the interplay of personalities and politics without which no true understanding is possible.

But, without derogating these all too few creditable efforts, it is questionable that they match some of the early studies of industrial pathology in the sweatshops, the textile factories, and the stockyards by such muckraking journalists as Lincoln Steffens, Upton Sinclair, Jacob A. Riis, and Ray Stannard Baker. Outside the realm of union penetration by the underworld, there has been little sustained interest in recent years in any aspect of union affairs by most elements in the press.

The holdbacks are twofold. For one, there is apathy on the part of editors, despite the overwhelming evidence of the pervasiveness of labor's influence on everything from the survival of the cities to the shape of an economy struggling with chronic inflation and unemployment in a period of worldwide constraints on future growth. And along with that goes an appalling shortage of qualified reporters and analysts regularly assigned to labor matters.

In the 1930s, when the passage of the Wagner Act and the formation

of the CIO made even the most hidebound editor aware that labor was a big story, the ease with which Louis Stark of *The New York Times* dominated the labor scene prompted most other major newspapers to scramble for experts in this field. The level of those who were pressed into service was uneven, but professional standards did rise and much of the coverage was characterized by sophistication, accuracy, and comprehensiveness, a boon to historians seeking to reconstruct that volcanic period and illuminate its tensions.

In the last two decades, regrettably, the tide of journalistic interest has tended to recede, though there are healthy signs at the moment of reviving attention what with the emergence of the most substantial crop of new union leaders in a quarter-century and the complexity of problems created by stiffened import competition and new technology. If journalism is to do an adequate job for its current readers and as a sourcebook for labor historians, it is going to have to start with a recognition of the need for sustained attention to all of labor's activities by editors and reporters of quality and dedication. It is also going to have to broaden its conception of what is news in this field and, above all, to put developments into a context of significance not only to workers and employers but to all of society.

The Phil Taft perspective is as relevant to labor journalists as it is to labor historians.

Now that I have delivered myself of those rather sour reflections on my central theme, let me turn to the infinitely more pleasurable task of talking about our beloved friend, Phil. Nothing would irritate him more than the thought that a meeting in his honor should be an occasion for sadness or lament.

He was eternally full of zest for life, his eyes always agleam, his shy smile brightening the fiercest argument. Erudition never stripped him of passion or of compassion. In a cynical world, he was unwavering in his certainty that idealism would ultimately prevail, his faith an unspoken reproach to those of us overquick to conclude that greed and arbitrariness were ever on the ascendant.

Phil Taft was an inspiration to all who knew him through his encyclopedic writings; to those who knew him as a friend he was a radiant spirit touching everyone of us with a warmth and beauty that never fades.

DISCUSSION

JONATHAN GROSSMAN U.S. Department of Labor

As historian for the United States Department of Labor, I will take a few minutes to talk about labor history and the government. Of government agencies that have historical staffs, the Department of Labor is the smallest. Military agencies have large professional staffs, as have the Department of State and the Department of Agriculture. Some years ago several trade union groups tried to launch a campaign for a more intensive study of labor history. As part of the effort, Leonard Woodcock asked the Secretary of Labor to expand government labor history programs, but his proposal died on the vine. I am glad to hear that recently the UAW arranged with Jack Herling for a three-year project to write their own union history. Because government labor history has only a token program and I do not have the talent or energy of Philip Taft, we limit ourselves to an occasional book and a few articles a year chiefly on relations between the federal government and labor.

I want to call to the attention of researchers that we maintain a useful annotated record of the files of all Secretaries of Labor going back to 1913. This has been a research tool not only for innumerable Ph.D. candidates in labor history and industrial relations, but also for distinguished authors including Philip Taft. Phil Taft was interested, as you already know from Jack Barbash's remarks, in government and labor, and his last book, which I reviewed for the American Historical Review, was called Rights of Union Members and the Government. The Department of Labor also published a superb history of The American Worker for its Bicentennial celebration. Two of the six labor historians who made major contributions were Jack Barbash and Philip Taft.

Barbash has told you of the Commons-Perlman-Taft "school" of labor history. Recently I found a letter John R. Commons wrote in 1894 to Commissioner of Labor Carroll Wright. I hope the Wisconsin School does not think I am committing treason when I observe that Commons wrote the letter on the stationery of Indiana University in Bloomington. He asked the Department to sponsor him on a 15-month trip to study labor in Australia. Young Commons gave as reference Richard Ely, the grandfather of the "Wisconsin School" of labor history. Before the avalanche of paper and modern filing systems, records of outgoing correspondence were kept in copybooks. Most of the Department of Labor's old copybooks have disappeared. But, some careless clerk failed to destroy the copybooks for the period 1899 to 1906. To the best of my knowledge, historians have not consulted these copybooks, partly because of their obscurity, and partly because they cover many miscellaneous matters and have no topical index. These few copybooks contain 91 letters to John R. Commons and show that Commons was active in the great anthracite coal strike of 1902. This strike was a turning point in the relations of the federal government to organized labor. The strike caused what we would today call an energy crisis. President Theodore Roosevelt then called it "a fuel famine." He refused to take sides. The government acted as mediator instead of its hitherto customary role as "strikebreaker."

Because Phil Taft, like John R. Commons, used the Department of Labor as a research source, I grew to know and admire Phil Taft.

Now for my comments on the papers themselves.

Barbash points out that Taft was the premier labor historian of his era, that he was a polemicist for American unions and their business orientation, and that labor leaders were paid by their followers to represent a given group of workers, rather than to be industrial statesmen. But, as Barbash shows, Taft moved beyond being a court historian for the American Federation of Labor and that Taft's article in 1937 in the American Economic Review was probably the first article on the CIO to appear in a scholarly journal. Barbash also discusses Taft's broader studies of the influence of unions in society.

I agree with Barbash but want to add a few comments about the "new" historians who have attacked Taft's work specifically and the Wisconsin School in general. These historians want labor history written from the "bottom up" and accuse the Wisconsin School of confusing the word "union" with all labor. To the more militant faction of the group, traditional American unions are an aspect of big business rather than representatives of workers. These anti-Taft historians complain that unions no longer carry the message of social justice. But, as George Meany said, "You can be quite radical if you were involved in a labor dispute where people were getting 30 cents an hour because . . . all you lose is 30 cents an hour." (I am updating Meany's figures but continuing his line of thought.) But when the average construction worker makes more than \$10 an hour plus an additional \$2 an hour for fringe benefits and is paying off mortgages, and has kids going to college, "you have an entirely different situation."

Taft understood these changes in unions. Their success changed their point of view. But he also knew that each generation of historians looks at the past from the viewpoint of its own times. While stoutly defending the right of unions to look at history in their own terms, Taft recognized the relevance of the new historians and was on occasion a "new historian" himself.

Historians must recognize that it would be impossible to write the "new history" were it not for the groundwork laid by men like Richard T. Ely, John R. Commons, Selig Perlman, Philip Taft, Richard Morris, and others. These men are not the antagonists of new history, but the forefathers.

Taft himself was writing history from "bottom up." He recognized the importance of local labor movements and civil rights. At the time of death, he was working on interracial aspects of Alabama unions. In a 1975 note in *Labor History*, he told of a black vice-president of the interracial Alabama State Federation of Labor who, in 1902, was arranging a convention in Selma, Alabama. When there was difficulty in hiring a hall, a white delegate from the typographical union vowed that they would "meet in the woods" if all halls would refuse to accept equally black and white delegates. As Taft explained, meeting in the woods was not necessary, because a hall was made available "without regard to color line"—by none other than the United Confederate Veterans.

Turning to the paper by Bertram McNamara, I found it fascinating, but I don't think the "new" historians would like it very much. Mc-Namara writes squarely in the "Wisconsin School" tradition, and he glories in the trade union as an institution. McNamara studied with Perlman and is a member of the Wisconsin Board of Regents. I suppose that the new historians might soften their criticism slightly because McNamara writes about an industrial union rather than a craft union, but he is union all the way.

McNamara himself became part of the movement that created the modern United Steelworkers of America. McNamara recalls with reverence the birth, more than 100 years ago, of the Amalgamated Association of Iron, Steel and Tin Workers of North America. You can sense the sadness when he recounts the defeat in the Homestead Strike of 1892 and his pain at the Memorial Day Massacre. His talk today is a tribute to Phil Taft. Appropriately, he ends with an eloquent quotation about Taft from labor editor and commentator John Herling.

Mentioning Jack Herling gives me a lead into my comments on A. H. Raskin's paper on "The Journalist as Labor Historian." Herling has written *The Right to Challenge* (a book about the Steelworkers' struggle for union democracy), a subject in which Taft was vitally interested. His *Labor Letter* is an excellent historical source.

Abe Raskin, himself, is proof that journalists make great contributions to labor history. I accuse Raskin of false modesty when he downplays the role of journalists as labor historians. Richard Morris has edited a major book in the field of labor history based on a single source newspaper reports in *The New York Times*. Louis Stark, Abe Raskin, and reporters for *The New York Times*, *The Wall Street Journal*, other newspapers, and TV make contributions to labor history.

Now Raskin does make some valid criticism of newspaper stories. It is true that reporters look for the dramatic. A strike, gangsterism in unions, a terrible industrial accident, grab big bold headlines. The peaceful settlement of even a major industrial collective bargaining contract, if reported at all, gets notice for perhaps one day, usually on an inside page. Journalists constantly miss important events that are routine and dull.

As Raskin points out, news reports tend to be episodic. One aspect is that beginnings are well publicized and endings get lost in obscurity. Raskin gives a magnificent example of this in the bargaining between Mayor Lindsay and the unions representing New York City municipal workers where a \$250,000,000 "heist" at the end went unnoticed.

But, granting all these considerable shortcomings, I know of no source that matches newspaper reports. Good reporters know where to go, whom to ask, what to ask, and they get materials that most historians would never think about and, even if they did, would not know how to find. And good reporters get different points of view. I'm glad Raskin rebuts a typical labor comment like that of George Meany—"just another attack by a normally hostile press." There are no totally objective newspaper reporters, but at least good reporters are intellectually honest.

Historians rely heavily on newspapers, and Taft's books have many footnote references to newspapers. His story of interracial unions in Alabama during the reign of Jim Crow came from Birmingham newspapers. Management sources are scarce and self-serving. Labor sources are more abundant but also self-serving. If mediators talk they lose credibility with management and labor. Government reports are antiseptic and controversy is down-played.

Labor historians need many sources, and, among the best, is the work of journalists. There is no more fitting an example than the report which Raskin gave you of his 18-column article on the New York newspaper strike. That story should have gotten a Pulitzer prize. This 114-

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day strike involved the vital public interest of the "right to know." The strike was of momentous economic significance, and, for some of the newspapers, it was a matter of life or death. To workers also, automation involved economic survival. This intricate web of freedom of the press, economic survival, technological progress, and skills in collective bargaining was a complicated story. Raskin told it honestly, clearly, interestingly, and with a first-hand knowledge that no labor historian could match.

Journalism as labor history has shortcomings. But can anyone in this room give a better single source? I can think of only one: a knowledgeable, indefatigable, and objective historian with an analytic mind and the advantage of hindsight. Such a historian was Philip Taft to whom this memorial session on labor history is dedicated.

XII. CONTRIBUTED PAPERS: ORGANIZATIONAL BEHAVIOR

Analyzing Attitudes Toward Unions: Two Case Studies in Higher Education

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Why the employees in an organization might want collective representation by a union is a central question in labor relations. The recent growth of faculty unionism in higher education provides academics the opportunity to address that question in a spirit of self-inquiry. As of February 1977, there were collective bargaining agents representing the faculty at 326 institutions on 550 different campuses.¹ Previous research by Garbarino identifies some characteristics of institutions with such faculty unions, e.g., public control (257 of the 326 institutions with agents), two-year program (209 of 326), favorable state legislation, and inclusion in a centrally administered system of several related units.² Nonetheless, a psychological question remains: Why do some academics within any given institution want a union while others do not? Perhaps the simplest explanation derives from folk economics: dissatisfaction with salary leads to an interest in a labor union. In higher education, the potential for faculty involvement in governance suggests paying special attention to an academic's role in organizational decision-making as a possible explanation for interest in a faculty union. This report assesses the validity of several current explanations of individual interest

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¹ Information provided by Edward P. Kelley, Director, Academic Collective Bargaining Information Service, Washington.

² Joseph W. Garbarino, in association with Bill Aussieker, *Faculty Bargaining*, *Change and Conflict* (New York: McGraw-Hill Book Co., 1975).

in faculty unionism, with a particular focus on the last two: (1) organizational position, (2) personal background, (3) dissatisfaction with salary, (4) perceived participation in decision-making, and (5) trust in decision-making. Since these explanations frequently overlap and because previous studies have focused primarily on simple correlations between explanations and attitudes toward unionism, this study analyzes their intercorrelations by means of multiple regression to identify the relative importance of each.

Explanations of Individual Desire for Collective Bargaining

In summarizing an early questionnaire survey of faculty in higher education across the nation. Ladd and Lipset emphasize two predictors of union interest: political liberalism, and the status or prestige of the individual's institution.³ Self-described liberalism and holding a position at a lesser institution predict support for unions. According to a later survey of the University of Vermont by Nixon, low-status individuals within the institution hold more militant attitudes, where status includes organizational rank, salary, publication record, and age.⁴ Kemerer and Baldridge provide the most extensive list of explanations of individual interest in faculty unions based on their own questionnaire data from a national sample: low salary, high teaching load, low education, low rank, youth, humanities or social science discipline, liberal ideology, dissatisfaction with various aspects of the institution including salary levels, and low trust in the administration.⁵ However, Kemerer and Baldridge did not identify the relative contribution of these explanations. These explanations fall into three categories: objective status or position within the institution, personal background of the individual, and subjective attitudes toward the organization.

Within this third category of attitudes toward the organization an important focus is the organization's decision-making process. Indeed, Gress highlighted participation in decision-making as the central issue predicting faculty attitudes toward bargaining.⁶

Current decision-making practices, however, can be viewed by fac-

³Everett Carll Ladd, Jr., and Seymour Martin Lipset, Professors, Unions and American Higher Education (Washington: American Enterprise Institute for Public Policy Research, August 1973), Domestic Affairs Study 16.

⁴ Howard L. Nixon II, "Faculty Support of University Authority," Administrative Science Quarterly, vol. 20 (March 1975), pp. 114–23.

⁵ Frank R. Kemerer and J. Victor Baldridge, Unions on Campus (San Francisco: Jossey-Bass, 1975).

⁶ J. R. Gress, "Predicting Faculty Attitudes Toward Collective Bargaining," *Research in Higher Education*, vol. 4, no. 3 (1976), pp. 247–56.

ulty members from two perspectives, focusing either on their current *participation* in decisions or on the expected *consequences* of such decisions. From the point of view of participation, individuals vary in their current level of participation in important organizational decisions, and low levels of participation may frustrate the needs or expectations of the individual academics to influence organizational decisions.⁷ By this argument, low perceived personal participation in decision-making is expected to be related to a greater desire for bargaining (Hypothesis 1).

From the point of view of the consequences of decisions, Gamson has argued that members of an organization view the decision-making process with either trust or suspicion, depending on whether or not they expect the process will result in decisions favoring or acceptable to their individual interests.8 Furthermore, according to Gamson, level of trust determines the means of influence adopted by different individuals and groups to change a decision-making system. High trust suggests persuading the authorities; neutrality suggests providing positive inducements to sway decision-makers; low trust suggests making use of sanctions and the threat of penalties. It is assumed that collective bargaining implies to individual academics a rhetoric of demands and the use of threat because of its association, in both private industry and the public sector, with possible work stoppage. It is expected, therefore, that professors who have lower trust in current organization decision-making will desire bargaining more (Hypothesis 2). Both perspectives on organizational decision-making-participation and trust-have been identified in past studies by Gress (1976) and Kemerer and Baldridge (1975) as explanations of an interest in faculty unionism.⁹ This study assesses their relative usefulness along with other explanations.

The Studies

To explore these explanations of desire for faculty unionism, the results of separate questionnaire surveys of academics in two upstate New York institutions are used here. The first survey, in April 1974, covers all the full-time faculty at Cornell University. Cornell is a large, research-oriented university including colleges under both private and New York State control. Cornell is a complex, partly public institution in a state with favorable legislation for public-employee unions. Thus, despite its research orientation, Cornell has many of the characteristics

⁷ J. Alutto and J. Belasco, "A Typology for Participation in Organizational Decision Making," Administrative Science Quarterly, vol. 17, no. 1 (1972), pp. 117–25.

⁸ William A. Gamson, Power and Discontent (Homewood, Ill.: Dorsey, 1968).

⁹ Gress; Kemerer and Baldridge.

associated with union support. However, as of this writing (in July 1977), no union or professional association has attempted an organizing drive.

The second survey covers the full-time faculty at Ithaca College (IC), a small, private college primarily offering undergraduate courses in the liberal arts. Cornell and IC are located in the same upstate city, Ithaca, N.Y. The survey, in May 1975, came shortly after a collective bargaining representation election among the faculty, conducted by the National Labor Relations Board. The faculty at IC, with an 84 percent turnout, rejected collective bargaining: 62 percent voted for no representation, 24 percent for the American Association of University Professors (AAUP), and 15 percent for another faculty association that had obtained a place on the ballot after a faculty petition for an election on representation by the AAUP.

The survey respondents at both institutions—56 percent (778) at Cornell and 39 percent (109) at IC—are representative of the entire faculties in terms of academic rank and sex.

Desire for unionism is measured by six questions in both institutions. Each individual's score is the number of questions answered reflecting a positive attitude toward unionism (Table 1). These six questions range from support for bargaining in general to support for bargaining at the two specific institutions. Garbarino emphasizes the importance of identifying interest in unionism at the individual's institution, in addition to the more general legitimacy of strikes or collective bargaining for academics. Table 1 shows the importance of this distinction.¹⁰ While 45 percent of our Cornell respondents can envisage circumstances where strikes are appropriate, only 29 percent would vote for bargaining at Cornell. In the Cornell study, these six items form a Guttman scale (coefficient of scalability = .70) and the intercorrrelations among the items are high in both institutions ($r \ge .71$). In addition to this evidence of internal consistency, the six items also demonstrate concurrent validity in the Ithaca College survey by predicting the respondents' self-described vote in the NLRB election (r = .76, p < .001).

The two aspects of the individual's views of organizational decisionmaking hypothesized to affect desire for bargaining—personal participation and trust—are also measured by indices composed of several questions. First, the measure of personal participation includes several personnel and financial decisions (e.g., hiring new faculty, promoting faculty, appointing department heads, determining salary increases, and allocating the institutional budget). Possible responses ranged from no

¹⁰ Garbarino.

Questionnaire Items							
 Do you think it would ever be appropriate for college pro- fessors to go on strike? 	Cornell Ithaca	Yes 45 55				No 45 34	Don't Know 10 11
Is collective bargaining con- sistent with the professional standing of college professors?	Cornell Ithaca)*es 44 56				No 48 36	Don't Know 9 8
8. Would collective bargaining raise or lower the professional status of Cornell/Ithaca College professors?	Cornell Ithaca	Raise 8 22		Neithe r 48 34		Lower 28 33	Don't Know 17 11
. Would collective bargaining have a positive or negative effect on higher education at Cornell/Ithaca College?	Cornell Ithaca	Positire 14 28		No Effect at All 19 10		Negatire 51 44	No Opinion 16 17
Are you in favor, or opposed to, collective bargaining for Cornell/Ithaca College faculty?	Cornell Ithaca	Strongly in Faror 12 26	Moderately in Favor 20 17	Uncertain 14 9	Moderately Opposed 24 20	Strongly Opposed 28 24	No Opinion 2 0
b. If a referendum were held to ascertain if faculty were interested in collective bargaining, would you vote?	Cornell Ithaca	For Collective Bargaining 29 43			Against Collectice Bargaining 49 48		Undecided 22 9

TABLE 1 Desire for Bargaining: Percentages Favoring Faculty Bargaining on Questionnaire Item^{a, b}

^a The questions are presented here as they are worded in the questionnaire. For purposes of Guttman scaling and in the subsequent analysis, the responses to all questions were grouped into two categories. On questions 1 through 4 those who saw positive or no harmful effects of collective bargaining were scored positively. On questions 5 and 6, those favoring or for bargaining were scored positively.

^b Percentages refer to those respondents answering each question. Due to incomplete questionnaires, the number of responses varies from 746-778 at Cornell and from 107-109 at Ithaca.

input (scored 1), through prior consultation with the decision-maker, to a group decision by vote or consensus (scored 5). The median intercorrelation on the nine decisions in the Cornell questionnaire is low (r = .16, p < .001), and somewhat stronger (r = .37, p < .011) at Ithaca College where the questionnaire includes only the six of these questions that were most strongly associated with an interest in bargaining.

Trust in the decision-making process is the second hypothesized predictor. It is measured by summing Likert-type questions on how frequently the individual academic can trust both the decision-maker and the decision procedures at each of three hierarchical levels to make decisions the individual considers appropriate. The hierarchical levels are department, college, and university at Cornell and department, school, and college at IC. The median correlation among the trust items is moderate at both Cornell (r = .46, p < .001) and Ithaca College (r = .41, p > .001).

The questionnaires also include other explanations of desire for bargaining corresponding to the three categories of explanations from previous research: objective organizational position (an index of organizational status composed of salary level, any administrative position and academic rank, and a measure of academic discipline, with biological or physical sciences in one group or humanities and social sciences in the other), personal characteristics (sex and political liberalism), and subjective attitudes about the organization (dissatisfaction with salary). Dissatisfaction with salary is included here primarily to stiffen the test of the explanations based on the decision-making process. When economic dissatisfaction is controlled, do low levels of perceived participation or low trust in organizational decision-making add anything to the prediction of an interest in unions? Moreover, Gress has called for additional research to clarify "the relative importance of faculty participation in institutional decision making as well as faculty monetary benefits in predicting attitudes towards collective bargaining. . . . "11

Results

An academic's view of organizational decision-making, as hypothesized, does help explain why some would want a union in an institution of higher education. Table 2 presents the correlations between desire for faculty bargaining and two aspects of organizational decision-making from the individual's perspective—personal participation and trust. Only at Cornell are lower levels of personal participation in decisions also

¹¹ Gress, p. 256.

		1.	2.	3.	4.	5.	6.	7.
	Desire for bargaining			·····		 		
2.	Organizational status (low)	.23** (.19)						
3.	Academic discipline (humanities or social sciences)	.15** (.30**)	.10** (08)					
4.	Sex (female)	01 (.10)	.10** (.28**)	.16** (14)				
5.	Political liberalism	.16** (.02)	.11** (.05)	.12** (.18)	03 (18)			
6.	Personal participation in decision-making (low)	.22** (.01)	.32** (.09)	08 (14)	.03 (.04)	02 (29*)		
7.	Trust in decision- making (low)	.41** (.38**)	.25** (.03)	.11** (02)	.05 (.13)	.08* (04)	.30** (.27*)	
8.	Dissatisfaction with salary	.43** (.36**)	.30** (.17)	.09* (.09)	$.01 \\ (05)$.00 (.04)	.2 7** (.11)	.40** (.47**)

 $\begin{array}{l} \mbox{TABLE 2} \\ \mbox{Simple Correlations Among Predictors of Desire for Bargaining:} \\ \mbox{Cornell University (N $\ge 653) and, in Parentheses, Ithaca College (N $\ge 92)} \end{array}$

* Indicates significance at $p \leq .05$.

** Indicates significance at $p \leq .01$.

associated with a greater desire for unionism (Hypothesis 1). At both institutions, individuals who have greater distrust of the existing process of organizational decision-making show significantly higher levels of interest in unionism than their more trusting colleagues (Hypothesis 2). At both institutions, moreover, distrust is significantly more strongly associated with such desire than are low levels of personal participation (at Cornell p < .001, at IC p < .006).¹²

The relative importance of distrust in organizational decision-making rather than low personal participation as an explanation of union interest also appears in Table 3. There, all the potential explanations of support for bargaining are included in a multiple regression analysis to determine the separate validity of each explanation—organizational status, academic discipline, sex, liberalism, and economic dissatisfaction. Distrust is a valid predictor of desire for bargaining at both institutions, even when the effects of all other explanations including dissatisfaction with salary are statistically controlled. In contrast, the absence of a significant regression coefficient for personal participation in Table 3 shows that personal participation in decision-making adds nothing to the other explanations of interest in bargaining. Therefore, while the first hypothesis on the effects of personal participation on interest in unionism is not supported, the second hypothesis on the role of trust is strongly supported.

Table 3 also provides the information from both surveys required to assess the validity of various other explanations of individual interest in unionism developed in previous research. At Cornell, salary dissatisfaction and distrust in organizational decision-making emerge as the best predictors in the multiple regression analysis. Besides their validity as the strongest explanations, they also show the strongest simple correlation with desire for bargaining (Table 2). Political liberalism appears next in terms of significance as an explanation. Finally, both low organizational status and a discipline of humanities or social sciences also add slightly but significantly to the explanation of interest in unionism among the faculty. At Ithaca College, distrust and salary dissatisfaction are again most strongly correlated with a desire for bargaining (Table 2). In the more stringent multiple regression analysis (Table 3), however, of these two attitudinal explanations only distrust adds significantly to the predication of desire for unionism. In addition, the academic

¹² Darlington described the significance test for the differences between two correlations involving a common variable. R. B. Darlington, *Radicals and Squares and Other Statistical Procedures for Behavioral Sciences* (Ithaca, N.Y.: Logan Hill, 1974), p. 507.

		$\begin{array}{l} \text{Cornell} \\ (N = 610)^{a} \end{array}$	Ithaca College $(N = 89)^{b}$
1.	Organizational status (low)	.07*	.04
2.	Academic discipline (humanities or social sciences)	.07*	. 29**
3.	Sex (female)	.00	.09
4.	Political liberalism	. 13**	02
5.	Personal participation in decision-making (low)	.04	07
6.	Trust in decision-making (low)	.25**	.26*
7.	Dissatisfaction with salary	.28**	.20

TABLE 3

Multiple Regression Coefficients for Prediction of Desire for Bargaining

* Indicates significance at $p \leq .05$. ** Indicates significance at $p \leq .001$.

^a The multiple correlation at Cornell is .53 (p < .001). ^b The multiple correlation at Ithaca College is .51 (p < .001).

disciplines of the humanities and social sciences also emerge in the multiple regression analysis as a valid explanation at Ithaca College.

In summary, these results show some support for each of the three categories of explanations advanced in the earlier review of the literature. Organizational status and academic discipline, both aspects of the individual's position within the organization, help explain a desire for unionism: organizational status at Cornell and academic discipline at both institutions. Political liberalism, probably a reflection of the individual's personal background outside the institution, is independently associated with interest in unionism at Cornell. The other aspect of personal background, sex, is not associated with such interest at either institution. Finally, and most importantly, individual attitudes toward the organization emerge in these studies as the strongest explanations of a desire for unionism. Salary dissatisfaction and distrust in decisionmaking are most useful at Cornell and distrust again emerges at Ithaca College. Of the two aspects of the individual's view of the decisionmaking process, only this attitude of distrust and not low levels of perceived personal participation predict a desire for a faculty union.

Discussion

These studies highlight the importance of an individual's view of the current process of organizational decision-making as a reason for

some academics to favor the introduction of faculty unionism in an institution of higher education. Collective bargaining constitutes one system of individual participation in organizational decision-making, namely, representation or indirect participation. Those people who experience little direct personal participation in current decision-making were hypothesized to desire collective bargaining in order to change the existing decision system. However, only distrust in the current decision-making system, rather than low levels of personal participation, emerges as a useful predictor of support for bargaining. People with more trust in the existing decision process favor bargaining less regardless of their personal participation in decisions. This finding substantiates and clarifies the high correlation between trust in the administration and opposition to bargaining reported in their national sample by Kemerer and Baldridge.¹³ By the multivariate analysis described in Table 3, distrust can be isolated as an explanation for a desire for bargaining even when level of participation in decision-making, dissatisfaction with salary, and a range of position-related and personal explanations are controlled statistically.

Since low personal participation has little direct influence on bargaining attitudes, administrative attempts to defuse faculty support for unionism by opening decision processes to individual participation may have little value. In theory, trust refers specifically to anticipated satisfaction with the results of organizational decision-making rather than to involvement in the decision process. Until institutions change objectionable policies to favor (or at least become acceptable to) the individual interests of various academics, the desire for a union by some faculty members will endure. It should be noted, however, that while personal participation has little importance across the entire faculty, at least for the decisions examined here, past research on its other effects suggests that some individuals may respond more favorably to increased participation.

The desire for unions at these two institutions also reflects the drive for economic self-improvement as an explanation of unionism. Dissatisfaction with salary is a stronger predictor of prounion attitudes. Because academics are often alleged to attach more value to noneconomic rewards from their work (such as freedom or a sense of accomplishment) compared to most other workers, these studies provide a stringent test of the economic explanation for employees' turning to unionism.¹⁴

¹³ Kemerer and Baldridge.

¹⁴ Strauss, for example, has argued that college professors desire higher participation in organizational decision-making more than does the average worker.

The two institutions in the present study, while not necessarily representative of all higher education, sound a warning both for private, fouryear colleges like Ithaca College and for wealthy, research institutions like Cornell. Ladd and Lipset's (1973) early study might suggest that faculty members will resist bargaining indefinitely in some high-status sectors of higher education. Based on the present studies, desire for bargaining may represent a *selective* interest in organizational change focused on economic issues and reflecting distrust in the administration. In a continuing financial squeeze, a growing number of the individuals in *any* institution may turn to collective bargaining simply to improve their economic positions. In this respect, a study of individual attitudes leads one to expect a wider spread to faculty unionism.

The present findings are consistent with a growing literature on the explanations of academics' interest in unionism. Some significant relationships continue to appear between an interest in unionism and differences in organizational position (academic discipline, rank, tenure, administrative position, and salary level) as well as differences in personal background (political liberalism and age). However, when all three categories are combined in a multivariate analysis, these two categories are relatively unimportant compared to attitudes toward the organization, the third category of explanation of individual interest in unionism. Multivariate studies by Gress and by Feuille and Blandin found organizational position and personal background less important thar, attitudes toward the organization in explaining an interest in unionism.¹⁵ In particular, the present study identifies the organizational attitudes of distrust in the decision-making process and dissatisfaction with salary as key explanations. In a multivariate reexamination of their earlier study. Feuille and Blandin identified a similar set of organizational attitudes as explanations of faculty desire for bargaining: dissatisfactions with the relationship between the faculty and the campus administration, with workload and selected support services, and with pay and benefits attached to the job.¹⁶

From a psychological perspective, individual attitudes toward the organization, such as salary dissatisfaction and distrust, result from a complex combination of objective organizational position and personal characteristics.¹⁷ For example, salary dissatisfaction reflects both current

¹⁵ Gress; P. Feuille and J. Blandin, "University Faculty and Attitudinal Militancy Towards the Employment Relationship," Sociology of Education, vol. 49 (April 1976), pp. 139–45.

¹⁶ Feuille and Blandin.

¹⁷ A. E. MacEachron, "Two Interactive Perspectives on the Relationship Between Job Level and Job Satisfaction," Organizational Behavior and Human Performance, vol. 19 (August 1977), pp. 226–46.

and desired salary levels. Similarly, distrust in decision-making reflects not any particular policies or decision practices, but the individual's personal assessment of the decision-making process.

An adequate theory of why individual academics want a faculty union awaits an understanding of the cause of these organizational attitudes. Such a theory may well have broad generality, however, because the explanations among these academics—distrust in "management" and dissatisfaction with salary—sound very much like the reasons any worker might give for an interest in unionism.

Unions' Views Concerning Alternative Work Schedules, and Proposals to Alter Federal Overtime Pay Legislation

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A considerable amount of attention centers on the subject of alternative work schedules. The term *alternative work schedules* encompasses any variation of the requirement that all permanent employees in an organization adhere to the same 5-day, fixed-hours work pattern. Two of the more talked-about alternative work schedules are: the 4-day workweek (the compressed workweek), and flexitime (gliding time).

In the 4-day workweek, an employee works the normal total number of hours specified in the employer-employee agreement over 4 workdays. The version most discussed is the 4-day workweek of 10 hours per day, also identified as the 4/40 plan. Formally speaking, the origins of the 4/40 arrangement are traced to America. Although the 4-day workweek is a subject of considerable discussion, in reality, only a very small percentage of the labor force worked under the 4-day workweek in 1976.¹

Flexitime is an alternative work schedule whereby an employee can, on a daily basis and within specific limits, start and finish work at his or her discretion, as long as the person completes the total number of hours required for a given time period. Flexitime's origins are traced to West Germany. Since the birth of flexitime in that nation in the mid-1960s the system has experienced widespread applications throughout Europe, the most frequent applications occurring in West Germany and in Switzerland. In 1977 thousands of European organizations were on

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¹ In 1976 only about 1.2 percent of the full-time labor force was on a 4-day workweek (*down*, from 1975 figures). More than 80 percent of all employees worked 5 days per week. In fact, more Americans worked 7 days a week (almost 2 percent) than 4 days. Additional statistics: only about 10 percent of the 4-day workers worked 10 hours per day. Persons who worked 10-hour days were most likely to work 5 days per week (a good 60 percent of all 10-hour day workers), or 6 days per week (close to 25 percent of all 10-hour day workers).

flexitime (more popularly identified in Europe as gliding time). In 1977 accurate information was not available as to the number of organizations on flexitime in the United States.²

In general, in the U.S. flexitime relates to the ways 40 hours (or a lower total, if such is the employer-employee agreement) are distributed over a workweek. However, some programs include (or would like to include) debiting and crediting of hours provisions. For example, in contrast to the 8-hour day, 40-hour workweek, under flexitime's debiting and crediting options, an employee might voluntarily choose to work only 7 hours one day and make up for it by working 9 hours on a subsequent day. Similarly, an employee might decide to work 45 hours in one week, and bank the 5 extra hours so that he or she need work only 35 hours during some future week.

Where laws and contractual agreements require employers to pay overtime rates (a minimum of one and one-half times the basic hourly rates) to employees for hours worked in excess of 8 hours a day or in excess of 40 hours per week, the provisions discourage use of the 4/40arrangement as well as flexitime programs containing debiting and crediting options.³

Over the 1975-77 period numerous proposals aimed at relaxing existing overtime pay requirements and allowing for experimentation with alternative work schedules were introduced before the 94th and 95th Congresses.⁴ In 1977, however, the proposals remained in a state of limbo.

³ As of 1977, the acts outlined below, and their essential provisions, reveal principal federal legislation concerning overtime-pay requirements: The Walsh-Healey Act (1936) applies to employers signing contracts with the government. Firms covered are required to pay nonexempt employees a minimum of one and one-half times the basic hourly rates for time worked in excess of 8 hours per day or 40 hours per week. The Fair Labor Standards Act (1938) established minimum wages and maximum hours, and applied to employers engaged in interstate commerce. An 8-hour workday and a 40-hour workweek were other standards established, with time and one-half pay benefits going to nonexempt employees for work exceeding 40 hours per week. FLSA has been amended a number of times through the years. As amended in 1974, coverage was extended to federal employees. The Contract Work Hours and Safety Standards Act (1962) covers contractors engaged in federal government construction projects, and requires that the companies pay nonexempt employees a minimum of one and one-half times the basic hourly rates for time worked in excess of 8 hours per day or 40 hours per week. The U.S. Pay Code (and Title 5) concerns federal employees. Briefly stated, Title 5 specifies that the basic 40-hour workweek shall be scheduled on 5 days, Monday through Friday where possible. Additional provisions: working hours during the workweek shall be the same, and the basic nonovertime workday shall not exceed 8 hours.

⁴ See H.R. 5451; H.R. 9043; S. 517; H.R. 2732; H.R. 2930.

 $^{^2}$ A statement contained in a recent letter to J. Carroll Swart, from Janice N. Hedges, senior economist in the U.S. Department of Labor: "We do not have data on the number of firms with flexible work schedules." The Labor Department expects, however, that accurate data will be made available in 1978.

For a number of reasons the two researchers were interested in studying unions' views regarding the 4-day workweek, flexitime, and overtime pay regulations. In the first instance, although the AFL-CIO national headquarters went on record more than six years ago as opposing proposals to relax overtime-pay requirements, and maintained a similar stance in 1977,⁵ little contemporary information was available as to the views of individual national unions.⁶ Second, there existed a dearth of information regarding American unions' views of the flexitime system and of that system's debiting and crediting options. Third, how did national union leaders judge flexitime in comparison to other work schedules? Fourth, concerning alternative work schedules and overtimepay regulations, to what extent were independent unions in agreement with AFL-CIO affiliated unions? Last, through a survey of union leaders it was hoped that knowledge could be gained as to whether union officials would tend to support or block proposals aimed at altering existing overtime-pay legislation.

A Survey of National Unions, and Findings

In 1977 the researchers surveyed union leaders regarding two alternative work schedules (4-day workweek, and flexitime), and in relation to overtime-pay requirements. A questionnaire containing five essential questions was mailed to the presidents or chief executive officers of 197 national unions, from the list in the 1976 edition of Who's Who in Labor,⁷ a reference source in which unions are classified as AFL-CIO affiliates or independent. A personalized cover-letter accompanied each mailing. Anonymity was guaranteed to all respondents. An "Instructions" section on the questionnaire, in addition to defining essential terms, ex-

⁵ On August 9, 1971, the AFL-CIO Executive Council went on record as rejecting proposals which would have the effect of dropping the requirement of time and one-half pay for work in excess of 8 hours a day. In 1977 AFL-CIO research department spokesmen made similar pronouncements in Chicago, at the National Conference on Alternative Work Schedules.

⁶ In the mid-1970s the federal government surveyed four national unions, seeking the unions' views concerning overtime-pay regulations. See Report to the Congress by the Comptroller General of the United States: Contractors' Use of Altered Work Schedules for their Employees—How Is it Working? (Washington: U.S. Government Printing Office, 1976), pp. 14–16. A different investigator attended a conference in Europe, and interviewed a limited number of union spokespersons in the United States, in attempting to discover information concerning flexible work schedules. Part of the investigation was related to the issue of overtime pay. See John D. Owen, "Flexitime: Some Management and Labor Problems of the New Flexible Hour Scheduling Practices," Industrial and Labor Relations Review, vol. 30 (January 1977), pp. 152–61.

⁷ Who's Who in Labor (New York: Arno Press, 1976).

plained that the focus was to be placed on the typical nonexempt worker in the American civilian labor force. Further clarifications presented to would-be respondents: all references to time worked implied nonweekend and nonholiday dates; shift-work differential pay would not be affected; provisions in any existing contract would not be affected.

The questionnaire items, and findings, are discussed below.

QUESTION 1.

Is your union affiliated with the AFL-CIO? Or is it classified as an Independent?

Virtually identical response rates for both classifications resulted. Of 107 AFL-CIO affiliates surveyed, 23 responses revealed a return rate of 21 percent. Similarly, 19 of 90 Independents responded to the survey a rate of, again, 21 percent.

QUESTION 2.

Assess the following legislative proposal in reference to the 4-Day, 40-Hour Workweek: "Where the 4-day work schedule is installed, overtime pay shall apply only to hours worked in excess of 10 hours per day or in excess of 40 hours per workweek." Concerning the proposal above, what is the overall opinion of high-level leaders in your specific union?

Concerning this second question on the questionnaire, 43 percent of all respondents opposed the proposal, 43 percent adopted a neutral stance, and only 14 percent supported the proposal. However, the data also revealed that the AFL-CIO affiliates and the Independents taken separately differed somewhat in their reactions.

The AFL-CIO affiliates rather solidly opposed the proposal. In all, 74 percent of the AFL-CIO respondents opposed the proposal, while 26 percent took the middle ground. Not a single supporter of the proposal was discovered in the AFL-CIO ranks.

The Independents as a body are best described as neutral, since 63 percent neither opposed nor supported the proposal. Only 5 percent were in opposition; however, almost one-third of the Independents actually expressed support of the proposal.

QUESTION 3.

Assess the following legislative proposal in reference to Flexitime (Gliding Time): "Where a flexible work schedule containing debiting and crediting options is installed—in cases where the employee voluntarily chooses to work in excess of the standard total number of hours for a given time period (he elects to work the extra hours, and use the banked time in the form of time off on a future workday), overtime pay shall not be required of the employer. However, where the employer officially orders in advance that an employee work in excess of the standard total number of hours, overtime pay shall be required of the employer for excess hours worked." Concerning the proposal above, what is the overall opinion of high-level leaders in your specific union?

Question 3 was aimed at discovering respondents' reactions to flexitime programs containing debiting and crediting options, and in which overtime-pay requirements are relaxed.

AFL-CIO affiliates and Independents had opposite attitudes toward this type of flexitime arrangement. Whereas 65 percent of the AFL-CIO affiliates were opposed, only 21 percent of the Independents expressed opposition. On the other hand, whereas 47 percent of the Independents endorsed such programs, only 13 percent of the AFL-CIO group approved. Neither opposing nor supporting the proposal was the response selection of 22 percent of the AFL-CIO respondents and 32 percent of the Independents.

Taken as a whole, the respondents appeared to oppose the proposal, as 45 percent expressed opposition. About 29 percent were supportive, and 26 percent neither opposed nor supported the proposal.

QUESTION 4.

A majority of flexitime programs in operation do not include debiting and crediting options. Instead, most programs relate to the ways 40 hours (or a lower total, if such is the employeremployee arrangement) are distributed over a 5-day workweek. Concerning flexitime programs which do not include debiting and crediting options, and in which existing overtime pay reguirements are not relaxed, what is the overall opinion of highlevel leaders in your specific union?

Question 4 was aimed at discovering respondents' reactions to flexitime programs which do not contain debiting and crediting options, and in which overtime-pay requirements are not relaxed.

As shown in the questionnaire returns, the Independents appeared to favor this form of flexitime program, whereas the AFL-CIO affiliates expressed considerable division of opinion. None of the Independents opposed the program as described, 47 percent voiced neither opposition nor support, and 53 percent expressed a position of support. Among the AFL-CIO group, 35 percent were opposed to this form of flexitime schedule, 26 percent were supportive, and the remainder of the group appeared indecisive.

As an overall body, the respondents for the most part were neutral, as 43 percent neither opposed nor supported the type of flexitime program described in the question. Those supporting the program described numbered about 38 percent, whereas only 19 percent were in opposition.

QUESTION 5.

Please rank, on the basis of information currently at your disposal, four work schedules in the order of your union's preference. In other words, what is the overall opinion of high-level leaders in your specific union? (Use 1-2-3-4 numbering to indicate first, second, third, and fourth choice selections.)

On the questionnaire the four work schedules were presented in the form of selection alternatives: (a) fixed hours, in which existing overtime pay requirements are not relaxed; (b) flexitime with debiting and crediting options, where overtime-pay requirements are relaxed; (c) flexitime without debiting and crediting options, where overtime-pay requirements are not relaxed; (d) 4-day, 40-hour workweek, in which existing overtime-pay requirements would apply only to hours worked in excess of 10 hours a day or 40 hours per week.

Among the AFL-CIO unions the foremost selection was fixed hours, which received an average rank⁸ of 1.26 and thus a relative rank of number one. The second-ranked work schedule was flexitime without debiting and crediting options, where overtime-pay requirements are not relaxed. It received an average rank of 1.85. Flexitime with debiting and crediting options, where overtime-pay requirements are relaxed, was ranked third overall by the AFL-CIO officials, with an average rank of 2.60. Far behind with an average rank of 3.50 came the 4-day, 40hour workweek, in which existing overtime-pay requirements would apply only to hours worked in excess of 10 hours a day or 40 hours per week.

Among the independent unions the average rankings were more closely grouped. Officials of independent unions ranked flexitime without debiting and crediting options, where overtime-pay requirements are

⁸ Concerning each work schedule, average rank was determined by multiplying the rank numerals (i.e., 1st, 2nd, 3rd, 4th) by their corresponding frequency of selection, adding the resulting products, and dividing the sum total by the total number of responses.

not relaxed, first overall in a relative sense with an average rank of 2.00. In contrast to the AFL-CIO affiliates, the 4-day, 40-hour workweek had a better reception among the Independents, acquiring an average rank of 2.33 for a relative rank of second. Third place went to fixed hours, which received an average rank of 2.56. Finally, among Independents flexitime programs with debiting and crediting options, where overtime-pay requirements are relaxed, failed to muster much support. It placed fourth, with an average rank of 3.06.

When responses of the AFL-CIO affiliates and the Independents were combined, the total group's average rankings were distributed over the smallest range. The average ranks of the first and fourth choices differed by exactly one unit. Fixed hours received an average rank of 1.89, earning first position in the relative rankings. In second place with an average rank of 1.94 was flexitime without debiting and crediting options, where overtime-pay requirements are not relaxed. Third position fell to the 4-day, 40-hour workweek, with an average rank of 2.75. Flexitime programs with debiting and crediting options, where overtime-pay requirements are relaxed, secured last place with an average rank of 2.89.

Note: Data in reference to Questions 2 through 5 were subjected to a statistical test (*t*-test) to determine whether differences in responses between AFL-CIO and independent groups are significant at the .05 level. With the exception of two items relating to Question 5 (flexitime with debiting and crediting options, where overtime-pay requirements are relaxed; and flexitime without debiting and crediting options, where overtime-pay requirements are not relaxed), response differences are significant at the .05 level (p < .05).

Conclusions

Based upon viewpoints expressed by labor leaders of some 42 national unions, major conclusions derived through this study are as follows: (1) On a basis of affiliation—AFL-CIO or independent—differences of opinion exist among unions regarding the relative merits of two alternative work schedules: flexitime, and the 4-day, 40-hour workweek. (2) Overall, unions are indeed opposed to proposals aimed at relaxing existing overtime-pay requirements. (3) Regarding a 4/40 schedule accompanied by relaxations in existing overtime-pay requirements, AFL-CIO affiliates show strong opposition, whereas independent unions adopt a more neutral position. (4) Supporters of flexitime systems should be encouraged by this study, for it indicates that fellow supporters may be found in the ranks of union leadership. As previously noted, flexitime without debiting and crediting options, and where overtime-pay requirements are not relaxed, was ranked first and second, respectively, by the Independents and AFL-CIO affiliates taken as separate groups. (5) By contrast, flexitime programs containing debiting and crediting of hours options, and which require relaxations in overtime-pay requirements, can be expected to continue to receive slow acceptance or even outright opposition by union leadership.

A Proposed Model of Factors Influencing Worker Participation'

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The nature of worker-participation programs varies dramatically across Western industrial societies.² In *form* these programs may entail either direct or indirect (representational) participation; in *content*, they may involve participation in technical, managerial, or institutional levels of decision-making.³ Despite this apparent diversity (see Figure 1 below for illustrations), researchers have yet to articulate a multilevel framework for examining contextual factors which may influence the form and content of participation. The present paper identifies forces from industrial relations settings and from the sociotechnical climate of organizations which might be especially salient components of such a framework. It posits that institutional commitment (i.e., the support of union, management, and government leaders) for various types of participation is shaped by these forces and by changing perceptions of social and private payoffs.

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 $^{^1}$ This research was partially supported by funds from the Bureau of Business Research at the University of Oregon. The authors wish to express their appreciation to Eaton H. Conant for his comments on an earlier version of this paper.

² See, for example, Solomon Barkin, Worker Militancy and Its Consequences, 1965– 75 (New York: Praeger, 1975); Paul Bernstein, Workplace Democratization: Its Internal Dynamics (Kent, Ohio: Kent State University Press, 1976); Fred E. Emery and D. E. Thorsrud, Form and Content in Industrial Democracy (London: Tavistock Publications, 1969); Nancy Foy and Herman Gadon, "Worker Participation: Contrasts in Three Countries," Harvard Business Review, vol. 54 (May-June 1976), pp. 71–83; Adolf Sturmthal, "Workers Participation in Management: A Review of United States Experience," International Institute for Labor Studies, Bulletin 6 (Geneva: June 1969), pp. 149–86; Arnold S. Tannenbaum, Bogdan Kavcic, Menachem Rosner, Mino Vianello, and Georg Wieser, Hierarchy in Organizations: An International Comparison (San Francisco: Jossey-Bass, 1974).

³Talcott Parsons, Structure and Process in Modern Societies (New York: Free Press, 1960).

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Content Levels	Forms of Participation				
	Indirect/Representational	Direct [*]			
Institutional (Higher Level Decisions): Overall organizational policy & strategy.	A —Worker Represen- tatives on Boards of Directors	D —Advisory influence of Hospital Physicians and Faculty Senates. —Worker Cooperatives.			
Managerial (Mid-Level Decisions). Control/ administration of technical sub- organization.	B —Workers' Councils.⁵ —Trade Unions.	E —Semi-autonomous units—worker roles encompass depart- ment operation, staffing levels, determination of rewards. —Scanlon Plans. —Worker Cooperatives.			
<i>Technical</i> (Job-Level Decisions) Material/ resource processing and service delivery.	C —Trade Unions.	F —Job restructuring/ enrichment, MBO, Likert's System IV Management.			

Figure 1

Forms and Content of Worker Participation

^a Participation is considered direct at the institutional level if formal or informal processes exist to insure on-going rank-and-file influence over decisions at this level. ^b Under some circumstances, Workers' Councils may have mechanisms which insure *direct* participation (e.g., obligatory referendums, democratic elections, rotation of worker representatives, and a participatory democratic ethos). This appears to be the case in Yugoslavia.

The Proposed Model

A proposed model of the factors influencing worker participation is presented in Figure 2. This model has multiple levels of analysis, and it is characterized by reciprocal causation and feedback processes. Its components are dynamic and, at any given moment, they are arranged in relative states of lead and lag with respect to support for various types of worker participation. As these factors become co-aligned, a "critical mass" is reached which supports the development of successful and durable worker participation. Similarly, as perceived private and social payoffs increase, so will the support for worker participation.

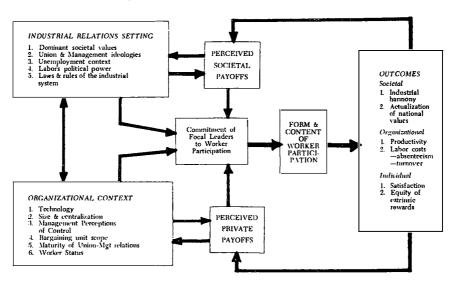


Figure 2 Proposed Model of Factors Influencing Worker Participation

Industrial Relations Setting

In the industrial relations setting three factors are of particular salience with respect to effects on worker participation: (1) value systems and union ideologies; (2) political-economic forces; and (3) aspects of the employment relationship which are institutionalized either by custom or law. Each of these factors is discussed briefly below.

VALUE SYSTEMS AND UNION IDEOLOGIES

Industrial relations systems evolve in ways which reflect dominant societal values.⁴ For example, values which molded early employment relationships in the U.S. included economic individualism, private property, and competition;⁵ while in Norway industrialism was forced to adapt to a social ecology characterized by the long-standing traditions of independent farmers and fishermen.⁶ Thus, in the U.S., but not in Norway, employee efforts to influence working conditions were for over a century viewed as a criminal conspiracy.

⁴Clark Kerr, John T. Dunlop, Frederick Harbison, and Charles A. Myers, *Industrialism and Industrial Man* (Cambridge, Mass.: Harvard University Press, 1960).

⁵ Max Weber, The Protestant Ethic and the Spirit of Capitalism, Translated by Talcott Parsons (New York: Charles Scribner's Sons, 1958).

⁶O. D. Thorsrud, Workers' Participation in Management in Norway (Geneva: Institute for Labor Studies, 1972).

In Western Europe and Scandinavia, community attachments have traditionally been much stronger, and upward mobility has been more constrained than in the U.S. Together, those forces have increased the impetus for workers to pursue more actively a better lot in their present workplace. In these nations active, collective participation has been a vehicle for pursuing the socialist goal of a more classless society.

In the U.S., several survey researchers have documented a broadbased secular change away from the historically rooted values and beliefs which legitimized fragmented work and hierarchical means of insuring worker compliance.⁷ In general, this emergent value system emphasizes the quality of life and personal growth over material achievement. Were union ideologies to become coaligned with these values, a significant transitional force would exist, with increased pressure to expand *representational* participation at all decision levels. In the absence of such a coalignment, these pressures will tend to be channeled toward *direct* participation and, in this form, they may be severely constrained by the sociotechnical climates of particular organizations.

Union ideologies vary dramatically between nations.⁸ In Britain the Trade Union Confederation has taken an active stance in support of codetermination; in France, unions are the principal force in efforts to achieve the long-term Marxist goal of a new society based upon collective ownership; and, in Sweden trade unions are leading efforts to expand social democracy to the workplace.⁹ Against this backdrop, U.S. unionism is far more conservative. From a practical perspective, union leaders would rather be critics than partners in management, exerting influence "almost exclusively by negotiation and grievance handling, rather than by representation on managerial bodies."¹⁰ Officially, the position of the AFL-CIO is that it does "not want to blur in any way the distinctions between the respective roles of management and labor in the plant."¹¹ Ironically, this position may encourage U.S. managers to respond to emergent values by unilaterally initiating experiments to increase *direct* participation at the technical and managerial levels. To

¹⁰ Sturmthal, p. 184.

⁷Louis E. Davis and Albert Cherns, The Quality of Working Life, Volume 1 (New York: Free Press, 1975); Ronald Inglehart, The Silent Revolution: Changing Values and Political Styles Among Western Publics (Princeton, N.J.: Princeton University Press, 1977); William F. Whyte, "Organizations for the Future," in The Next Twenty-Five Years of Industrial Relations, ecl. Gerald Somers, IRRA Series (Madison: IRRA, 1973), pp. 129–40.

⁸ Kerr. Dunlop, Harbison, and Myers.

⁹ Barkin.

¹¹ Thomas R. Donahue, "Collective Bargaining, Codetermination, and the Quality of Work," World of Work Report, Vol. 1 (August 1976), pp. 1-7.

the extent that this occurs, union recognition will be increasingly difficult to achieve.

POLITICAL-ECONOMIC FORCES

The ability of trade unions to win the necessary legislative reforms for increased worker participation (e.g., power equalization on higher management bodies, access to management information) varies in proportion to levels of unionization. Thus, political support for participation in managerial and institutional decisions is greater in Sweden where 90 percent of all workers belong to unions, West Germany (50 percent unionized), and even Great Britain (40 percent unionized) than in the U.S. (25 percent unionized).

Moreover, with high unemployment, the U.S. labor movement is far more concerned with the *quantity* of jobs than quality-of-work issues. Expanding participation at managerial or institutional levels is far down on the list of priorities. In short, the political and economic base of support for legal reforms is comparatively weak in the U.S.

INSTITUTIONALIZED NATURE OF THE EMPLOYMENT RELATIONSHIP

A theoretical model of the relationship between industrial relations systems and worker participation would also be incomplete without an appreciation of such factors as: (1) the scope of bargaining units; (2) the sharing of power and information; and (3) the maturity of unionmanagement relations. Decentralized and fragmented wage bargaining focuses negotiation processes on *technical* level decisions and reduces the propensity of unions to seek increased workforce participation in managerial or institutional decisions.¹²

Similarly, the absence of established mechanisms to insure that power and information are shared may preclude meaningful participation; and, a zero-sum, adversarial bargaining relationship may greatly increase employer resistance to possible encroachments on management prerogatives. Together, these institutionalized forces may severely constrain participation in higher level decisions.

Organizational Context

Three sets of sociotechnical factors influence the form and content of worker participation: (1) the interaction of size, centralization, and management conceptualizations of control; (2) technology; and (3) worker attitudes. The general body of contingency views which has evolved out of organizational studies suggests important opportunities

¹² Peter B. Doeringer and Michael J. Piore, Internal Labor Markets and Manpower Analysis (Lexington, Mass.: D. C. Heath, 1971).

and constraints for worker-participation programs. Space precludes all but a summary treatment of these findings and their implications.

SIZE, CENTRALIZATION, AND MANAGEMENT CONCEPTUALIZATIONS OF CONTROL

If increased organizational size is accompanied by centralized decision-making, the degree to which individuals and workgroups can put their ideas into practice will be greatly constrained.¹³ In larger organizations, hierarchy and bureaucracy have tended to emerge out of organizational attempts to gain control over variances from desired states in core operations or processes.¹⁴ Robert Hoxie¹⁵ was perhaps the first theoretician to comment on the consequences of these patterns of organization. He concluded that scientific management, when coupled with bureaucracy, enabled managers to monopolize knowledge, prevented workers from having a clear conception of overall organizational activities, and, thereby, enabled managers to exercise complete control over workers' activities. Research in organizational behavior indicates that managers who conceptualize control as a function of rationality, unilateral decision-making, and centralization will tend to reinforce dependencies on hierarchical administrative structures and standardized operating procedures.¹⁶ This attitude has, for example, been associated with the failure of some Scanlon Plans.¹⁷

TECHNOLOGY

Contingency theories generally conclude that organizational structure, authority relationships, and amounts of participation are a function of technology.¹⁸ According to Perrow,¹⁹ the latitude for participation is

¹³ George Hespie and Toby Wall, "The Demand for Participation Among Employees," Human Relations, vol. 27 (May 1976), pp. 411-28.

¹⁴ James D. Thompson, Organizations in Action (New York: McGraw-Hill, 1967). ¹⁵ Robert F. Hoxie, Scientific Management and Labor (New York: D. Appleton, 1915).

¹⁶ George Strauss and Eliezer Rosenstein, "Worker Participation: A Critical Review," *Industrial Relations*, vol. 9 (February 1970), pp. 197–214; Arnold S. Tannenbaum, *Control in Organizations* (New York: McGraw-Hill, 1968).

¹⁷ Robert A. Ruh, Robert L. Wallace, and Carl F. Frost, *Management Attitudes* and the Scanlon Plan (East Lansing: Midwest Scanlon Associates & The Michigan State University, 1972).

¹⁸ For example, Tom Burns and G. M. Stalker, *The Management of Innovation* (London: Oxford University Press, 1965); Dennis Moberg and James L. Koch, "A Critical Appraisal of Integrated Treatments of Contingency Findings," *Academy of Management Journal*, vol. 18 (March 1975), pp. 109–24; Joan Woodward, *Industrial Organization: Theory and Practice* (London: Oxford University Press, 1965).

¹⁰ Charles Perrow, "A Framework for the Comparative Analysis of Organizations," American Sociological Review, vol. 32 (April 1967), pp. 194–208.

greatest in nonroutine technologies. Nonuniformity in raw materials and high variability in transformation processes tends to increase the responsibility and autonomy associated with work roles. By contrast, routine technologies tend to result in narrow, regimented roles, strained supervisory-subordinate relationships, one-way communications, and other facets of organizational climate that are not conducive to *direct* participation at any decision level. In this latter context, *representational* participation through elected union officers may be the only effective means for workers to influence operations.

WORKER ATTITUDES

Since Walker and Guest's²⁰ classic depth interviews of assembly-line workers, several researchers have concluded that individuals in routine jobs with early career ceilings will tend to adjust to these otherwise debilitating work roles by becoming neutral or indifferent.²¹ Conversely, factors associated with higher perceived worker status (e.g., skill levels, professionalism, occupational or organizational identification, and occupational communities) will tend to increase worker interest in both direct and indirect forms of participation at *all* decision levels.

Outcomes: Clarity of Payoffs

Rigorous evidence on the economic or attitudinal improvements achieved through participation in mid- and higher level decisions is sparse. Quantified results from field experiments with longitudinal control group designs are conspicuously absent from the literature. Even Europe's *Mitbestimmung* or codetermination movement has failed to provide concrete evidence of real payoffs. Although this movement is conjectured to have improved industrial peace,²² Kassalow's²³ more careful analysis suggests several alternative and more viable explanations. There is little doubt that this lack of clear payoffs is associated with the tendency of U.S. managers and union leaders to refer to participation or work redesign efforts as "experiments."²⁴

²⁰ Charles Walker and Robert Guest, *The Man on the Assembly Line* (Boston: Harvard University Press, 1952).

²¹ For example, Robert Dubin, Joseph E. Champoux, and Lyman W. Porter, "Central Life Interests and Organizational Commitment of Blue-Collar and Clerical Workers," *Administrative Science Quarterly*, vol. 20 (September 1975), pp. 411–21.

²² Harry B. Ellis, "Workers on the Board: Productivity Help or Hindrance?" The Christian Science Monitor, May 18, 1977.

²³ Everett Kassalow, "Industrial Conflict and Consensus in the United States and Western Europe: A Comparative View," Paper presented at the 30th Annual Meeting of the IRRA (December 28-29, 1977).

²⁴ Foy and Gadon.

Discussion

A treatise of research propositions which might derive from this model is presented elsewhere.²⁵ However, empirical examinations within an inclusive multivariate framework such as the one proposed here remain to be done. Inquiries of this kind would enable researchers to begin assessing the interactive and combined influences of these contextual factors.

Operationally, a study of this nature would comprise a cross-national sample of managerial, union, and government leaders, with appropriate empirical measurement for each of the respective variables. Were such a study completed, it is expected that the propensity of focal actors to support various types of worker participation might be better understood. Until this time, our appreciations of the predeterminants of successful worker participation programs will continue to ignore the causal texture within which these efforts are embedded.

²⁵ James L. Koch and Colin Fox, "The Influence of Societal, Institutional and Organizational Forces on the Scope of Worker Participation in the United States," College of Business Administration, Working Paper Series #1977-1, University of Oregon, 1977.

DISCUSSION

THOMAS H. PATTEN, JR. Michigan State University

The three papers presented are entirely different in content, approach, and philosophical foundations; hence, I have no identifiable themes which I can single out for discussion. As a result I will present specific views on each paper and restrict myself to comments on what seem to be major points of a research nature.

Driscoll's paper is a statistical case study of attitudes toward unionization among faculty members at Cornell University and Ithaca College. I had a hard time grasping what was being studied because we are not provided with any background on the systems of academic governance and administrative management at the two institutions so that we would be able to formulate, as listeners to a research report, what is meant by "participation in decisions" and the "consequences" of decisions. I would personally not define trust as "how an individual views the outcomes of organizational decisions" because trust is essentially an attitude of confidence held by one in respect to another's acting in a consistently beneficial nonharmful way. Trust may or may not be organizationally pervasive. Trust is probably first interpersonal, then intragroup, then intergroup, then intraorganizational, and, finally, interorganizational. Trust may exist in some parts of a complex organization and not in others. In organizational development (OD) terms the opposite of trust is not suspicion but expectation of harm, and hence the elicitation of behavior by employees that is essentially defensive and protective. If we knew more about even the formalities of academic governance at Cornell and Ithaca College (not to mention the real behavioral dynamics of the systems), we could better understand what "participation" and "trust" mean in those academic institutions and to persons employed there.

I do not know what is meant by the statement that "Cornell has many of the characteristics associated with union support." As a graduate student there two decades ago and occasional passer-by since then, I cannot grasp what this means. Driscoll admits Cornell has never experienced a union (or professional association) organizing drive and alleges it is a wealthy research institution. There are probably many Cornells and it is difficult to discern where trust exists or does not exist in that piebald setting, wealthy and poor. The same may be hypothesized for the proclivity toward unionization. In any event, the low rate of returns (56 percent at Cornell and 39 percent at Ithaca College) prevent our having much confidence in the findings for even the total institution.

Turning to the Guttmann scale analysis of the data, I think the important consideration is the coefficient of reproducibility which Guttmann determined should be .90 or greater for data to be considered scalable. (Less than .90 would be a quasi scale.)¹ The interpretation of a coefficient of scalability of .70 as demonstrating that a domain is truly scalable and proving that if one supports bargaining in general, he/she supports it specifically seems idiosyncratic.

The remaining data are interesting but difficult to understand when the actual governance/management of Cornell and Ithaca College are not described dynamically. We are presented merely with attitudinal data which are handled well statistically. My quarrel is with trying to analyze case studies without being presented with the case (the organization(s)) but instead attitude survey data in aggregate form. The problem should have been conceptualized differently.

The Swart and Quakenbush paper focuses on alternative work schedules and unions' views on flexitime as well as the 4/40 plan (4-day workweek of 10 hours per day) and debiting and crediting hours provisions. Flexitime is essentially a by-product of the autobahns of West Germany and expressway systems of the United States: without fast roads we probably would not have the possibility of gliding time as a new dimension in industrial relations and work scheduling. I have not seen any figures on adoption of flexitime by firms and public agencies, but anecdotally I hear about adoptions of it quite regularly. The 4/40 plan and debiting and crediting plans are rare in my experience.

It is regrettable that Swart and Quakenbush received only a 21 percent rate of return in their questionnaire survey of 197 AFL-CIO affiliates and independent unions because I wonder what the roughly 80 percent nonrespondents might have said. The results of the survey reinforce the belief that flexitime is the most acceptable alternative work schedule innovation from the standpoint of union respondents. However, unions seem still wedded to fixed hours during the workweek and overtime pay beginning at hours in excess of 40 as a basic wages/hours policy.

The more detailed comparisons of responses from AFL-CIO affiliates

¹ Margaret Jarman Hagood and Daniel O. Price, Statistics for Sociologists, rev. ed. (New York: Holt, Rinehart and Winston, 1952), pp. 144-54.

and Independents are said to be statistically significant. But certainly the low rate of returns on the survey instrument diminishes the generalization of any conclusions we would be able to make to the American labor movement as a whole.

The mix of responses from AFL-CIO affiliates and Independents would be interesting to examine per se rather than lumping the data into these two broad categories. More pointedly, is support of a specific work schedule related to the membership composition or type of union: industrial vs. craft, manufacturing vs. nonmanufacturing, hourly (bluecollar) vs. salaried (white-collar), and the like? Affiliation basis (AFL-CIO vs. Independent) seems less meaningful to me as a categorical set.

The Koch and Fox paper is largely in a philosophical vein and examines the form and content of participation in the American industrial relations system. Two forms of participation are considered (direct and indirect); and three content levels are discussed (technical, managerial, and institutional). References are made to different European industrial relations systems where it is thought comparison and contrast will sharpen the analyses.

The Koch and Fox paper focuses on formal participation in the private sector and leaves out the public sector. I think a major force in the shaping of labor-management relations in America in the period 1860–1920 was immigration. The American legal system evolved mainly out of the British and the common law tradition. The waves of immigration amounted to populating the country with people who did not know how to wield power and form a durable broad-based trade union center. Once the AFL under Gompers became viable, it was possible to adopt several different stances, but collective bargaining coupled with facilitative social and labor legislation became the route traveled 1920–1977. The male grandchildren and great-grandchildren of the immigrants and blacks and women probably en masse have greater expectations today for an abundant life and humanization of the workplace than their forbears for a variety of reasons that transcend the purview of industrial relations.

The Koch and Fox paper, in a series of 11 propositions, stresses presumably how the desire for participation takes hold and spreads anywhere in a modern urban industrial society. The key variables are: values discrepancies, the relative conservatism of union ideologies, unemployment rates, extent of unionization in a country, the structure and maturity of collective bargaining in different nations, the pattern of centralization/decentralization in organizations, extent of technological development, propensity to share influence and power as an exchange for control and for improvement of operating effectiveness, employee pressure for participation (especially of high-talent personnel), and diffusion of OD skills in a work organization. This is a long list and quite provocative. It seems in one way or another to touch upon the various concepts in an industrial relations system identified by Dunlop two decades ago.²

My main question is: Where do we go with this list of propositions? Koch and Fox come to editorial-types of conclusions which are logical and acceptable on their face. The propositions could be worked over and used as a prologue for a lifetime of research. The working-over would need to begin with what is meant by "participation" if it is not to remain a formal structural concept. Is there not as well a subjective side to the idea? Even formally, is there not a great deal of difference objectively and subjectively between a New Hampshire town meeting and GM-UAW "big table" negotiations as two opposite forms of participative governance?

Participation (like "trust" in the Driscoll paper) has crept into the industrial relations lexicon, and I think the concepts have been too uncritically accepted by professionals in our field. We deal with them much too indirectly, accepting only partial indices of what they mean. As a result, we are led astray in our research and do not come to grips very well with basic human and social phenomena.

² John T. Dunlop, Industrial Relations Systems (New York: Holt-Dryden, 1958), passim.

XIII. OLDER WORKERS IN THE CONTEMPORARY ECONOMIC ENVIRONMENT

Employment Discrimination and the Older Worker: An Assessment of the 1977 ADEA Amendments and Current Litigation^{*}

MARC ROSENBLUM National Commission on Employment and Unemployment Statistics

A funny thing happened on the way to the White House. The 1977 Amendments to the Age Discrimination in Employment Act (ADEA) never arrived. When they do, presumably as the 1978 Amendments, not all those supporting the concept of stronger statutory protection against age discrimination may recognize or applaud the final version. Depending on the final compromises to be worked out next month, a careful assessment of the pluses and minuses suggests that some older workers may be no better off than they are now, and perhaps less so.

At the risk of presuming that House and Senate conferees would resolve their differences with dispatch, following the Senate's passage of the Amendments on October 19, the title of this paper was submitted as you see it. The perils of title selection aside, it is still reasonably safe to say that Congress will approve the legislation, albeit several months behind its original schedule, since both houses have agreed on the major provisions.

This paper will attempt an analysis of the bill's impact. A review of the present law and how ADEA will look with the Amendments incor-

[•] This paper represents the views of the author and does not necessarily represent the official policy or position of the Commission. The author is solely responsible for the contents of this paper. Author's address: National Commission on Employment and Unemployment Statistics, 2000 K Street, N.W., Washington, DC 20006.

porated will be followed by a summary of recent litigation under the Act, which suggests why the Amendments were required in the first place. That is, in certain respects ADEA enforcement has not provided older workers with protection on a scale envisioned by the Act's original sponsors.¹

The conclusion will surmise how older workers are likely to fare in our nation's labor markets over the next few years as a result of the 1978 Amendments, recent legal rulings under the Act, and the range of social and economic factors affecting their labor force participation in general. While ADEA may prove an effective route to redress some aspects of employment discrimination, few older workers do in fact assert their claims and even fewer have in the past prevailed. The extent to which the Act's new provisions can modify this pattern remains to be seen.

The House Provisions

The Age Discrimination in Employment Act Amendments of 1977 originated in the House of Representatives as three bills. Sponsored separately, each addressed a distinct and unrelated objective with the combined bill representing the fact that they at least do not conflict.

The three original bills were:

1. H.R. 6798 [Weiss (D.-N.Y.) and Waxman (D.-Cal.)]. The purpose of this bill was to prohibit mandatory retirement under company pension plans if such practices forced workers out involuntarily at less than age 65. Under ADEA, the protected age range covers employees between 40 and 65 years old, but some employers interpreted the Act as exempting employee benefit plans from these limits.

This bill was prompted by an ongoing disagreement between federal appeals courts concerning the permissibility of this practice. The Fourth Circuit had ruled, in October 1976, that a plan requiring retirement at age 60 was a violation of Section 4(f)(2) of ADEA.² The Third Circuit held, in January 1977, that a bona fide pension plan qualified as an exemption and would permit such retirements.³

Both cases were appealed to the U.S. Supreme Court.⁴ The only basis on which both appeals courts had agreed was on the question of

 $^{^1}$ See remarks of Sen. Jacob Javits (R.-N.Y.) accompanying the introduction of S.1773, 123 Cong. Rec. S10954-55 (1977).

² McMann v. United Airlines, 542 F.2d 217 (4th Cir. 1976).

³ Zinger v. Blanchette, 549 F.2d 901 (3rd Cir. 1977).

⁴ United Airlines v. McMann, cert. granted, 429 U.S. 1090 (1977), argued Oct. 4, 1977; Zinger v. Blanchette, cert. pet. filed, No. 76-1375 (1977).

whether an employer's plan in effect prior to the passage of ADEA was required to conform to the 4(f)(2) provision. Contrary to the earlier Fifth Circuit decision in *Brennan (Secretary of Labor)* v. *Taft Broadcasting Co.*⁵ that was based in part on Taft's plan predating ADEA, both the Third and Fourth Circuits held, in effect, that a retirement system that was not revised to conform to ADEA's specifications could evolve into an illegal subterfuge to bypass the Act and become invalid. In *Zinger* v. *Blanchette*, the Third Circuit noted: "The railroad argues that since the early retirement plan predated the Act, it cannot be considered a subterfuge. We believe this chronological argument lacks merit, and the mere fact that the plan was in existence before the Act was passed is not determinative."⁶ With regard to the central question of whether a pension plan could require involuntary retirement, however, the two circuits reached diametrically opposite results.

In the face of such clear judicial inconsistency over congressional intent regarding Section 4(f)(2), Congressmen Weiss and Waxman believed a restatement of the prohibition was necessary. In effect, in the event of a favorable Supreme Court ruling in *McMann*, the new language would be redundant, or at least "insurance." If, on the other hand, the Court were to rule that mandatory retirement under a pension plan had been permitted under ADEA, the new law would render the decision moot from the effective date of H.R. 6798.

The Supreme Court ruled on December 12, 1977, that the permissibility of such practices depended on whether the retirement plan predated ADEA or not.⁷ This will be discussed below in the section on recent ADEA litigation.

H.R. 6798 also proposed to remove the upper age limit of ADEA. While complete "uncapping" was regarded as unlikely, some upward revision beyond age 65 was considered an attainable goal. With 52 cosponsors, the bill began with the support of one of every eight Representatives in the House.

2. H.R. 65 [Findley (R.-Ill.)]. The simple purpose of this bill was to remove the upper age limit of coverage under the Act. Representative Findley had introduced similar legislation during the 93rd and 94th Congresses, largely as a symbolic gesture against mandatory retirement. No hearings had ever been held, nor had any votes been taken on the prior proposals.

This time there was a difference. H.R. 65 had been introduced with 25 co-sponsors, including Rep. Hawkins (D.-Cal.), chairman of the Sub-

⁵ 500 F.2d 212 (5th Cir. 1974).

⁶ 549 F.2d at 904.

⁷ United Airlines v. McMann, 434 U.S. — (1977).

committee on Employment Opportunities, and Rep. Quie (R.-Minn.), ranking minority member of the Committee on Education and Labor.

Mr. Hawkins recognized two pertinent factors. First, his subcommittee (with jurisdiction over all employment-related legislation) did not have the time for multiple hearings regarding ADEA amendments. Second, passage of H.R. 65 would not eliminate the loophole that Section 4(f)(2) afforded employers if the courts ruled pension-based mandatory retirement legitimate.

3. H.R. 1115 [Pepper (D.-Fla.)]. Chairman of the House Select Committee on Aging, Representative Pepper sought to eliminate the age 70 mandatory retirement rules for federal employment. At present, government employees (other than air-traffic controllers, federal firefighters, law enforcement personnel, and other specific groups) are protected by ADEA up to age 70. If compared to the number of workers potentially affected by H.R. 6798, or even H.R. 65, the number of federal workers whose status would be immediately altered by H.R. 1115 is quite small. According to the House Report on H.R. 5383, only 1,509 civil service workers were mandatorily retired (at age 70) during fiscal 1976.⁸

Other evidence indicated that fewer than 30,000 federal employees between age 65 and 70 remained on the payroll, with most retiring before age 68 or 69.⁹ Thus, the impact of H.R. 1115 could not be directly compared to the millions of private-sector workers affected by the other bills. Nevertheless, Rep. Pepper was visibly identified with older Americans' interests, and his legislation was regarded as a complement to the private-sector bills.

The complement took this form: H.R. 1115 did not address the private sector, but since government workers are not subject to premature retirement under employee benefit plans, neither H.R. 6798 nor H.R. 65 were pertinent to federal jobholders. Therefore, the three bills were combined, renumbered H.R. 5383, and quickly passed by the subcommittee, the full committee, and the House.

The House vote, on September 23, 1977, was 359-4. This margin is deceptive, reflecting the unwillingness of many representatives to unnecessarily oppose a growing constituency, older Americans. Once the outcome was assured, the bandwagon effect was evident.

The principal changes in ADEA made by H.R. 5383 can be summarized as follows:

⁸ U.S. House of Representatives, Report No. 95-527, Age Discrimination in Employment Act Amendments of 1977, 95th Cong., 1st Sess. (1977), p. 12.

⁹ Hearings, Amendments to the Age Discrimination in Employment Act of 1967. Committee on Education and Labor, Subcommittee on Employment Opportunities, June 2, 1977, p. 119.

1. Nonfederal employees between age 65 and 70 would come under the Act's coverage, 180 days after enactment.

2. Employee-benefit or pension plans cannot be used as an excuse for mandatory retirement on account of age for workers below age 70. Existing plans do not have to be modified if benefits are not accrued beyond age 65; employees would continue working but not collect such pensions until their retirement at age 70. Where workers are covered by collective bargaining contracts negotiated between their employer and a labor organization, coverage would not become effective until the expiration of existing contracts or two years, whichever occurred sooner.

3. Federal employees (other than specially exempted workers) could not be forced to retire solely on the basis of age. This change would not require the retention of workers no longer capable of satisfactory job performance, but is designed to protect older jobholders still able to work from discrimination based on age. At present, Section 4(f)(3) permits employees—private or public—to be removed for cause irrespective of age.

4. The present limit on annual appropriations for ADEA enforcement of \$5 million is repealed. If authorization of larger sums is necessary, the Secretary of Labor may seek such greater amounts. (It may be noted, however, that recent appropriations and enforcement expenditures have run well below existing ceilings).

The Senate Provisions

The Senate originally had not considered ADEA amendments a priority for 1977. Only after the House Subcommittee held hearings and prepared to report a bill did the Senate Human Resources Committee become involved.

Two bills had been introduced, but no hearings were scheduled and without the House's activity the issue would have been ignored. Senator Domenici (R.-N. Mex.) sponsored S. 481, which was analogous to H.R. 65 in that it "uncapped" the age limit but otherwise failed to address other ADEA provisions.

Following introduction of H.R. 6798, Senator Heinz (R.-Pa.) was the first to address the Section 4(f)(2) question, or pension plan-based retirement. His bill, S. 1583, also removed the age limit.

A month later, near the end of June, members of the Human Resources Committee introduced Age Act Amendments. Senator Kennedy (D.-Mass.) sponsored S. 1768, Senators Javits (R.-N.Y.), Chafee (D.-R.I.), and Eagleton (D.-Mo.) introduced S. 1773, and Senators Williams (D.-N.J.) and Church (D.-Idaho) S. 1784. Williams, chairman of Human Resources, and Church, chairman of the Special Committee on Aging, used S. 1784 as the vehicle for the Labor Subcommittee hearings that were held late in July. The provisions of S. 1784 included a prohibition on involuntary retirement under an employee-benefit or seniority plan, and a gradual increase in the upper age limit (rather than outright repeal) to 66, 68, and then to 70, two years after the effective date. Finally, the Secretary of Labor is directed to complete within three years a study of the feasibility of further increases in the maximum age for coverage.

Since H.R. 5383 had already been approved by the House in late September, the Human Resources Committee substituted its language instead of S. 1784 and, on September 30, approved the bill with several amendments that materially weaken it. At the request of the President, the age 70 upper limit was delayed until January 1, 1979.

More importantly, two special-interest loopholes were added that would exempt specific occupations from coverage beyond age 65. Sen. Pell (D.-R.I.) sponsored a provision, adopted by voice vote, that permits companies to retire executives whose private pension entitlement equals \$20,000 or more in 1977 dollars. The rationale is that top-management positions have to be subject to flexibility and not encumbered by older workers who refuse retirement. The other exemption, sponsored by Senator Chafee, permits universities and colleges to retire faculty members otherwise protected by tenure at age 65. That provision also passed by voice vote.

A third modification was adopted at the Administration's request. It allows employers to establish mandatory retirement at an age less than 70 (the Act's new upper limit) where age is a bona fide occupational qualification (BFOQ).

Under the existing language of Section 4(f)(1)—altered by the Administration's provision—only if age is shown to be a BFOQ on an individual case basis would termination or retirement be permitted. Interpreting the revision, occupational categories could thus be classified according to an age level where (on average) employee performance begins to decline, and retirement legally set at that level.

Such a system relies on the characteristics of group averages rather than individual worker performance. Reliance on group rather than individual norms has been ruled invalid in both age- and sex-discrimination cases.¹⁰ It is unclear from the record why the Administration re-

¹⁰ Houghton v. McDonnell Douglas Corp., 553 F.2d 561 (8th Cir. 1977), cert. den., 434 U.S. — (Nov. 28, 1977); Weeks v. Southern Bell Tel. Co., 408 F.2d 228 (5th Cir. 1969).

quested such a provision. What is clear is that the Senate retained it when approving the bill on October 19.

On the other hand, two procedural amendments were added to "make it more likely that the courts will reach the merits of the cases of aggrieved individuals and do so more expeditiously."¹¹ Both areas are recognized by practitioners of ADEA law as ones where many plaintiffs have lost for failure to comply with complex procedures, especially notification to the Secretary of Labor of the intent to sue within 180 days of the alleged violation. The Supreme Court recently addressed such a case, but failed to settle the question by a 4-4 decision, to be discussed below.¹²

The second procedural revision permits tolling of the statute of limitations during conciliation efforts by the Secretary of Labor, which are required prior to suit. As the Senate report noted, "It is the intent of this amendment to prevent those who have violated the Act from delaying and postponing conciliation and thereby possibly avoiding liability."¹³

A third procedural change was offered as a floor amendment by Senator Kennedy, and agreed to without debate. It permits plaintiffs in ADEA cases to request jury trials.¹⁴ This, too, is an area that has been subject to litigation, since most employers oppose the use of juries in age suits. Their principal arguments are that (1) juries are likely to contain more older persons who may be sympathetic to plaintiffs and (2) jury trials take longer and would thus be more costly to litigate. The Supreme Court has agreed to rule on the question, which will be discussed below.

In the only close vote on any provision, the Senate defeated 48-45, an amendment by Senator Cranston (D.-Cal.) that would have eliminated the higher education and business executives exceptions from the version of the H.R. 5383 reported by the Human Resources Committee.¹⁵ Once these exemptions were retained, the bill was approved, 88-7.¹⁶

The House-Senate Conference

Several meetings of the conferees in October and early November failed to produce a compromise. House conferees refused to accept the

¹¹ U.S. Senate, Report No. 95-493, Amending the Age Discrimination in Employment Act Amendments of 1977, 95th Cong., 1st Sess. (1977), p. 12.

¹² Shell Oil Co. v. Dartt, 434 U.S. — (Nov. 29, 1977). See also Charlier v. S. C. Johnson, 556 F.2d 761 (5th Cir. 1977).

¹³ Senate Report, p. 13.

^{14 123} Cong. Rec. S17296-97 (1977).

¹⁵ 123 Cong. Rec. S17295 (1977).

¹⁶ 123 Cong. Rec. S17303 (1977).

business executive and professors exemptions to the age-limit increase, while Senators favoring them would not back down.

Because the conferees got no further, their disagreement over the Section 4(f)(1) revisions, permitting age-based mandatory requirement under a BFOQ, did not surface. Little else in the Amendments is subject to contention despite the fact that several provisions are only in the Senate version and several only in the original H.R. 5383 passed by the House. Upon resolution of the exemption questions and the BFOQ-mandatory retirement issue, it is probable that the increased private-sector age limits, removal of federal employee age limits, barring mandatory retirement under a pension plan, jury trials, tolling, eliminating the appropriations ceiling, and the 180-day limit waiver will all become law.

The Anticipated Impact

What effect will the various provisions of the 1978 Amendments have on older worker labor force participation and employer practices? Such questions were explored by both the House and Senate in hearings prior to passage of H.R. 5383, as well as by advocates of the special interest modifications added by the Senate.¹⁷

It is difficult to estimate the number of older persons who would remain in the labor force if the ADEA limit is raised to age 70 and the Section 4(f)(2) loophole closed. Data collected for the Bureau of Labor Statistics (BLS) by the Current Population Survey (CPS) do not include reasons for retirement, so the proportion of involuntary retirees who would have remained at work is unclear.

The Social Security Administration's Survey of Newly Entitled Beneficiaries (SNEB) is unavailable for any year more recent than 1971, so that little confidence can be drawn regarding subsequent retiree responses. Such responses are important for analysts, however, since issues of age discrimination and involuntary retirement have become more prominent over the past few years. Despite these and other data shortcomings, two witnesses provided the Senate subcommittee with estimates of 200,000 older workers—estimates arrived at totally independently and through different analytical methods.¹⁸

If 200,000 additional older workers remained active by not retiring as a result of the Amendments, given a civilian labor force of 100 million at year-end 1977, participation would increase by about one-tenth of

¹⁷ Hearings, Subcommittee on Employment Opportunities, and Hearings, Senate Committee on Human Resources, Subcommittee on Labor, July 26–27, 1977.

¹⁸ Assistant Secretary of Labor Donald Elisburg presented data prepared by Department researchers; this writer utilized a labor force participation trend model to ascertain the impact. Hearings, Subcommittee on Labor, July 26, 1977.

one percentage point. Assuming, in the extreme, that total unemployment would rise among all other workers by an equal amount as a result, then the unemployment rate would go up by 0.2 percent—from approximately 6.9 percent to 7.1 percent.

But members of high-unemployment age subgroups—mostly youth are unlikely to be qualified or experienced enough to replace retirees, so that the unemployment impact is likely to be much less. Moreover, the stationary unemployment rate throughout much of 1977 at around 7.0 percent is the result of labor force expansion at a rate equal to new job creation, not an impact of extended older worker participation.

With regard to the Amendments' other provisions, no estimate was prepared on the negative impact of revising Section 4(f)(1)'s BFOQ standards since that section was not added until all hearings were completed. Should that provision become law, its ability to offset the positive effects of raising the maximum age and forbidding benefit-plan mandatory retirement should not be underestimated.

The technical adjustments—tolling, jury trials, and the 180-day limits —will be of value primarily to litigants and not have any quantitative impact on older-worker labor force participation. Moreover, because most older workers withdraw voluntarily and are unlikely to be affected by improved legal safeguards for those electing to remain active, the participation rate for persons approaching retirement will continue to decline.¹⁹

Why the 1977 Amendments?—Recent Trends in ADEA Litigation

ADEA litigation can be divided for analysis into substantive and procedural areas. The latter cases are not usually subject to critical review, but are of some interest here for several reasons. First, the 1978 Amendments—if and when passed—will serve to perfect procedural areas that have been heavily litigated in recent years, mostly to the detriment of older plaintiffs. Second, several of these issues reached the Supreme Court during the present term, based on the unamended statute, the first time that ADEA procedures have been carried beyond the circuit court level.²⁰

¹⁰ Projections suggest that by 1990 men age 65 and above will participate at only a 16.8 percent rate, compared with 21.7 percent in 1975. Howard N. Fullerton and Paul O. Flaim, "New Labor Force Projections to 1990," *Monthly Labor Review* (December 1976), pp. 3-13.

²⁰ Pons v. Lorillard, 549 F.2d 950 (4th Cir. 1970), cert. granted 433 U.S. — (June 27, 1977), argued Dec. 8, 1977 [jury trial permitted]; Morelock v. NCR Corp., 546 F.2d 682 (6th Cir. 1976), cert. pet. filed, No. 77-172 (1977) [jury trial not permitted].

In the Dartt case, the Supreme Court ruled that the 180-day notice was not a substantive jurisdictional requirement, but could be tolled for equitable reasons. The Court's split decision means that no legal precedent is set and the issue remains open for further review.²¹ Three courts of appeals have ruled in the opposite, and until the 1978 Amendments are passed district courts in those areas are bound by those decisions.²²

Of greater interest and impact are the substantive areas of ADEA. The critical section of H.R. 5383 is Section 2(b), which amends Section 4(f)(2) of the 1967 statute. The relevant phrase is: "and no such seniority system or employee benefit plan shall require or permit the involuntary retirement of any individual . . . because of the age of such employee."

Passage of the Amendments would, in effect, moot the Supreme Court's ruling in *McMann* that a pension plan operating prior to the effective date of ADEA was not a subterfuge to avoid the Act even if it required retirement at age 60. As Mr. Justice Marshall observed in his dissent, "... today's decision may have virtually no prospective effect."²³

Otherwise, the major issue still lacking a full Supreme Court review is whether age constitutes a valid BFOQ under Section 4(f)(1).²⁴ Under the present statutory language plaintiffs are not consistently successful in proving discrimination, even when they "have a case" in suits involving one or a few older workers, since the subsection also permits a defense to be based on "reasonable factors other than age"²⁵ which, in practice, permits decisions that are age-related but presented in other forms. Should the Congress permit Section 4(f)(1) to be amended, it would tip the balance even further away from older workers attempting to indicate age as the cause for their termination. In that sense, age itself would become a positive defense against ADEA suits.²⁶

 24 The Supreme Court has refused to grant review to opposite circuit court rulings that age is not a BFOQ for test pilots, *McDonnell Douglas Corp.* v. Houghton, 434 U.S. — (Nov. 28, 1977), and that age is a BFOQ for bus drivers, *Brennan* (Secretary of Labor) v. Greyhound Lines, Inc., 419 U.S. 1122 (1975).

²⁵ See, for example, Reed v. Shell Oil Co., 14 FEP Cases 875 (S.D. Ohio 1977); Mastie v. Great Lakes Steel Co., 424 F.Supp. 1299 (E.D. Mich. 1976); Usery (Secretary of Labor) v. General Electric Co., 13 FEP Cases 1641 (M.D. Tenn. 1976).

 26 If the pending 4(f)(1) language were already in the statute, for example, *Houghton* would not have been reversed on appeal following a trial court ruling in favor of the employer. *Houghton* v. *McDonnell Douglas Corp.*, 553 F.2d 561 (8th Cir. 1977), reversing 413 F.Supp. 1230 (E.D. Mo. 1976).

 $^{^{21}}$ Shell Oil Co. v. Dartt, supra note 12. Shell Oil has petitioned the Supreme Court for a rehearing of the case.

²² Ott v. Midland-Ross Corp., 523 F.2d 1367 (6th Cir. 1975); Powell v. Southwestern Bell Tel. Co., 494 F.2d 485 (5th Cir. 1974); Moses v. Falstaff Brewing Corp., 525 F.2d 92 (8th Cir. 1975).

²³ United Airlines v. McMann, 434 U.S. at —, Slip Op., Dissent at 11 (1977).

Conclusion

Assuming that the Amendments will be enacted, the nation's older workers could end up in 1978 primarily with symbolic statutory gains. While some additional protection from job discrimination in employment will result from the upper age limit being raised from 65 to 70 and the closing of employer options to use pension or benefit plans to invoke mandatory retirement at lower ages, conversion of the BFOQ exception from individual assessment to group norms could permit many competent older employees to be retired simply because others of their age and occupational category have begun to perform at lower levels of competence.²⁷

The House-Senate conference committee's focus on other differences in the pending legislation has diverted attention from the revised language of Section 4(f)(1), which would permit age to be used as a BFOQ in determining qualifications and retirement at a point below the statutory age limit.

Although the exact impact of this possible change cannot be determined, it could materially offset other anticipated gains, as measured by the number of older workers who will remain active and in the labor force as a result of statutory protection under ADEA. The net effect would thus be more modest progress than originally envisioned by the Amendments' sponsors at the outset.

Afterword

P.L. 95-256, the 1978 Amendments, was signed into law by President Carter April 16, 1978. In reaching a compromise, conferees deleted the language that would have modified Section 4(f)(1), but retained the exemption for key business executives and tenured college professors. For all other private sector workers, the permissible mandatory retirement age is raised to 70, effective January 1, 1979. For most federal employees, the age-70 limit is removed entirely, effective September 30, 1978.

²⁷ Many federal courts, including the Supreme Court, have never considered age discrimination in the same broadly remedial context as race or sex discrimination under Title VII of the 1964 Civil Rights Act, 42 U.S.C. 2000-e, or under the 14th Amendment. See, for example, *Massachusetts Board of Retirement* v. Murgia, 427 U.S. 307 (1976).

Management Perception of the Older Worker

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In a recent study, Palmore and Manton compared various population subgroups on an equality index that measured overlap in income, occupation, and education.¹ According to the investigators, between 1950 and 1970 the aged lost substantial ground compared to other groups. Palmore and Manton concluded that few people recognize the magnitude of age inequality in our society.

Age stereotypes, that is, widely held beliefs regarding the characteristics of people in various age categories, may account for much of the declining status of older workers. Yet few studies have systematically examined the extent and pervasiveness of age stereotypes. From an applied perspective, attributions with respect to the likely potential and performance of older people should give valuable insights into the psychological processes that underlie age discrimination. Accordingly, a study was undertaken to assess the kinds of work-related attributes commonly associated with younger and older people.²

Development of an Age-Stereotype Questionnaire

On the basis of item content, a list of 65 items was developed and classified into four work-related scales: Performance Capacity, Potential for Development, Stability, and Interpersonal Skills.

One hundred and six respondents completed the questionnaire, including 56 realtors and 50 business students. Participants were asked to consider a list of 65 characteristics and indicate the degree to which each characteristic described the average 60-year-old male and the average 30-year-old male. This approach emphasized the differences seen be-

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¹E. B. Palmore and K. Manton, "Ageism Compared to Racism and Sexism," Journal of Gerontology, vol. 28 (1973), pp. 363-69.

² B. Rosen and T. H. Jerdee. "The Nature of Job-Related Age Stereotypes," *Journal of Applied Psychology*, vol. 61 (1976), pp. 180-83.

tween young and old in a direct comparison, which seemed desirable in a first exploration of work-related age stereotypes.

Comparisons were made of the mean rating score for each item on each of the four scales for the 30-year-old man and the 60-year-old man.

PERFORMANCE CAPACITY

The younger man was seen as more productive, efficient, motivated, and capable of working under pressure. The younger man was also perceived to be more innovative, creative, and logical. The older man was seen as more accident-prone.

POTENTIAL FOR DEVELOPMENT

The younger man was seen as more ambitious, eager, and futureoriented, as well as more receptive to new ideas, more capable of learning, more adaptable, and more versatile. The older man was seen as more rigid and dogmatic.

STABILITY

Ratings on this dimension favored the older man. The 60-year-old man was seen as more reliable and dependable, more honest and trust-worthy, and less likely to quit or to miss work for personal reasons.

INTERPERSONAL SKILLS

No clearly defined age stereotype regarding age differences in interpersonal skills emerged.

The overall pattern of results suggests the existence of age stereotypes that depict the older person as less employable than a younger person, particularly for highly demanding and challenging positions. The older person was perceived to be less capable of effective performance with respect to creative, motivational, and productive job demands. Moreover, the older person was rated lower on potential for development. These age stereotypes regarding older workers' performance capacity and potential for development could have potentially damaging effects on the career progress of older employees.

Age Stereotypes and Managerial Decisions

In order to assess the extent to which age stereotypes influence managerial decisions, a second study was undertaken involving 1,570 subscribers to the *Harvard Business Review*.³

³ B. Rosen and T. H. Jerdee, "Too Old or Not Too Old," Harvard Business Review, vol. 55 (1977), pp. 97-106.

Respondents were asked to assume an administrative role in a fictitious organization and to make decisions about a series of incidents. There were two versions of each incident, one featuring an older person and the other featuring a younger one. Each participant received only one version of each incident and was not aware that half of the respondents were reading the same incident, but with the age status (younger vs. older) of the person reversed. Participants indicated how they would handle each incident by evaluating several suggested approaches for resolving the managerial problems. By comparing responses of those who received the "younger" version of each incident with responses of those who received the "older version," it was possible to determine the effects of age on decisions.

RESISTANCE TO CHANGE

In the first incident, participants read about a shipping-room clerk who was not responsive to customer calls for service. Participants perceived the "older" worker as resistant to change and recommended reassigning the employee. When the employee was depicted as "younger," an encouraging talk was perceived to be the appropriate managerial response. Clearly, respondents saw the older employee as more resistant to managerial influences, even though there was no evidence in the memorandum to suggest support of such a perception.

DISINTEREST IN TECHNOLOGICAL CHANGE

In the next incident, participants evaluated the desirability of sending a production employee to a training seminar. Participants perceived an "older" employee as less motivated to keep up with new technology and were less likely to provide funds for training. In a similar incident, involving an employee whose skills had become outdated, a higher percentage of respondents favored retraining a younger employee compared to an older employee. Findings from these three incidents suggest that managers are less likely to provide constructive opportunities for retraining or development for older workers who have demonstrated a need or an interest, as compared to younger workers in identical circumstances.

LACK OF CREATIVITY AND INABILITY TO COPE WITH STRESS

Participants next considered two promotion decisions, one involving a promotion to marketing director, a job requiring innovative thinking, and the other involving a computer-operations position that required coping with emergency malfunctions. In both cases, younger candidates were favored over identically qualified older employees. It appeared that older employees were handicapped by age stereotypes that depicted them as lacking in creativity and unable to cope with job-related stress.

When considered together, these findings provide insights about the effects of the commonly accepted belief that older employees reach a time in their careers when motivation and learning ability significantly decline and they merely go through the motions until retirement. When managers expect a decline in motivation, they might make discriminatory decisions that have the effect of lowering motivation and performance among older workers. To the extent that an older worker perceives that his efforts are no longer linked to organizational advancement, his motivation may actually decline.

Limited opportunities for development and lack of feedback about performance may further reduce the older employee's motivation. Thus, it is likely that lowered motivation may not result from aging itself, but from managerial expectations and treatment of older workers.

Age Stereotypes and Retirement Decisions

In the likely event that the mandatory retirement age is extended or abolished, managers will soon be confronted with difficult decisions regarding older employees' fitness to continue working. A third investigation extends our previous work and examines how age stereotypes influence managerial judgments regarding the initiation of retirement procedures for older workers.⁴

It was hypothesized that under a flexible retirement policy, managers' retirement recommendations for employees near the traditional retirement age of 65 are influenced by the employee's chronological age, even when objective performance and health data are held constant. It was further hypothesized that older female employees were potential victims of both age and sex bias. No hypotheses were made for the influence of a third variable, job status, since employees holding highstatus positions may be seen as more valuable to the organization, but more costly to retain.

One hundred and forty-two managers were asked to assume an administrative role in a hypothetical organization that followed a flexible retirement policy. According to the policy, "employees over age 60 are to be reviewed each year, and on the basis of performance and health data, a decision must be made whether to continue the employee for the next calendar year."

⁴ B. Rosen and T. H. Jerdee, "Influence of Employee Age, Sex, and Job Status on Managerial Recommendations for Retirement," *Academy of Management Journal*, in press.

Participants reviewed the performance and health records of a candidate for possible retirement. Twelve versions of the candidate's records were written so as to manipulate the experimental variables. Age was manipulated by depicting the employee as either 62, 65, or 68 years old. Sex was manipulated by using the names Ronald or Ruth Hopkins in alternative versions. Job status was manipulated by depicting the employee's current position as either a mail clerk with a monthly salary of \$700 (low status) or a computer-operations executive with a monthly salary of \$2000 (high status). Other information was constant across all experimental conditions.

Participants rated the desirability of initiating procedures for the employee's retirement on a 6-point scale anchored by (1) extremely undesirable and (6) extremely desirable. The effects of employees' age, sex, and job status are shown in Table 1.

on Managenal Retrement Recommendations									
		62 Years Old		65 Years Old		68 Years Old			
		Male	Female	Male	Female	Male	Female		
High-status job		2.77	1.67	3.00	3.58	4.56	2.85		
Low-status job		2.75	2.30	3.50	3.18	3.58	3.50		
Source	MS	F	р						
Age (A)	20.07	9.12	.01						
Status (B)	0.15								
Sex (C)	9.34	4.24	.05						
$A \times B$	0.64	<u> </u>							
$B \times C$	1.86								
$A \times C$	3.74	1.7							
$A \times B \times C$	4.80	2.18							
Within	2.20								

 TABLE 1

 Effects of Employees' Age, Sex, and Job Status on Managerial Retirement Recommendations

AGE EFFECTS

A significant main effect for age was found. Participants perceived initiation of retirement procedures as undesirable when the employee was perceived as 62 years old, but progressively more desirable for employees depicted as 65 and 68 years old. One possible explanation for these findings is that managers responded on the basis of age stereotypes. It is also possible that participants responded on the basis of expectancies in regard to health and absenteeism, or on the basis of a desire to make room for younger employees.

Clearly, it is important to identify further the influence of employee age on managerial judgments and to understand the processes under-

lying these judgments. The minimum age for mandatory retirement may soon be raised to 70, and there is even a possibility that age-discrimination laws may be extended to cover all older workers, regardless of age. As public policy moves in this direction, managers may have difficulty avoiding the tendency to base decisions on employee age, especially if this tendency is based on deep-rooted stereotypes that have been reinforced by experience, custom, and legal sanctions.

SEX EFFECTS

Contrary to the hypothesis, women received *more* favorable treatment than did men with identical performance and health records. Perhaps women of a given chronological age are perceived as physiologically younger and more fit than men of the same age because of women's longer life expectancy. Or, perhaps retirement of a female, particularly in a high-status job (where the effect was strongest) may be seen as detrimental to the equal opportunity position of the organization.

JOB STATUS

A main effect for job status was not found. Retirement recommendations were approximately the same for both the high-status and lowstatus employees.

Summary

In our first study, managerial stereotypes were identified that depict older workers as less capable of responding to creative and productive job demands, less interested in change, and less capable of coping with future challenges. Findings from the second and third study suggest that managers may be unknowingly influenced by these age stereotypes in everyday decisions affecting the employment and retention of older employees. If these conclusions are correct, policy changes to eliminate discrimination against older employees represent only a first step. Additional efforts are required to help managers identify these age stereotypes and eliminate their effects on everyday decisions. In order to ensure equitable treatment for all employees, managerial decisions must be made on the basis of individual qualifications and should not be influenced by employee membership in a particular age category.

DISCUSSION

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The two papers examine two facets of the complex problems of older workers in the contemporary economic environment. These problems can be divided roughly into two major areas; first, the retention of older workers, and the second, securing reemployment for older workers once they become unemployed. These papers concentrate on the first—retention of older workers.

Professor Rosen's paper centers on job-related age stereotypes and examines their effects on managerial judgments. He concludes that there appears to be managerial bias against older workers based on stereotypes related to age and quite correctly points out that such stereotypes pose possible serious consequences for older employees. His research results indicate that such stereotypes cause managers to view older workers unfavorably on such qualities as flexibility and willingness to change and, consequently, were less likely to promote or retain them.

Professor Rosen's conclusions are not surprising since most of us accept the fact that age stereotypes do exist and do play some role in management decisions affecting older workers. But his research provides some interesting findings and examines in detail some of the actual and potential effects of these stereotypes.

On the other hand, I did find it surprising that among managers, who themselves largely make the decisions regarding personnel practices for older employees, a significant number felt that current business practices with respect to the treatment of older employees were inadequate and an overwhelming majority favored greater emphasis on affirmative-action programs for older people. For example, a large majority favored elimination of mandatory retirement at age 65. Another interesting finding, which I hope Professor Rosen will explore in future research, was that age stereotypes were much less apparent for women than for men. These findings indicate that strong countervailing attitudes exist to mitigate against the effects of age stereotypes.

But just how important are age stereotypes in determining managerial decisions regarding older workers when weighed against other factors that influence such decisions? Are there other considerations more influential than age stereotypes? For example, what role do cost factors play in such decisions? Because of seniority and other personnel practices, older workers usually have higher wages than younger workers and replacing older workers with younger ones can have significant cost advantages for employers.

Employers facing layoffs due to adverse business conditions and/or automation are likely to make their decisions based on cost-benefit considerations. The typical employer will have extensive training investment in skilled and semiskilled workers and is likely to try to keep these workers when the alternative is to retire older workers with short worklife expectancies. Similarly, most employers are concerned about costly turnover, particularly among skilled younger workers who may go elsewhere unless there are good possibilities for higher wages and greater responsibility through promotion.

The important role cost factors play is reflected in recent press accounts of what is happening in Japan. Respect for age and lifetime job security are cherished traditions in Japan. But Japanese employers are now claiming it is no longer possible to sustain the present system of providing permanent employment. Under the Japanese system, pay raises and promotions are awarded largely on the basis of advancing age. As the average age of the workforce has risen, so have labor costs. A growing number of Japanese employers have decided that laying off older workers is the most effective way to cut costs.

Centuries of Japanese culture are being undermined by modern industrial technology and cost accounting. I suspect that American employers have been similarly motivated by cost considerations. Perhaps Japanese employers have been a little more honest in explaining their actions. U.S. employers, as is typical in American society, are probably more sensitive to the importance of public relations.

A number of noncost factors undoubtedly also have significant effects on managerial decisions pertaining to older workers. For example, are pressures to hire, retain, or promote women and minority employees a factor in such decisions, particularly in regard to early and mandatory retirement? Professor Rosen's research indicates there is less age bias against women than men and concedes that this may have resulted because retirement of a female might be seen as detrimental to the organization's equal opportunity policies. Further research is needed. Perhaps Professor Rosen will explore this point in future research, broadening it to include minority groups as well as sex.

Another important factor may be that under certain circumstances retirement of older workers may have greater overall employee acceptance and less adverse impact on employee morale. Most workers may feel it unjust to lay off younger workers with families to support and retain at work elderly workers who are eligible for Social Security benefits, pensions, and health care.

In short, the essential point is that many factors are involved in these managerial judgments—many of which are probably more influential than age stereotypes. It would have been helpful if Professor Rosen had included these other factors in his research to rate their importance in managerial decisions relative not only to age stereotypes but to each other as well. He has done an excellent job of explaining age stereotypes, but, in my opinion, has given them a greater importance in shaping managerial judgments regarding older workers than they deserve.

Marc Rosenblum's paper provides an excellent summary of the Age Discrimination in Employment Act (ADEA) and how the law will be changed by the amendments now pending in Congress. The paper includes a review of recent litigation under the Act and concludes with some estimates of the effect on labor force participation in the event the proposed legislation becomes law. He concludes that the "nations' older workers could end up . . . with symbolic gains" and particularly so if the Senate version of the legislation is adopted by the House-Senate Conference Committee. Mr. Rosenblum makes a good case and I see no reason to disagree with him.

In view of the claims made by its sponsors and the media's exaggerated accounts of the legislation, Mr. Rosenblum's kind of sober analysis is essential and long overdue. As he points out, the Senate provisions contain a number of major modifications which would (1) permit employers to retire employees whose private pension equals \$20,000 or more, (2) allow universities to retire faculty members otherwise protected by tenure at age 65, and (3) under certain conditions permit employers to establish mandatory retirement at an age less than 70 where age is a bona fide occupational qualification (BFOQ).

There has been considerable attention focused on the first two, but very little on the last and potentially by far the most important. The latter apparently, at least under Mr. Rosenblum's interpretation, would convert the BFOQ exception from the individual-assessment requirement under present law to one that allows employers to classify occupational categories according to ages where (on average) employee performance begins to decline and to retire workers legally at those ages—in other words, permit retirement of many capable older employees because on an average others of their age and occupational category demonstrate lower levels of competence. The result would be to seriously undermine the impact of the legislation. Mr. Rosenblum's estimate of the impact on labor force participation are equally pessimistic—about 200,000 older workers which is almost negligible given a civilian labor force of 100 million at the end of 1977. He utilized a labor force participation trend model to ascertain the impact, but no mention is made in the paper of the basis for or any details of this model. But in fairness the purpose of his paper was to provide an overview of the legislation and its impact and not a technical description of a labor force participation model. He points out that totally independent research by the U.S. Department of Labor arrived at essentially identical results. The paper concludes with the observation that "because most older workers withdrew voluntarily and are unlikely to be affected by improved legal safeguards for those electing to remain active, the participation rate for persons approaching retirement will continue to decline."

One of the main arguments in support of abolishing mandatory retirement is that it will retain large numbers of productive workers in the labor force and will substantially reduce public and private expenditures for retirement benefits. Mr. Rosenblum's analysis indicates the potential for achieving this objective is very small.

His data results may come as a surprise to those who have been misled by the exaggerated rhetoric concerning the legislation. Those who are familiar with the Social Security Administration's Survey of Newly Entitled Workers and with the early retirement experience under collective bargaining agreements are not surprised, for his estimates only confirm what has long been obvious.

My main complaint is not with the papers per se, which do an excellent job of making each author's case, but rather with their narrow focus given the topic of this session, "Older Workers in the Contemporary Economic Environment." There is no paper relating to the most pressing problem—to keep at work the very large number of older workers who are able and want to work but are forced out of the labor market for reasons other than mandatory retirement or age stereotypes.

The age of workers is often of secondary importance in determining future work success when measured against such interrelated factors as unemployment, education, skill, and race. It is particularly difficult to expand job opportunities for older workers when the job market is tight for all. Such efforts will work only in a favorable economic framework, for older workers cannot be placed in jobs if those jobs do not exist. Economic growth and expansion, not abolition of mandatory retirement, are the key factors in keeping older workers in the labor force. After reading Mr. Rosenblum's excellent paper, I am sure he would agree with me.

XIV. CONTRIBUTED PAPERS: CURRENT COLLECTIVE BARGAINING

The Propensity to Strike in American Manufacturing^{*}

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Data on strikes and labor disputes probably represent the single best indicator of serious conflict or maladjustment in the collective bargaining relationship. The use of strike data to make inferences about the state of labor-management relations is complicated, however, by the number of alternative measures of strike activity that are available. For instance, the conventional measures of strike activity such as numbers of strikes, workers involved, and mandays idle each represent a different dimension of the strike, namely, frequency, size, and duration. All of these, however, provide information on strike activity in absolute terms, e.g., 5,000 strikes per year or 1 million workers involved. For some purposes a relative measure of strike activity as a proportion of the potential number of such events. In this case the question of interest concerns not the aggregate volume of strike activity, but rather the separate concept of relative strike frequency or the "propensity to strike."

Editor's Note: Following Professor Kaufman's presentation of his paper at the IRRA session, he was informed that there were errors in the BLS data he had been using. This version of his paper is based on corrected data. Therefore, some of the discussant's comments on the earlier version may no longer be applicable.

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[•] The author wishes to acknowledge the contributions of Michael Shalev and the members of his dissertation committee, Glen Cain, Gerald Somers, and James Stern. The Bureau of Labor Statistics, and in particular Albert Belman, George Reuben, and Frances Kanterman, were also most generous with their assistance. The study was financed by Employment and Training Administration Grant 91-55-76-56.

Especially in comparisons of strike activity between different countries, industries, or points in time, a relative measure of strike activity is useful. This is because the absolute measures of strike activity depend in part on such things as the size of the labor force, number of union members, number of contract expirations, and size of bargaining units. If these variables reflecting the "opportunity to strike" are not controlled for, it then becomes difficult to infer whether or not differences in strike activity actually reflect differences in labor-management relations. For example, an increase in the number of strikes between one year and another would suggest, if taken by itself, a deterioration in labor-management relations. If, however, the number of contract expirations had increased more than proportionately to the number of strikes, the actual propensity to strike would have in fact fallen, suggesting instead an improvement in labor-management relations. Clearly this ambiguity is rather crucial from both a methodological and policymaking point of view.¹

Previous Studies

In constructing a relative measure of strike activity, past studies have in general used either some measure of nonagricultural employment or of union membership to proxy for the "opportunity to strike" variable in the denominator of this ratio. For example, in their cross-national study of strike activity, Ross and Hartman calculated what they called an employee-involvement ratio and a membership-involvement ratio.² These were the number of workers involved in strikes as a proportion of total nonagricultural employment and of total union membership, respectively. A different strike measure using nonagricultural employment has been employed in some other studies; Hibbs, for example, used the number of mandays lost from strikes per 1,000 wage and salary workers.³

All such measures as these represent a propensity-to-strike concept in that they base an absolute measure of strike activity to some common denominator. To accurately estimate relative strike involvement, however, this ratio should ideally contain only that subset of workers or employment situations that are actual or potential participants in the group of work stoppages found in the numerator. Which propensity to strike measure is appropriate would then seem to depend on the particular

¹For a similar discussion and empirical analysis for Canada, see L. A. Kelly, *Measuring Strike Activity*, Research and Current Issues Series No. 33 (Kingston, Ont.: Industrial Relations Centre, Queen's University, 1976).

² Arthur Ross and Paul Hartman, Changing Patterns of Industrial Conflict (New York: John Wiley & Sons, Inc., 1960).

³ Douglas A. Hibbs, Jr., "Industrial Conflict in Advanced Industrialized Countries," American Political Science Review (December 1976), pp. 1033-58.

country being analyzed and the nature of its industrial relations system.

For example, in the United States where nonorganized workers rarely strike, a measure of union membership would seem to be much superior to total nonagricultural employment as a proxy for those workers with the opportunity to strike. The danger in using nonagricultural employment is that it is impossible to distinguish whether a change in the resultant relative strike measure is a consequence of changes in the size of the unionized labor force, the propensity to strike constant, or due instead to an actual change in strike involvement. In countries such as France, however, where either union membership is not well defined or nonunion workers engage in frequent strikes of a quasi-political nature, the use of nonagricultural employment may be a better approximation of those workers who are potential strike participants.

In countries such as the United States where collective bargaining is quite formalized in terms of contractual arrangements, union membership may also be a less than accurate measure of workers with a potential involvement in strikes. For the last 15 years in the United States more than two-thirds of all workers involved in strikes are the result of strikes during the negotiation or renegotiation of union contracts.⁴ Especially in U.S. manufacturing, where union membership has been virtually constant since the mid-1950s, on a year-to-year basis it is the periodic negotiation of the union contract, not the fact that the workers are union members, that most often represents the true opportunity to strike.

A New Measure of the Propensity to Strike

As suggested above, because the majority of strikes in the United States occur during contract renegotiations, strike activity is likely to have a direct relation to the bargaining calendar. In the short run, movements in strike activity will be affected by variations in the number of contract expirations in light and heavy bargaining years. In the long run, the trend in strikes will be affected by changes in the number, size, and duration of collective bargaining contracts. None of these factors could be captured if strikes were related only to union membership.

For these reasons a more accurate measure of relative strike involvement would seem to be the number of strikes or workers involved in those strikes that occur during contract renegotiations relative to the total number of contract expirations and workers covered under those contracts. To calculate such a measure requires data on contract expirations and on strikes during the renegotiation of union contracts.

The best available data pertaining to contract expirations comes

⁴ Bureau of Labor Statistics, Analysis of Work Stoppages (Washington: U.S. Government Printing Office, 1961–75 issues).

from the BLS publication *Current Wage Developments (CWD)*. This source gives the annual number of contract settlements and number of workers covered under those settlements in manufacturing for all bargaining units of 1,000 or more workers since 1954.⁵ These numbers are given in columns 1 and 4 of Table 1 for the period 1954–75.

Since our measure of bargaining opportunities is restricted to contract negotiations or renegotiations involving 1,000 workers or more, this implies we should similarly restrict the strike data we compare with this. Unfortunately, however, statistics on strikes by contract status are available only since 1961. As a substitute we have selected those strikes involving 1,000 or more workers that occurred over economic issues.⁶ Less than 8 percent of strikes over economic issues took place during the term of agreement in 1975, and in turn, this class of strikes represented almost 90 percent of all strikes that occurred during contract renegotiations.^{7, 8} These figures for number of strikes and workers involved are given in columns 2 and 5 of Table 1.⁹

In columns 3 and 6 of Table 1 are given our two measures of the propensity to strike. Propensity to Strike (I) involves the number of strikes over economic issues of 1,000 or more workers in manufacturing as a fraction of all major (1,000 or more workers) contract settlements in manufacturing. Propensity to Strike (II) involves the number of workers in this subgroup of strikes as a fraction of all workers covered under major contract settlements. The relationship between number of

⁹ This subsample of strikes in Table 1 represents 4.0 percent of all strikes in manufacturing and 38.1 percent of all workers involved in such strikes. Data on mandays lost were not available.

 $^{^5\,\}rm Consistent$ data for nonmanufacturing are available only since 1966 and have not, therefore, been included in this study.

 $^{^{6}\,\}rm Economic$ issues include strikes over general wage changes, supplementary benefits, wage adjustments, and hours of work.

⁷ Bureau of Labor Statistics. Analysis of Work Stoppages, 1975, p. 22.

⁸ These measures of strike and bargaining activity are not completely comparable for four other reasons: (a) the bargaining measures from CWD are contract settlements which may take place at a later year than the contract expiration and strike; (b) a bargaining unit may be less than 1,000 workers and hence excluded from CWD, but a strike may involve more than one bargaining unit or nonunion workers and thereby exceed 1,000 workers; (c) for multiemployer or multiplant agreements, CWD lists only the master agreement, whereas a strike may occur over both the master agreement and in each firm or plant over local issues; and (d) when unions bargain with a number of major producers in one industry, all facing the same contract expiration date, a strike against more than one company is still considered to be one strike, although CWD would list each contract settlement separately. For correction of item (a), see Table 1, fn. a. As for item (c), since only strikes over economic issues were included, most local-issue strikes have probably been eliminated.

Year	Major Contract Settlements (1)	Number of Strikes (2)	Propensity to Strike (I) (3)	Covered Workers, Major Contract Settlements (4)	Workers Involved in Strikes (5)	Propensity to Strike (II) (6)
1954	919	72	.078	3,228	302.6	.094
1955	1,030	142	.138	4,446	1180.3	.265
1956	915	109	.119	3,406	825.1	.242
1957	564	7 5	. 133	1,567	186.1	.119
1958	646	84	. 130	2,709	824.2	.304
1959	769ª	88	.114	2,671ª	820.6	.307
1960	755ª	45	.060	2,051ª	186.2	.094
1961	782	58	.074	2,601	163.9	.063
1962	845	62	.073	2,362	178.1	.075
1963	751	4 0	.053	2,189	136.5	.062
1964	842	69 77	.082	2,261	208.5	.092
1965	1,132		.068	2,482	314.4	. 127
1966	543	91	.168	1,396	253.0	. 181
1967	483	107	.222	2,199	562.1	.256
1968	646	123	. 190	2,277	374.0	.164
1969	466	125	.268	1,459	372.9	.256
1970	518	94	.181	2,184	246.4	.113
1971	519	98	.189	1,913	311.6	.163
1972	330	45	.136	913	107.7	.118
1973	486	78	. 160	2,403	361.4	.150
1974	518	154	. 297	1,854	483.2	.261
1975	307	47	.153	778	102.7	.132

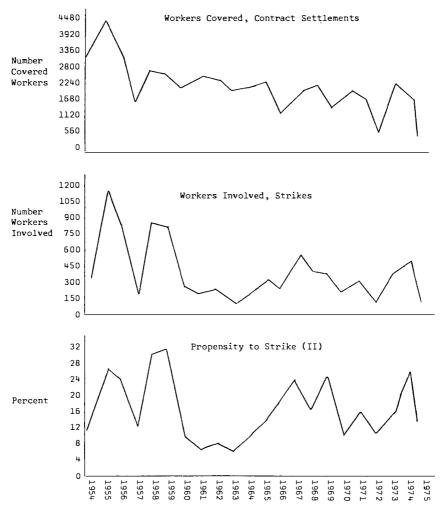
 TABLE 1

 Two Measures of the Propensity to Strike in U.S. Manufacturing (Workers Covered and Workers Involved, in Thousands)

Sources: Unpublished BLS strike data; contract-settlement data from various issues of Current Wage Developments; number of contract settlements 1968-75, unpublished.

^a 1959 data adjusted to include 1960 steel industry settlements from previous year's strike.

Figure 1. Number of Workers Covered by Settlements, Workers Involved in Strikes, and Propensity to Strike (II), 1954–75 (Workers Covered and Workers Involved in Thousands)



workers involved in strikes, workers covered under contract settlements, and the resultant propensity to strike measure is shown in Figure 1.

The Pattern of Contract Settlements

An examination of Table 1 reveals two distinct patterns in our measures of bargaining activity. The first is the gradual appearance of a three-year cycle of bargaining rounds. Second, both measures of contract settlements also reveal a clear long-term decline in the annual volume of bargaining activity, especially so for the number-of-contract-settlements measure. This is probably due to at least three interrelated factors: (a) the continuing movement toward longer-term agreements, (b) the consolidation of bargaining units as either master (company-wide) agreements were negotiated in place of plant-by-plant agreements or alternatively when individual companies were merged, and (c) the decline in employment for a number of companies below the 1,000 level and hence exclusion from coverage in *Current Wage Developments*.

Bargaining Activity and Strike Activity

Having excluded most strikes that occur during the term of the agreement, we would expect to find a positive relation between the levels of bargaining activity in columns 1 and 4 and levels of strike activity in columns 2 and 5. If the number of strikes and workers involved varied in direct proportion to changes in the number of settlements and workers covered by those settlements, we would find the propensity to strike graphed in Figure 1, for instance, a horizontal line. As is clear, this is not the case as both propensity-to-strike measures exhibit distinct cyclical patterns.

A correlation of the logged data in columns 4 and 5 yields a figure of .666, indicating a fairly substantial positive association between changes in workers involved in strikes and workers covered under expiring union contracts. The same correlation for the data in columns 1 and 2 yields a much lower figure of .108, however. When these data are broken down into two equal subperiods, 1954–64 and 1965–75, the correlation coefficient rises to .401 and .422, respectively. This would seem to indicate that part of the expected positive relationship between number of strikes and contract expirations is obscured by long-run trends in each variable as well as by changes in other independent variables.

The Propensity to Strike

Both measures of the propensity to strike in Table 1 display much the same overall cyclical trend during the 1954–75 period, although the measure using workers involved certainly has a greater relative variability. Our calculations show that in the beginning year 1954, 7.8 percent of all major contract expirations in manufacturing and 9.4 percent of all workers covered by those contracts were involved in strike action. This proportion rose during the remaining years of the decade until, at least in terms of workers involved, an overall peak in strike involvement was reached in 1959 with nearly one out of three covered workers out on strike.¹⁰

 $^{^{10}\,{\}rm The}$ high strike involvement in 1959 is mostly due to the industrywide steel strike of that year.

The trough in the strike cycle in the post-Korean War period was apparently in 1963 when both strike measures in Table 1 fell to about 6 percent, their lowest levels at any point in the sample period. Starting in 1964, relative strike involvement began to rise again until a new peak was established in 1969 with a propensity to strike of approximately 25 percent. Strike involvement fell to lower levels during the 1970–73 period, although still well above the early 1960s. Our numbers indicate 1974 was another peak year for strike activity in manufacturing. In this year one out of every four major contract negotiations was preceded by a strike, and one out of four workers covered by these contracts walked off the job. The year 1975, however, witnessed a substantial decline in the willingness of labor and management to strike, although this was again over twice the 1963 level.

Conclusions

It appears that taking into account the changing number of contract expirations does not alter the basic cyclical behavior of strike activity that is reflected in the more conventional measures of strike activity. This result lends additional support to the conclusions of previous studies that economic and/or institutional developments have a definite role in generating cyclical variation in strikes.

The data presented in this paper show that at least for major collective bargaining negotiations in manufacturing the strike has not shown much tendency to "wither away" in recent years. While there has been a noticeable long-term decline in the annual number of strikes and workers involved in strikes because of the concomitant decline in bargaining activity, the actual propensity to strike has fallen very little. In the last peak year of the strike cycle, 1974, there was nearly as high a rate of strike involvement as in any year in our analysis.

Finally, this paper has discussed various measures of strike activity. Which particular measure is appropriate depends on the type of strike being analyzed, the time frame of analysis, and the question being investigated. Where the majority of strikes occur during a contract renegotiation, it has been suggested that for a relative measure of strike activity the contract expiration is the best measure to use in the denominator of this ratio. For an analysis of long-term trends in strike activity, however, union membership might be more appropriate, as it would be for analyzing strikes that occur during the term of agreement.

Industrial Safety and Collective Bargaining

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The standard argument of economists in reference to collective bargaining over nonwage issues is that the nonwage provision can be converted to a dollar equivalent and that analysis can continue using the full wage.¹ While nonwage provisions can be converted to a dollar value, doing so provides little insight into the determination of the mix between wage and nonwage components of the bargaining outcome. Kochan and Block's research suggests that the traditional method of viewing nonwage issues may severely restrict the development of a systematic analysis of industrial relations and collective bargaining.² Their analysis demonstrated several instances in which the correlations between some traditional measures of relative bargaining power and nonwage outcomes, such as working conditions, did not conform to correlations with the outcome of wage disputes.

Inclusion of job-safety provisions in bargaining outcomes may be influenced by the same variables in the same manner as are wage outcomes. On the other hand, other economic and environmental variables, not relevant to wage outcomes, may be crucial to the determination of job-safety outcomes.

The hypotheses of this paper are that job safety provisions are more likely to be included in collective agreements under the following con-

^{*} This paper is based upon a section of my Ph.D. dissertation, "Industrial Safety and Collective Bargaining: An Economic Analysis," written at the University of Wisconsin-Milwaukee. The dissertation research was supported by Grant No. 91-55-76-38 from the Employment and Training Administration, U.S. Department of Labor. Any viewpoints or conclusions expressed in the paper are those of the author and do not necessarily represent current policy of the Department of Labor or of the American Medical Association. The author wishes to express his thanks to Richard Perlman, Robert McLean, Paul Nystrom, Swamjit Arora, and Eric Schenker for their assistance. Any errors are the sole responsibility of the author. Author's address: American Medical Association, 535 North Dearborn, Chicago, IL 60610.

¹ Orley Ashenfelter and George E. Johnson, "Bargaining Theory, Trade Unions and Industrial Strike Activity," *American Economic Review*, vol. 59 (March 1969), pp. 35–49.

² T. A. Kochan and R. Block, "An Interindustry Analysis of Bargaining Outcomes: Preliminary Evidence from Two-Digit Industries," *Quarterly Journal of Economics*, vol. 91 (August 1977), pp. 431–52.

ditions: (a) the industry's labor force is exposed to numerous work hazards, (b) the industry's labor force is highly unionized, and (c) the composition of the internal labor force is relatively homogeneous. The structure of bargaining and the degree of product market concentration should influence the outcome, but a priori, the directions of influence are ambiguous.

Previous Research

Traditional theory held that relative bargaining power was (a) positively related to the extent of union organization,³ (b) positively related to multiemployer bargaining structure,⁴ and (c) related to the degree of concentration in the product market, although the direction of influence was subject to debate.⁵ One variation to the traditional theory was that wage levels were not influenced by the degree of product market concentration, but rather were positively related to plant size.⁶ Another variation held that labor and product market influences were not independent, but relative bargaining power was contingent upon the interaction of both markets.⁷ Termed the market structure proposition, existence of a barrier to entry was the key.

Recently, Hendricks, in addition to Kochan and Block, has conducted a systematic analysis of private-sector collective bargaining outcomes.⁸ Hendricks's results confirmed the traditional theory with respect to the influence of (a) extent of union organization, (b) multiemployer bargaining, and (c) plant (firm) size. However, product market concentration had an insignificant positive impact upon the level of negotiated wages. His investigation of the market structure proposition demonstrated that, for a given level of product market concentration, wages increased as extent of union organization increased, and for a given degree of union organization, wages increased moving from low to mod-

³ Albert Rees, *The Economics of Work and Pay* (New York: Harper and Row, 1973), p. 152, and Sherwin Rosen, "Trade Union Power, Threat Effects and the Extent of Organization," *Review of Economic Studies*, vol. 36 (April 1969), pp. 185–96.

⁴ E. R. Livernash, "The Relation of Power to the Structure and Process of Collective Bargaining," *Journal of Law and Economics*, vol. 6 (October 1963), pp. 10-40.

⁵ Rees, p. 158, and Leonard Weiss, "Concentration and Labor Earnings," American Economic Review, vol. 56 (March 1966), pp. 96-117.

⁶ Stanley H. Masters, "An Interindustry Analysis of Wages and Plant Size," Review of Economics and Statistics, vol. 51 (August 1969), pp. 341-45.

⁷ Martin Segal, "The Relation Between Union Wage Impact and Market Structure," *Quarterly Journal of Economics*, vol. 78 (February 1964), pp. 96–114.

⁸ Wallace Hendricks, "Labor Market Structure and Union Wage Levels," *Economic Inquiry*, vol. 13 (September 1975), pp. 401–16.

erate concentration, but declined moving from moderate to high concentration.

Kochan and Block observed several instances in which the correlations between wage outcomes and other categories were not positive. Further, using zero-order correlations and their index of working conditions, they found (a) a positive but insignificant correlation between extent of union organization and their index of working conditions, (b) a positive but insignificant correlation between product market concentration and their index, and (c) a positive and significant correlation between multiple-plant bargaining and their index.⁹

Kochan and Block's results suggest that the traditional method of treating nonwage provisions may be limiting. Not only may the production of workplace safety be subject to certain economies, but the priority given to safety as a bargaining goal may differ among employees.

The Model

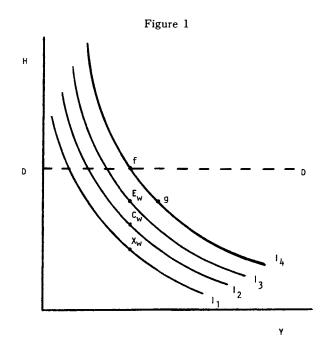
It is assumed that all employees desire a safe and healthy work environment, but due to differences in the expected turnover cost of employees, employers allocate greater quantities of safety inputs to those employees most costly to replace. Collective bargaining is one avenue through which employees can obtain the desired level of safety inputs.

Let line DD in Figure 1 represent the quantity of safety inputs that will produce the desired level of workplace safety for all employees. Let I_1 through I_4 represent trade-off functions between safety provisions and other goods. Let E_w , C_w , and X_w represent the relative allocation of safety to three groups of employees. Drawing upon the internal labor market literature, let E_w , C_w , and X_w represent enterprise, craft, and external market employees, respectively.¹⁰ The relative allocation of other goods and services are assumed to be equal among all employees.

Firms with high levels of workplace hazards are characterized by smaller absolute allocations of safety inputs to employees, although within the firm, the relative order of allocations to groups of employees is the same. Given that safety provisions (represented by H) and the composite provision (represented by Y) are normal goods, the relevant

⁹ Kochan and Block.

¹⁰ Internal labor markets have their origin in the specificity of skills and customs. Due to differences in the types of skills, particularly firm-specific skills relative to those that are general, and the expected turnover cost of employees possessing the skills, the firm has the incentive to make those jobs filled by firm-specifically trained employees (enterprise) safer than those jobs filled by employees with general training (craft) or no training at all (external). Consequently, more safety inputs would be invested in jobs held by enterprise employees relative to jobs held by craft or external employees.



bargaining range for a union composed of all three groups of employees is bounded by f and g on I_4 . As a result, not only will the bargaining goals of employees subject to high levels of workplace hazards contain a relatively large proportion of safety provisions, bargaining goals of external and craft market employees— $(f - X_w)/(g - E_w)$ and $(f - C_w)/(g - E_w)$, respectively—should contain relatively more safety provisions than those— $(f - E_w)/(g - E_w)$ —of enterprise employees.

The actual bargaining goal of the union may not be the same as the bargaining goals of its individual members. The union leadership may respond to one interest group or may give equal weight to all members.¹¹ Furthermore, the bargaining goal is not a bargaining outcome. After the union has determined its set of goals, it must possess sufficient power to attain those goals.

Estimation and Results

The model estimated by ordinary least squares was of the form:

 $I_{im} = l(W_n, L_{in}, B_{in})$

where I_{im} was the *i*th index value of safety provisions for the *m*th con-

¹¹ Alan M. Cartter, *Theory of Wages and Employment* (Homewood, Ill.: Richard D. Irwin, Inc., 1959), pp. 85–86. Cartter stated, "to attempt to gain an understanding of trade unions, . . . it is sufficient merely to note that union aims are not necessarily a precise weighted average of all its members' preferences."

tract; W_n was the average lost workdays per workday case in the *n*th industry; L_{jn} was a vector of internal labor market variables for the *n*th industry; and B_{jn} was a vector of bargaining power variables for the *n*th industry.

Characteristics of Major Collective Bargaining Agreements, July 1, 1974 was the principal data source.¹² It consists of all collective bargaining agreements covering 1,000 workers or more that were in effect as of July 1, 1974. Only those agreements negotiated in manufacturing industries covering either production or production and clerical employees were included for the analyses, resulting in a data file consisting of 584 contracts in 165 four-digit SIC industries. Fifteen provisions were categorized as safety-related. Because all provisions were coded as being either in the contract or not, indices of the relative number and importance of safety provisions in each contract were constructed. (A description of the safety provisions and the four indices is given in the Appendix.) The Handbook of Labor Statistics provided 1972 figures of extent of union organization and lost workdays per workday case;¹³ a special report of the 1970 Census, Occupation by Industry,14 contained figures for the internal labor market variables; and Census of Manufactures 1972 provided four-digit concentration ratios.¹⁵

Estimates for the traditional bargaining model (model 1), estimates of the traditional model modified by the addition of lost workdays per workday case (model 2), and an internal labor market model (model 3) are listed in Table 1.¹⁶ The coefficients of lost workdays per workday

¹⁵ U.S. Department of Commerce, Bureau of the Census, *Census of Manufactures* 1972 (Washington: U.S. Government Printing Office, 1975). For some industries, it was necessary to use 1967 concentration ratios because the Department of Labor had used 1967 SIC codes and it was not possible to trace that particular 1967 code to the 1972 equivalent.

¹⁰ For the first two models, eight dummy variables representing the nine possible combinations of the market-structure proposition, and variables representing durable goods, establishment size, and geographic region of contract coverage were also included in the estimating equation. Generally, six of the eight market-structure variables were significant; the latter three variables were seldom significant.

¹² U.S. Department of Labor, Bureau of Labor Statistics, Characteristics of Major Collective Bargaining Agreements, July 1, 1974.

¹³ U.S. Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics 1975-Reference Edition (Washington: U.S. Government Printing Office, 1975). Extent of union organization figures were calculated by dividing 1972 two-digit union membership figures by the level of production worker employment in 1972 in that two-digit industry.

¹⁴ U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, *Occupation by Industry* (Washington: U.S. Government Printing Office, 1972). Figures for occupations by industry were available for most three-digit industries. This necessitated the assumption that all four-digit industries within a three-digit classification had the same distribution of occupations and that the distribution between occupations did not change from 1970 to 1972.

Model	Index	Con- stant	Lost Work- days	Female	Craft	Enter- prise	Exter- nal	Union Organ- ization	Concen- tration Ratio	Single Plant	Multi- em- ployer	Indus- try Wide	CR2
1	Index One	3.64*						. 002	-, 06*	44*	-2.40*	-1.45*	. 20
2	Index One	2.54*	.009*					002*	04*	41*	-2.19*	-1.41*	. 24
3	Index One	3.25*	.003	-4.88*	1.05	. 30	. 89						. 20
1	Index Two	24.32*						.07	- .45*	-3.84*	-17.30*	-9.66*	. 19
2	Index Two	15.17*	.08*					. 02	31*	-3,55*	-15.54*	-9.32*	. 24
3	Index Two	24.92*	.05*	-28,23*	9.73	-6.75	-10.08						. 19
1	Index Three	20. 28*						. 03	43*	-3,46*	-13.75*	-6.73*	.18
2	Index Three	12.63*	.06*					007	31*	-3.22*	-12.28*	-6.44*	. 23
3	Index Three	15.84*	.03*	-26.11	12.26*	-1.99	2.93						. 20
1	Index Four	26.02*						. 04	44*	-2.28	-17.93*		. 17
2	Index Four	17.85*	. 07*					.0001	31*	-2.03	-16.36*	-8.64*	. 21
3	Index Four	27.39*	. 03	-37.37*	2,94	2.27	-2.86						. 17

TABLE 1 Estimating Equations of Contract Safety Indices

* = Significant at 0.05 level; n = 584

case were positive, as hypothesized, and significant at the 0.05 level for all estimates of model 2. Relative to the traditional model, addition of the workplace-hazards measure increased the explanatory power of the model by statistically significant amounts—F-statistics ranging from 28.35 to 17.01—for all indices.

Coefficients of extent of union organization were not significantly different from zero for any of the estimates. This result was not consistent with that received by Hendricks for his study of negotiated wage outcomes, nor was it in agreement with the hypothesis. Product market concentration had negative and significant coefficients for all estimates. Although at variance with Hendricks's result, it is consistent with the casual observation that firms in concentrated industries have fewer safety hazards.¹⁷ Thus, it can be presumed that because the workplace allocation in concentrated industries more closely approximates the desired level, safety provisions compose a smaller proportion of the bargaining goal.

Coefficients of bargaining-unit variables represent the difference between the mean value of contracts of that unit and contracts of multipleplant units, after controlling for the other variables. As indicated, multiple-plant units tended to have the highest mean values of contractsafety provisions. This result again does not agree with Hendricks's result, but it is in agreement with Kochan and Block's. This outcome may be the consequence of the inability of the firm to whipsaw the union in combination with the fact that employees of the same firm, although in different plants, may face similar working conditions and may formulate homogeneous bargaining goals. On the other hand, working conditions between firms may vary substantially for employees included in multiemployer or industry units, or safety issues may be relegated to supplementary local agreements.

Six of the eight market structures were consistently positive and significant when extent of union organization and product market concentration were included in the estimating equation. However, the net effect of these variables, listed for Index One in Table 2, indicates that for each concentration level, the net effect increases as extent of union organization increases, and for a level of union organization, the net effect increases as concentration increases. This result is not in total agreement with the relationship in wage negotiations. It may be due to

¹⁷ Nicholas A. Ashford, "Worker Health and Safety: An Area of Conflicts," *Monthly Labor Review*, vol. 98 (September 1975), p. 10. It has also been observed that injury rates for manufacturing establishments employing at least 100 workers decrease continuously as establishment size increases.

the fact that as both extent of union organization and product market concentration increase, the agreement may cover more issues, such as safety, as a matter of course.

		•				
		Union				
Concentration	Low	Moderate	High			
Low	.000	.512	1.193			
Moderate	.737	1.400	1.899			
High	1.797	2.296	2.966			
Market Structure 2 Market Structure 3 Market Structure 4 Market Structure 6 Market Structure 6 Market Structure 7	$\begin{array}{llllllllllllllllllllllllllllllllllll$	+ Low Concentration + Moderate Concentration + High Concentration low Concentration Moderate Concentration	ation			
$50\overline{\%} \leq \text{Moderate}$	Low Union < 50% $0 \leq Low$ Concentration < 40% $0 \leq Moderate$ Union < 80% $40\% \leq Moderate$ Concentration < 70% $0 \leq High$ Union < 100% $70\% \leq High$ Concentration < 100%					

Net Influence of Market-Structure Proposition on Index One"

^a The influence of the market-structure variables on the other three indices were of similar relative importance.

With respect to the specification based upon internal labor market analysis, the proportion of female employment in the industry was negatively and significantly related to the index values and craft employment was positively and sometimes significantly related. The latter result has several possible explanations. Industries identified as craft industries tend to have higher levels of workplace hazards.¹⁸ Therefore, collective bargaining is used to obtain additional safety features. Alternatively, it has been argued that craft workers, according to Marshall's criteria for the elasticity of derived demand, have substantial bargaining power.¹⁹ In addition, craft workers tend to be organized into relatively skill-homogeneous unions, and consequently, should have relatively homogeneous bargaining goals. On the other hand, enterprise and external employees

¹⁸ Peter Gregory and Micha Gisser, "Theoretical Aspects of Workmen's Compensation," Supplemental Studies for the National Commission on State Workmen's Compensation Laws (Washington: U.S. Government Printing Office, 1973), vol. 1, pp. 107-28.

¹⁹ Lloyd Ulman, "Marshall and Friedman on Union Strength," Review of Economics and Statistics, vol. 36 (November 1955), pp. 384-401.

tend to be organized in skill heterogeneous unions and, as a result, may have substantial variation in bargaining goals.

Conclusions

In this paper it has been demonstrated that there is a positive relationship between the level of workplace hazards and the number and/or value of safety provisions included in collective bargaining agreements. Using four indices of contract-safety provisions as dependent variables, coefficients of several bargaining power variables, particularly bargaining structure and extent of union organization, were not of the same sign as they had been for outcomes of wage negotiations. Thus, concern with only the dollar equivalent of bargained agreements may limit the value of the analysis.

The positive relationship between the level of workplace hazards and the number and/or value of contract-safety provisions is of some policy importance. It demonstrates that collective bargaining is an additional "market" tool that can be used to achieve the desired level of workplace safety, based on the personal preferences of employees, rather than having a certain level mandated by administrative standards.

Appendix

The following assumptions were used for the construction of the four indices: Index One—all provisions are equally desirable; Index Two rank provisions according to their cost to the employer; Index Three rank provisions inversely to their frequency; Index Four—rank provisions according to their effectiveness at promoting workplace safety.

	Value							
Provision 1	ndex One	Index Two	Index Three	Index Four				
Environmental	1	4	10	2				
Hazard pay	1	15	11	6				
Labor-management								
committee on safety	1	7	3	15				
Listing of safety rules	1	2	12	8				
Paid rest or relief period	s 1	11	2	11				
Pay differential for abnor	mal							
working conditions	1	14	14	5				
Red circle rate	1	12	7	4				
Regulation of crew size	1	9	13	13				
Right of inspection by jo	int							
or union safety commi	ttee 1	5	5	9				
Right to discipline employees for violating								
safety rules	1	1	8	7				

	Value						
Provision	Index One	Index Two	Index Three	Index Four			
Right to grieve unsafe work or conditions	1	6	6	10			
Right to refuse unsafe work or conditions	1	13	9	3			
Safety equipment	1	10	1	14			
Union/employer pledge participate in safety	to						
programs	1	3	4	1			
Weight limitations	1	8	15	12			
Mean value	2.7	21.0	14.1	22.0			
Standard deviation	2.0	16.2	14.0	16.4			

Note: The ranking for Index Four was based on the judgment of John Brzek, Safety Director, International Longshoremen's Association, Great Lakes District.

Teachers' Salary Structures—Some Analytical and Empirical Aspects of the Impact of Collective Bargaining^{*}

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I

This paper is concerned with the impact of collective bargaining on the structure of salaries of public school teachers. From the viewpoint of a union, a policy that focuses on changing the salary structure rather than on across-the-board increases (including starting salaries) has two advantages. First, while such a policy is flexible in that it can be shaped to benefit almost as many members of the union as would a general salary increase,¹ its cost implications are not as easily perceived or understood by a public that may potentially exert political pressure and stiffen the resistance of elected officials to union demands.² Second, a change in salary structure can be used to bring greatest relative gains to those groups that wield the greatest political power in the union.

This paper takes only a limited step toward a complete study of the relations between collective bargaining and changes in the salary structure of teachers. Such a study would deal with three categories of sub-

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¹ The only group that is not likely to benefit from a change in salary structure is new teachers, not yet aboard when the change is negotiated.

² For an argument that stresses the role of public understanding of the cost implications of union-negotiated increases, see H. H. Wellington and R. K. Winter, *The Unions and the Cities* (Washington: Brookings Institution, 1971), pp. 31, 198–99. In another study we found that collective bargaining is particularly effective in raising teachers' pensions—another part of compensation whose cost significance is not readily apparent to the public. See A. L. Gustman and M. Segal, "Interstate Variations in Teachers' Pensions," *Industrial Relations* (October 1977), pp. 335–44.

jects: (1) the ways in which salary structures can be changed and the impact of such changes on various groups of union members; (2) how union and school-board policies are determined in the light of the potential impact of salary structure changes; (3) the actual impact of negotiated changes on salary structures. The issues discussed in our paper fall in the first and third of these categories.

In its broadest terms, a salary structure can be described as consisting of two elements: a starting salary for a person with a B.A. degree and no experience; and a set of differentials for experience and for formal training. In our analytical discussions, when we consider changes in starting salary we assume that the *absolute* values of all the differentials are preserved; and when we consider changes in the structure, we do it assuming a constant starting salary.³ (Of course, in practice salary increases negotiated in any year may encompass both types of changes.) The elements of salary differentials that we deal with are: the difference between maximum and starting salaries for those with a B.A. degree; the difference between maximum and starting salaries for those with an M.A. degree; the number of salary steps in each of these educational tracks;⁴ and the difference between the starting salaries of teachers with M.A. and B.A. degrees.

II

In the present section we will consider the effects of changes in salary structure on next year's earnings, and on present values of earnings for teachers with different years of experience and different expectations with respect to the number of years to be spent in the present employment. For a person on the n-1 step or below, the increase in next year's salary ($\triangle SAL$) from reducing the number of steps from n+1 to n is given by

(1)
$$\triangle SAL = i(\{W_+\} - \{W_-\})(1/\{n(n-1)\})$$

where W_{-} = starting salary, W_{+} = maximum salary, and j = the number of full years of experience one will have when one completes the current academic year. (In interpreting the formulas it is easiest to view the person as being in the last day of the year to be completed.)

The application of equation (1) to the earnings of teachers with dif-

 $^{^3}$ We also conducted our empirical analysis defining salary differentials in relative rather than absolute terms. The results are essentially the same as those reported below for absolute differentials.

 $^{^4}$ We assume that within a given educational track each step is of equal size, and that until he or she reaches the maximum salary, a teacher spends only one year in each step.

ferent levels of experience is illustrated in Figure 1(a). The data underlying that and the related figures (all pertaining to teachers with M.A.'s) are derived from the sample of 93 central city school districts which we used in our empirical analysis. As Figure 1(a) shows, the effect of reducing the number of steps by one on next year's earnings increases linearly according to the teachers' experience up to a level two steps below the highest. For a teacher now at that level, next year's increase is doubled.

The effect of reducing the number of steps by one on the present value of earnings during the period from next year till retirement $(\triangle PV)$ is given by

(2) $\triangle PV = \sum_{i=0}^{n-1-j} (i+j)(1/1+r)^i (\{W_+\} - \{W_-\})(1/\{n(n-1)\})$

where i = indicator of time with value 0 in initial period, and r = discount rate.

The formula is illustrated for the data from our sample cities in Figure 2(a).⁵ It can be seen there that the effect on the present value of earnings until age 65 reaches its maximum value for a teacher with only a few years experience. This can be explained by the interaction of several factors. Most importantly, the high raises near the penultimate step are discounted more heavily for those with little experience. On the other hand, those with greater experience (but below the penultimate step) receive the higher raises for fewer years. We should also note that since the effect of reducing the number of steps is fully realized by the time one reaches the maximum step, step reduction may be of considerable value to those union members with relatively little experience who intend to remain in teaching for only a few (four or five) more years.

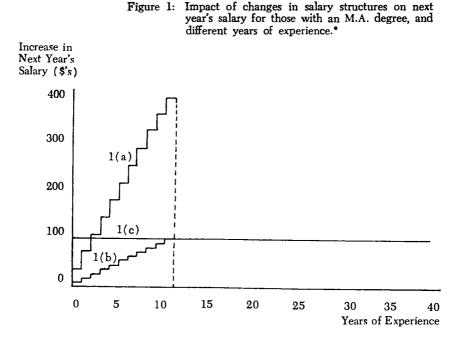
Of course for a person who is now one step below or at the maximum, reducing the number of steps will have no effect on either next year's salary or on the present value of future earnings.

The effect of changing the difference between the maximum and starting salary on next year's salary for a person below the top step is given by

$$(3) \qquad \triangle SAL = \{(\triangle W_{+})/(n-1)\} \cdot j$$

where n=number of steps in the salary structure. For a person who has already reached the maximum, the change in next year's salary is equal to the change in the maximum. The application of (3) to our data

⁵ In calculating present values in Figure 2, we used a 5 percent rate of discount. Since we made no allowance for productivity increases, this amounts, in effect, to a real rate of discount of about 7.5 percent.



is shown in Figure 1(b). It can be seen there that the effect increases linearly according to the teacher's experience up till the highest step, and then is constant.

Equation (4) shows the effect of changing the same difference on the present values of earnings for teachers with differing experience (the earnings are from next year until retirement).

(4)
$$\triangle PV = (\triangle W_{+})[(1/n-1)\sum_{i=0}^{n-2-j}(i+j)(1/1+r)^{i} + \sum_{i=n-1-j}^{t-j}(1/1+r)^{i}]$$

where t = the number of the year in which one retires if one started in year 0. Equation (4) pertains to those who are more than one step below the maximum. The analogous formula for the others would simply calculate present values of the increase in the difference between starting and maximum salaries. The application of (4) is shown in Figure 2(b). As the figure shows, the effect of this change on the present value of earnings until the age of 65 is highest for those with experience somewhat below that of the maximum step.

To place the other figures in perspective, we also indicate (in 1(c)

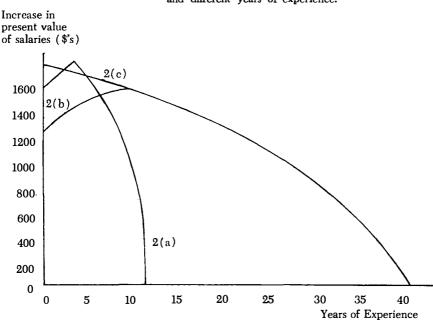


Figure 2: Impact of changes in salary structure on present value of earnings for those with an M.A. degree, and different years of experience.•

• The figure uses the average value for (MA+) - (MA-) of \$4741. In computing the effect of raising MA+ we assume that there are 12 steps.

1(a) and 2(a): Steps reduced from 13 to 12 1(b) and 2(b): (MA+) - (MA-) increased \$100 by raising (MA+)1(c) and 2(c): (MA-) increased by \$100

and 2(c)) the effects of increasing starting salaries while preserving the absolute values of the differentials for experience.

Our figures pertaining to next year's salaries and to the present values of salaries until 65 illustrate lower and upper limits to the effects of changes in salary structures. For a teacher with a given amount of formal training and experience, the actual effects will depend on additional years to be spent in the present employment, a period that may, of course, fall within these two limits.

111

Insofar as collective bargaining institutes changes in salary structures, its cumulative effect on the difference between union and nonunion areas

TABLE 1

Empirical Estimates—The Impact of Collective Bargaining on Teachers' Salaries 93 Central City School Districts, 1972-73^a (*t*-ratios are in parentheses)

	BA –	∦BA	∦MA	(BA+)- (BA-)	(MA+)- (MA-)	(MA -) - (BA -)
COMP	49.08 (.39)	-1.47 (-1.56)	-1.44 (-1.74)	114.8 (.38)	602.0 (2.23)	-37.80 (49)
NEG- COMP	-142.3 (-1.07)	$-2.53 \\ (-2.57)$	-2.45 (-2.83)	-196.7 (62)	278.3 (.98)	-37.48 (46)
<u>R²</u>	.6909	.1514	.1508	.3531	.4838	. 3838

Variables

BA -: Salary for a teacher with a B.A. degree and no experience.

#BA: Number of steps in the B.A. track.

#MA: Number of steps in the M.A. track.

(BA+) - (BA-): The difference between starting and maximum salary for a teacher in the B.A. track.

(MA+) - (MA-): The difference between starting and maximum salaryfor a teacher in the M.A. track.

COMP: Dummy variable, value of 1 indicates comprehensive agreement.

NEG-COMP: Dummy variable, value of 1 indicates the existence of a negotiation agreement which is not a comprehensive agreement.

^a These results represent partial regression coefficients with the column headings indicating the dependent variable in the regression and the figures reported on *Comp* and *Neg-Comp* indicating the coefficients estimated for these measures in the various regressions run. The following variables were held constant in the multiple regression: public school enrollment, population, family income, proportion of public school revenue from state sources, proportion of public school revenue from federal sources, property values, opportunity cost for public school teachers, median teacher age, proportion of teachers with an M.A. or higher degree, indicator that the school district is dependent, number of school districts in the SMSA, proportion of SMSA population in the central city, and an index of bargaining laws in the state. Complete regression estimates and details on the sources for the data are available from the authors.

can be discerned from an analysis of cross-sectional data. In this section we will present the results of such an analysis and use them to calculate the impact of union-induced differences in structure on salaries of various groups of current members.

Table 1 contains the empirical estimates of the impact of teachers' unions on salary structure. The data on salary structure for the 93 school districts are for 1972–73, and the other data are either for this same year or for one as close to it as possible. The sources of the data are described in our report to NIE and are available on request.⁶

⁶A. L. Gustman and M. Segal, *The Impact of Teachers' Unions*, Report to the National Institute of Education, September 1976.

To isolate union impact we standardized for forces of supply and demand and for characteristics of market structure and bargaining environment. One measure of collective bargaining pertains to comprehensive agreements (the most formal) and the other to negotiation agreements which are not comprehensive (these are less formal than the first type).

Our findings indicate first that collective bargaining has had no significant impact on starting salaries (BA-). As noted previously, the reason for this may be the high visibility of increases in the basic salary.

It appears that in unionized areas the number of steps in both educational tracks has been reduced relative to nonunion areas by $1\frac{1}{2}-2\frac{1}{2}$ steps. Our calculations indicate that if we were to hold the influence of other factors at the average level of the sample, in nonunion areas there would be an average of 12.9 steps in the B.A. track and of 14 steps in the M.A. track. Thus the calculations imply that, other things the same, where there are comprehensive agreements the number of steps has been reduced to 11.4 and 12.5 steps, and where there are negotiation agreements the reductions have been to 10.4 and 11.5 steps.

Our findings also indicate that by raising the maximum salary, comprehensive agreements increase the difference between the starting and the maximum salaries in the M.A. track, (MA+) - (MA-), by about \$600. We have used estimates of the impact of comprehensive and negotiated agreements, the proportion of cities covered by each of these agreements, and the average value of the difference for the sample as a whole to calculate that if we hold other influences at their average value, (MA+) - (MA-) in nonunion areas would amount to \$4378. Therefore, the estimated difference in (MA+) - (MA-) associated with comprehensive agreements is about 14 percent. In the case of the negotiation agreements, while the impact is not statistically different from zero, it is in the expected direction, and about half as large as that of comprehensive agreements.

Neither comprehensive nor negotiation agreements have had an effect on the difference between the starting and the maximum salaries in the B.A. track. This may reflect the fact that teachers with longer experience are expected and frequently required to get an M.A. degree.⁷ As a result, the focus of collective bargaining with respect to those with

⁷ For data on educational requirements necessary to obtain a permanent teaching license, see T. M. Stinnett, A Manual on Standards Affecting School Personnel in the United States, 1975 Edition (Washington: NEA, 1974), pp. 12–23. See also E. F. Kirk, "A Theoretical and Empirical Study of the Impact of Collective Negotiations on Public School Teachers' Salaries in the Commonwealth of Massachusetts," Ph.D. dissertation, Boston College, 1974, p. 146.

longer experience has apparently been on teachers who have acquired M.A.'s. There is no necessary inconsistency between this focus and the previously mentioned union-caused reduction in the number of steps in the B.A. track. As Figure 2 suggests, this latter change can significantly benefit younger teachers. But, while starting with a B.A. degree, such teachers may be expected to acquire an M.A. before reaching the highest step in the B.A. track.

The difference between starting salaries for teachers with M.A. and B.A. degrees—a difference which is small as compared with differentials for experience—has not been affected by collective bargaining. In the context of the previously reported results pertaining to additional pay for experience for the M.A. and the B.A. tracks, this means that where collective agreements have been negotiated the differential between the two tracks has been increased only for those with a relatively high level of experience.

IV

Since our regression results indicate only the cumulative impact of union induced changes, we cannot tell how the negotiated changes affected salary increases in the year(s) immediately following the negotiations and must concentrate on their cumulative effect on the earnings of currently employed teachers. Nevertheless while examining these cumulative effects, particularly as they are reflected in the present values of earnings, we should bear in mind that the *immediate* impact of salary structure changes may have constituted an important factor influencing union decisions.

Table 2 shows the impact of salary structure changes, brought about by unions, on present values of earnings of teachers with selected experience and expectations pertaining to the length of employment in teaching.⁸ The impact is measured both in dollars and as a percentage change in the relevant present values where the base present value is the one that would have obtained where there is no union agreement.

From the data in Table 2 one can discern differences between union and nonunion areas which in percentage terms come close to those indicated by other studies. As our regression results showed, these differences reflect union-induced changes in salary structure rather than increases

⁸ We evaluated the effect of reductions in the number of steps on the assumption that the difference between starting and maximum salaries is equal to a midpoint between the value of what it would have been, ceteris paribus, without a union and what it would have been under a negotiation or a comprehensive agreement. In evaluating the impact of an increase in (MA+) - (MA-), we assumed that there were 13 steps, the integer value between the union and nonunion figures.

	No Experience, Work to 65	5 Years Experience, Work 5 More Years	13 Years Experience, Work to 65
Effect of Comprehensive Agreement			
1.44 step reduction	\$2303	\$1478	0
in MA track	(1.1%)	(3.0%)	(0%)
\$6 02 increase in	\$7 544	\$ 1574	\$8938
(MA+) - (MA-)	(3.7%)	(3.2%)	(4.8%)
Effect of Negotiation Agreement			
2.45 step reduction	\$3906	\$2507	0
in MA track	(1.9%)	(5.3%)	(0%)
2.53 step reduction	\$ 3446	\$2556	0
in BA track	(1.9%)	(5.9%)	(0%)

TABLE 2 Increases in Present Value Resulting from Union-Induced Changes in the Salary Structure

in key rates such as the starting salaries. And as Table 2 indicates, representative groups of union membership—groups with different experience and different expectations of employment in their school district—have all benefited from one or another of these structural changes.

V

There are two implications of a more general nature that are suggested by the preceding discussion. First, our results suggest that an analysis of collective bargaining in the public sector may fruitfully extend beyond a mere measuring of union-nonunion differences and concern itself also with the ways in which these differences were brought about, and with the institutional considerations that may underlie specific changes in compensation. Second, our approach may be applied to an examination of salary changes of other groups (including those in the private sector) that, like teachers, face salary structures with welldefined tracks and steps of advancement. Where such groups also face some public scrutiny of their salary increases, changes in salary structures may play a role analogous to that observed in teaching.

DISCUSSION

RICHARD PROSTEN Industrial Union Department, AFL-CIO

It may reflect a bias on the part of this observer, but these papers suggest to me that organized labor in this country is doing a much better job of representing its members than many of us who are directly connected with organized labor would have dared to suggest.

Mr. Wendling suggests that collective bargaining is a substitute for federal legislation in the field of workplace safety and, by implication at least, that collective bargaining is a substitute for other administrative controls long accepted by our society. While I would tend to agree with him in the abstract, the point is moot unless we first guarantee that all workers have collective bargaining representation. In the absence of such guarantees, it is incumbent upon society to offer certain protections to those who either by choice or circumstance are not represented by a union. Mr. Wendling concludes that collective bargaining "can be used to achieve the desired level of workplace safety." I will return to that assertion shortly.

I conclude from the Gustman/Segal paper that collective bargaining agents representing teachers have performed admirably, at least in terms of fulfilling the desires of their members. The authors suggest that unions may attempt to mask some of the cost implications of their wage demands by restructuring salary schedules rather than accepting general wage increases, and that they may seek those changes which will most benefit those union members "that wield greatest political power" whatever that means. While it is not clear to me that they have proved the latter assertion, they have concluded that experienced teachers covered by what they call "comprehensive agreements" have been financially served by the collective bargaining process. One would have to conclude from this paper that experience and seniority are not generally rewarded by school systems without substantial prodding.

Mr. Kaufman does not testify to the accomplishments of unions. He offers some cogent criticisms of the standard measure of strike activity as indices of industrial harmony in the United States, and the problems implicit in attempting to utilize such measures on an international basis. The alternative measure which he offers bothers me in a couple of ways and does not seem likely to add to our knowledge about labor-management conflict.

Kaufman suggests that if we limit our observations to those contract settlements in the manufacturing sector which involve 1,000 or more workers, we can devise more accurate measures of the "propensity to strike." He suggests that we exclude all negotiations for first contracts, even though they might be of the appropriate size, and that we utilize only those situations in which the stated reason for a strike was the issue of general wage changes. He also excludes all strike situations which occur during the course of an agreement, even if they meet all of the other criteria he has established.

By excluding first contracts, I think the author has done himself a disservice. While there are not many groups of a thousand or more workers being organized these days, I think they are important to any serious estimation of industrial harmony. If all was hunky-dory in the workplace, it is unlikely it would have been organized at all. Therefore, I consider the temper of initial negotiations to be extremely important.

Mr. Kaufman also suffers the plight of many other academics who attempt to translate the human interaction and experience that characterize industrial relations at the practitioners' level, into an academically acceptable series of numbers.

I cannot fault Kaufman for relying on the Bureau of Labor Statistics for his information, if you will, on strike activity over the question of general wage increases in units of more than a thousand at contract renewal time, but I do question BLS's ability to be precisely accurate as to the reasons for a strike.

The stated purpose of a strike or lockout is not always an accurate explanation of the situation. Certainly, no employer, if questioned about his inability to reach agreement with his employees, would pass up the chance to say: "They are asking for too much money," or some variant of that theme. Similarly, there are numerous situations in which unions, striking over what might be thought of as nonwage issues, have reluctantly accepted a higher general wage settlement from a company that is otherwise intransigent on the question really being pursued by the union.

In short, there are situations where a strike is not over general wage issues, but is resolved on general wage issues. An analyst for the BLS may or may not accurately grasp what has happened, depending in no small part on how much information is made available by the parties. History may or may not accurately reflect what the strike was about. Frankly, I am not sure how I would characterize certain situations, at least in terms of allocation of cause for the dispute.

Finally, I think there are two fatal flaws in the proposed measures that render them useless, except as measures of strike activity in what the author suggests are less than 3 percent of all strikes in manufacturing. The first flaw is that there is no measure of intensity, so that a 100day strike by 50,000 workers has the same impact on Kaufman's propensity calculation as a one-day strike by 1,500 workers.

Another flaw is that while the number of major negotiations that the author wants us to look at is fixed (and, as he suggests, continually declining), the number of potential strikes is almost open-ended as local issues in national contracts are settled by strikes with growing frequency. For example, the iron-range strike involved over a thousand workers and came on the heels of the successful conclusion of a major contract settlement which ostensibly covered these employees. They proceeded to change the general wage structure in their section of the industry. Had it occurred in an "industrial" setting rather than "mining," I am not sure which columns of Mr. Kaufman's proposed calculation would be affected by this situation.

Mr. Wendling's paper disturbs me greatly. It is representative of a general suggestion on the part of industry that OSHA should be dismantled. Wendling suggests that collective bargaining is a market tool that can be used to achieve the desired level of workplace safety based, he says, on the personal preference of employees.

What he has failed to note is that markets do not work unless participants in the markets have information. Workers do not have much information on industrial safety. Of course, they do know if an area of floor is slippery, or that a given machine has wrenched x number of limbs from their colleagues, but these are rather obvious situations.

Generally speaking, employees are not in a position to know when they are at higher risk. Without government intervention they might never know that a chronic illness is a result of workplace exposure. Wendling uses lost workdays in his model; yet lost workdays is of almost no significance in assessing industrial safety. The asbestos industry, which is generally thought of as one of the most damaging to the health of workers, has a fairly good record in terms of lost work. Most of their employees simply go to the hospital and die. These deaths would not generally be considered safety-related, or even workplace-related.

I was recently told about people who make dynamite. Most of them die from heart attacks during vacation or at the end of a weekend, rather than in the plant itself. It is suggested that the nitroglycerine in the plant environment somehow creates a dependency on the part of the workers, and since they are not getting their "fix" while absent from the workplace, they are more likely to suffer coronary malfunction in what will be recorded as a nonworkplace-related situation.

Mr. Wendling bases his work on the premise that there is a definable wage equivalent for the nonwage items with which he is concerned. In the material presented here, he has not given us a dollar equivalent for the only items that are ultimately important to this observer—the value of life or suffering. Of course, I can't imagine that he'd try to do that. We've all been taught from childhood that we can't place a value on life. Unless we can, Wendling's major premise undercuts his work.

His other premises are interesting, but rather obvious without the construction of a model to prove that wheels are round. It is indeed likely that a labor force which frequently encounters work hazards would seek to correct them, and it is also obvious that such a force is more likely to do so if it speaks as a group of employees, i.e., through a union, than if the members of the group had to deal with such adversity one by one.

Finally, I do not think we can simply dismiss the need for federal regulation by suggesting that it is a matter for the economics of collective bargaining. Many unions and workers view safety as a noneconomic issue, and feel that their lack of expertise in epidemiology and other related fields mandates that some more profound observer be called in to assess and regulate workplace risk.

The Gustman/Segal paper presents but a small part of a much larger report which they did on the compensation of public school teachers. In that report they also studied pension benefits and interarea differentials in teacher pension plans. Their major conclusion seems to be that in the public sector, unions have attempted to maximize gains for those whose service falls into a broad, mid-range. Neither entry-level teachers nor those with service much longer than 25 years seem to have been affected by the activities of their bargaining agent.

Their findings conform to the general bargaining emphasis of unions in newly organized industries. Increases in wages, the most visible and observed measure of a union's ability to change conditions, are almost always an important initial goal. The revamping of salary structures to even partially reflect the employees' concept of equity is also a typical result of initial rounds of negotiations.

That the authors found no significant impact on starting salaries is also a confirmation of industrial relations experience in other industries. Nobody is likely to bargain on behalf of people who are not members of the union and are not even employed at the time of the negotiations. Most unionists assume that market forces will adequately determine entry-level salaries. (The equity of salaries so determined is a totally different matter and is obviously a function of how tight the labor market is at a given moment.)

The authors' quantification of the present value of expected lifetime earnings under various salary regimes is quite interesting. However, most practitioners would not be likely to allow such a measure to affect negotiations. There is no question that what is done today will have a permanent effect on future contractual arrangements—most obviously, that of increasing the base for future increases—especially those which are granted in percentage terms. Nevertheless, such a concept is not likely to catch on quickly in the everyday world of collective bargaining.

IRRA EXECUTIVE BOARD SPRING MEETING March 18, 1977, Tucson

The Executive Board met at 7:30 a.m. March 18, 1977, in Tucson, Arizona. Presiding was IRRA President Ray Marshall. In attendance were President-Elect Charles C. Killingsworth, Secretary-Treasurer Richard U. Miller, Co-Editor James L. Stern, and Board Members Bernard E. Anderson, Irving Bernstein, Henrietta L. Dabney, Shirley B. Goldenberg, Marcia L. Greenbaum, Lois A. Rappaport, Markley Roberts, and Paul Yager. Also attending the meeting were Gerald G. Somers, editor of IRRA's projected collective bargaining volume, Vernon Briggs of the Tucson program committee, Guy Parent of the Tucson local arrangements committee, Gerry Fellman of the Los Angeles local arrangements committee, and Charles Knapp, special assistant to Mr. Marshall.

Secretary-Treasurer Miller reported on the results of the election of officers of the Association as follows: Charles C. Killingsworth, President-Elect, and to three-year terms on the Executive Board, Bernard E. Anderson, Marcia L. Greenbaum, Lois A. Rappaport, and Markley Roberts. The proposed amendment to the IRRA Bylaws to extend the period of time during which the election of officers can be held was approved by referendum of the membership. In the future, elections of new officers may be held during the last six months of the terms of their predecessors.

Mr. Miller indicated that IRRA membership was being maintained and that the Association was now in a sound financial position. As of the beginning of 1977 there were approximately 4000 members of the national organization and a somewhat larger number of members in the 40 local chapters.

Mr. Miller presented the slate of candidates to be voted on by the membership in the 1977 fall election. Candidates approved by the Board were as follows: for President-Elect, Jerome M. Rosow; for Executive Board, Donald Vial and Jeffrey Tener, Bernard Samoff and Helen LeVan, Richard Prosten and Bertram McNamara, Jerome A. Mark and Robert M. Guttman, Joseph Krislov and James E. Jones, Jr. Mr. Miller also presented the names of the following members as the Nominating Committee for the 1978 slate of officers: Frances Bairstow, Virgil Day, Robert Garnier, Peter Henle, David Lipsky, Leon Lunden, Ray Mac-Donald, and Donald Wasserman.

Reporting on behalf of the Comprehensive Review Committee

(chaired by Richard Lester), Paul Yager indicated that the Committee had had a productive meeting in New York just prior to the Tucson meeting. The Committee members had reached tentative agreement on a number of matters relating to the administration and policies of the IRRA, but Professor Lester, who could not be present in Tucson, expressed a wish that the Committee recommendations not be reported to the Executive Board until November. However, Mr. Yager indicated that the Committee stressed the need for payment to the IRRA staff, especially to Barbara Dennis who had been serving as the Co-Editor since 1975. As a result of this discussion, the Board voted to provide a payment of \$1000 to Barbara Dennis for her service to the Association.

Co-Editor Stern reported that the *Proceedings* of the Atlantic City meeting was at the printer and would be distributed shortly. He indicated that the 1977 research volume, edited by Leonard Hausman and others, was proceeding satisfactorily with the exception of one chapter. There was some discussion as to the alternatives for the delinquent chapter. It was anticipated that the volume would be completed and distributed to members on schedule before the end of the year. Mr. Stern reported that work had started on the 1978 research volume on Public-Sector Labor Relations; Benjamin Aaron is chairman of the editorial committee.

Following a discussion about alternative publication plans for 1979, it was decided that a Membership Directory, similar to previous directories, would take the place of a regular research volume that year. Gerald Somers, director and editor of the IRRA's projected volume on collective bargaining in ten major industries, reported that the work on the volume was proceeding satisfactorily. However, he had been informed by the Labor Management Services Administration of the U.S. Department of Labor that no subsidy would be forthcoming to permit the distribution of the volume to IRRA members as a research monograph. Since the volume, to be completed in manuscript form by early 1978, would be more than 500 pages in length, it could not be distributed as a regular IRRA monograph. Further discussions with the Labor Management Services Administration, funder of the project, were being held in order to determine whether the Government Printing Office wished to publish the volume or whether it would be published by a commercial printer. Mr. Somers expressed the hope that funds would be available at least for the distribution of a summary version of the volume to IRRA members. Further details might be available by the time of the December Executive Board meeting.

Secretary-Treasurer Miller announced the application for affiliation of the following new local chapters: Boise, Greater Houston area, Mary-

land, New Brunswick, and Orange County (California). The Board voted to approve the new affiliations.

President Marshall reported on his preliminary plans for the December meeting in New York City. He indicated that the following had been appointed as members of the program committee which he chairs: Charles C. Killingsworth, Thomas Kochan, Rudy Oswald, Michael Piore, Jerome Rosow, Barbara Dennis, Richard Miller, and James Stern. There was some discussion among Executive Board members of the topics and possible speakers.

The meeting was adjourned at 9:30 a.m.

IRRA EXECUTIVE BOARD WINTER MEETING

December 28, 1977, New York City

The IRRA Executive Board met at 6 p.m. Wednesday, December 28, 1977, with President Ray Marshall presiding. Attending were Charles Killingsworth, incoming President, President-Elect Jerome Rosow, Secretary-Treasurer Richard U. Miller, Co-Editor James L. Stern, Legal Counsel Frederick R. Livingston, and members Eileen Ahern, Bernard Anderson, John Baitsell, Ben Burdetsky, Henrietta Dabney, Shirley Goldenberg, Marcia L. Greenbaum, Robert McKersie, Thomas H. Patten, Jr., Lois Rappaport, Markley Roberts, and Paul Yager as well as the five newly elected members, Donald Vial, Bernard Samoff, Bertram McNamara, Jerome Mark, and James E. Jones, Jr. Also present were Gerald G. Somers, Richard Lester, Rudolf Oswald, Frances Bairstow, Charles Knapp, Patrick Westerkamp, Gerry Fellman, and Thomas Helfrich.

Secretary-Treasurer Miller announced that 774 new members joined the Association during 1977, bringing the total membership to 4,376. He reported that the Association's cash and investment position as of June 30, 1977, was \$35,400.91° and that for fiscal 1977 the excess of income over expenditures was \$6,463.34. However, he concluded by saying that although the present financial condition was stronger than in the past, projected expenses for the next edition of the Association's Directory together with other rising costs will significantly increase the cash flow in the next fiscal year.

Mr. Miller reported the results of the 1977 elections, as certified by the Committee on Elections, as follows: Charles Killingsworth, President; Jerome Rosow, President-Elect; Executive Board members, Donald Vial, Bernard Samoff, Bertram McNamara, Jerome Mark, and James E. Jones, Jr.

[•] See footnote to the Audit Report of June 30, 1977, for a statement of IRRA's financial position projected through December 31, 1977.

The Executive Board next considered the selection of a new Secretary-Treasurer to succeed Mr. Miller, who had indicated that he was unable to continue in the position. After consideration of several candidates, the Board voted to name David R. Zimmerman as the Association's new Secretary-Treasurer. A second change in staff was necessitated when James L. Stern announced that he would be unable to continue as the Association's Co-Editor. He indicated that Barbara D. Dennis, currently Co-Editor, was willing to serve as Editor provided that her duties would be limited to editing the Annual and Spring *Proceedings* and the research volumes and that the Editor's position not be removed from the Executive Board. These recommendations were moved, seconded, and passed, effective January 1, 1978.

The Secretary-Treasurer reported that the Northern California (Sacramento) chapter had applied for affiliation and that the Tennessee chapter had applied for reaffiliation. A motion to approve the addition of the chapters was seconded and passed. This action raises the number of affiliated chapters to 47.

Invitations from four chapters—St. Louis, Kansas City, West Virginia, and Albany—as locations for the 1979 Spring Meeting were presented to the Board. Before selecting the site, the Board voted unanimously to hold all future IRRA meetings, where possible, in states that have ratified the Equal Rights Amendment. The Board chose West Virginia as the location of the 1979 spring meeting.

Co-Editor Stem reported that the 1977 research volume, Equal Rights and Industrial Relations, had been published and mailed to the membership, that Ben Aaron had indicated that work on the 1978 volume on public sector labor relations was progressing, and that plans were underway for the gathering of data and publishing of a new Directory in 1979. The Board decided that the forthcoming Directory should be similar in format to that of the 1972 issue.

The decision on the topic and editorial board for the 1980 research volume was delayed until the Board meeting at the 1978 Spring Meeting. President-Elect Killingsworth asked Board members to forward suggestions on subject matter, editorial board members, and chapter authors to him. Gerald Somers reported that *Collective Bargaining: Contemporary American Experience*, the book he was editing under a Department of Labor grant to the IRRA, was progressing well and was scheduled to be delivered to the Department for its review on February 1, 1978. The suggestion was made that if the Department chose not to publish the book, the Association might contact the Bureau of National Affairs. On behalf of the Nominating Committee, Chairperson Frances Bairstow reported the committee's recommendations for president-elect and for candidates for the Executive Board to replace those members who will be completing their terms in 1978. The Board unanimously approved the committee's recommendations. The election will be held in the Fall of 1978.

President-Elect Killingsworth and Gerry Fellman of the Southern California chapter reported on the program and arrangements for the 1978 Spring meeting in Los Angeles. Mr. Killingsworth also outlined preliminary plans for the Annual meeting in Chicago and asked that any suggestions for topics and/or participants be sent to him.

A major item on the Board's agenda was the 36-page report of the Comprehensive Review Committee, chaired by Richard Lester. After much discussion, the Board took action on the Committee's recommendations dealing with the annual Winter Meeting, the annual research volume, and certain staff questions. The Board decided that the Committee's recommendations in other parts of the report should be submitted to the membership in questionnaire form in order to have the benefit of members' views. It was hoped that the results of the questionnaire survey would be available by the August 1978 meeting of the Board. A motion to send the entire report to the membership was not adopted.

The following sections of the Comprehensive Review Committee's report were adopted by the Executive Board:

- 1. The recommendations on the Annual Fall/Winter meetings, adjusted to conform with the Constitution and Bylaws, were adopted on a trial basis for three years. (That action means that President Killingsworth should appoint a Program Committee to begin early in 1978 to plan for the 1979 December Meeting, the Committee to consist of President-Elect Rosow and eight additional members including the Editor, the Past President, and the Secretary-Treasurer, and six others.)
- 2. Future Fall/Winter meetings would include an address by a distinguished speaker.
- 3. A limit should be placed on the size of the printed Proceedings of Fall/Winter Meetings, with a specified limit on the length of each paper. The limit would not apply to distinguished speaker addresses or the President's address.
- 4. A limit should be placed on the size of the annual research volume.
- 5. The Secretary-Treasurer should be responsible for supervising the headquarters operation and the employment of necessary staff,

with their terms of employment subject to Executive Board approval.

The Executive Board adopted a motion that the outgoing Secretary-Treasurer, Richard Miller, and the current Editor, Barbara Dennis, be paid honorariums of \$2,000 and \$1,000, respectively, for "untiring service" over the past several years.

The meeting was adjourned at 12:15 a.m.

IRRA GENERAL MEMBERSHIP MEETING

December 29, 1977, New York City

The IRRA general membership meeting convened at 4:30 p.m. Thursday, December 29, 1977, with President-Elect Charles Killingsworth presiding in the absence of President Ray Marshall.

Secretary-Treasurer Richard U. Miller reported that Association membership was now 4,376, with the addition of 744 new members during 1977. He also reported that the IRRA's financial condition was stronger than in past years. Income exceeded expenditures by \$6,463.34, raising the cash and investment position to \$35,440.81. It is anticipated, however, that large expenditures in the next year for the Membership Directory and related items will reduce the cash balance considerably.

It was reported that the Executive Board had accepted the resignations of Secretary-Treasurer Miller and Co-Editor James L. Stern and had appointed David R. Zimmerman as the new Secretary-Treasurer and Barbara D. Dennis, Co-Editor, as Editor.

The Secretary-Treasurer announced that a new chapter was chartered in Northern California (Sacramento) and that the Tennessee chapter had reaffiliated, bringing the total number of chapters to 47.

Co-Editor Stern reported that the 1977 research volume, Equal Rights and Industrial Relations, had been published and mailed to members. He also reported on the status of the 1978 volume and the 1979 Membership Directory.

President-Elect Killingsworth reviewed the Executive Board's actions on the report of the Comprehensive Review Committee. Those sections of the report not specifically acted upon by the Board were to be submitted to the membership in a mailed questionnaire, so that the Board can have membership opinion on some major recommendations when it renews its consideration of the parts of the report not yet acted upon.

Mr. Killingsworth outlined plans for the Spring 1978 meeting in Los Angeles and for the Annual meeting in August in Chicago. He asked for suggestions for program topics and speakers.

The meeting adjourned at 5:30 p.m.

ANNUAL REPORTS

IRRA AUDIT REPORT

We have examined the statement of cash and investments of the Industrial Relations Research Associ-We have examined the statement of cash and investments of the Industrial Relations Research Associ ation as of June 30, 1977 and 1976 and the statement of cash receipts and disbursements for the years then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we con-sidered necessary in the circumstances. As described in Note 1, the Association's policy is to prepare financial statements on the basis of cash

As described in Note 1, the Association's policy is to prepare financial statements on the basis of cash receipts and disbursements; consequently, certain revenue and the related assets are recognized when re-ceived rather than earned and certain expenses are recognized when paid rather than when the obligation is incurred. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles. In our opinion, the financial statements referred to above present fairly the cash and investments of the Industrial Relations Research Association as of June 30, 1977 and 1976 and the cash transactions for the years then ended, on a basis of accounting described in Note 1, which basis has been applied in a man-ner consistent with that of the preceding year.

SMITH & GESTELAND Certified Public Accountants

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION Madison, Wisconsin

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS For the Years Ended June 30, 1977 and 1976

	1977	1976
Cash and investments—July 1	\$28,977.47	\$14,469.21
Cash Receipts		
Membership dues	\$50.815.00	\$38,638.75
Chapter dues	2,896,20	1,863.50
Subscriptions	6.555.00	6,945.00
Sales	7,867,92	10,126.62
Royalties	384.30	557.45
Mailing list	2,052.40	2,737.00
Travel, conferences and meetings	8,096.18	4,200,15
Interest income	1,651,03	1.114.68
Miscellaneous	56.50	89.28
Redemption of Bond	525.12	35.23
Redemption of Bond		
Total cash receipts	\$80,899.65	\$66,272.43
Cash disbursements		
Salaries and payroll taxes	\$18,393,68	\$13,692.32
Retirement plan	2,518.32	2,375.76
Postage	4,046,03	3,136.00
Services and supplies	7,753.66	3,158,46
Publications and printing	33,819.34	24,234.39
I. R. R. A. conferences and meetings	7,062,48	4,656.27
Telephone and telegraph	680.08	375.58
Miscellaneous	162.72	135.39
Total cash disbursements	\$74,436.31	\$51,764.17
Excess of receipts over disbursements	S 6,463.34	\$14,508.26
Cash and investments—June 30	\$35,440.81*	\$28,977.47

* Secretary-Treasurer's Note: Projection of incomes and obligations owing to members for the re-mainder of 1977, July 1-December 31, would decrease the June 30, 1977 cash and investments balance of \$35,440

Incomes July 1-December 31, 1977: (After deducting \$28,000 for 1978 dues collected	d in 1977)	\$12,600
		\$48,040
Disbursements July 1-December 31, 1977: Publication Costs Wages and Other Payments	\$21,000 14,000	-\$35,000
IRRA ADJUSTED FINANCIAL POSITION (After deducting \$28,000 for 1978 dues collected		er 31, 1977 \$13,040

The additional liability of a proposed reserve of \$12,000 for funding IRRA Life Members, recommended by Smith and Gesteland in 1976, would deplete IRRA's available reserves at this time.

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION, Madison, Wisconsin STATEMENT OF CASH AND INVESTMENTS, June 30, 1977 and 1976

CASH		1977	19 7 6
Checking account—First Wisconsin Natio Bank of Madison	nal	\$ 7,285.96	\$ 1,588.77
Golden Passbook—90 day—First Wiscons National Bank of Madison	sin	101.48	23,494.20
Golden Passbook—1 yr.—First Wisconsin National Bank of Madison	L	5,140.79	
Golden Passbook—2-½ yr.—First Wiscon National Bank of Madison	isin	20,492.96	
CORPORATE BONDS (At Cost)	Bond Numbe	<u>r</u>	
\$3,000 United Gas Pipeline Co. 5%—3/1/78 (market value 6/30/77—\$2,970 6/30/76—\$2,835)	B 218	2,419.62	2,419.62
\$2,000 Commonwealth Edison 3% 2/77 (market value 6/30/76—\$1,955)			1,474.88
Total Cash and Investments		\$35,440.81	\$28,977.47

NOTES TO FINANCIAL STATEMENTS, June 30, 1977 and 1976

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-RETIREMENT PLAN

The association has a retirement annuity contract covering the executive assistant. The amount of funding in 1977 and 1976 was \$2,518 and \$2,376 respectively. These amounts are treated as additional compensation to the executive assistant.

NOTE 3-TAX EXEMPT ORGANIZATION

The association is exempt from income tax under Section 501(c)(3) of the Internal Revenue Code.

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