In Whose Interest? A First Look at National Survey Data on Interest-Based Bargaining in Labor Relations

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The first national survey data on interest-based bargaining (IBB) in labor relations reveal broad awareness of IBB, contrasting union and management views, and variation by negotiator experience and gender. A majority of negotiators are aware of IBB, and approximately one-third of management negotiators and nearly one-half of union negotiators report using IBB in prior negotiations. An exploratory analysis of the relationships between IBB preferences and contract outcomes suggests that the process is producing more than a simple "mutual gains" pattern of outcomes. Based on these initial results, two hypotheses are suggested as the focus for future studies of the diffusion and sustainability of IBB in collective bargaining.

INTEREST-BASED BARGAINING (IBB) IS THE SUBJECT OF GREAT DEBATE among labor relations practitioners and scholars. For some, these principles represent a critical innovation that will allow the collective-bargaining process to keep pace with other organizational innovations, such as team-based work systems, new information technologies, and strategic alliances. For others in the labor relations field, the use of problem-solving approaches to bargaining is either seen as a new label for

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what Walton and McKersie (1965) termed "integrative bargaining" or as a well-crafted ploy to undercut bargaining power. Until now, however, the debate has been fueled primarily by anecdotal evidence, field interviews in case studies, and practitioner commentary (Hunter and McKersie 1992; Friedman 1994; Wells and Liebman 1996).

For proponents of IBB, labor relations is just one of many contexts where these principles are expected to help improve bargaining outcomes. As Fisher, Ury, and Patton (1991, first published 1981) note in the introduction to their book, *Getting to YES!*, what they term "principled negotiation" has universal applicability:

> Principled negotiation can be used whether there is one issue or several; two parties or many; whether there is a prescribed ritual, as in collective bargaining, or an impromptu free-for-all, as in talking with hijackers. The method applies whether the other side is more experienced or less, a hard bargainer or a friendly one. Principled negotiation is an all purpose strategy [p. xiii].

This bold claim has proven highly effective as an antidote for the overly positional bargaining that dominates so many aspects of society. It also, however, invokes considerable controversy and debate among labor and management practitioners (Horvitz 1994), just as Walton and McKersie's concept of integrative bargaining was greeted with considerable skepticism by some labor relations professionals when first introduced (Northrup 1966). The essence of the debate appears to be whether or not IBB can deliver "mutual gains" across the full range of issues of interest to the parties in as complex an institution as collective bargaining.

To understand how an innovation such as IBB is actually being received and used in practice requires data from a representative sample of union and management negotiators. In this article we introduce a data set that offers an initial opportunity to do this—the first National Performance Review Survey of labor and management negotiators, which was conducted for the Federal Mediation and Conciliation Service (FMCS) under a presidential mandate for federal agencies to better understand and serve their "customers." Although a very small part of the survey was devoted to IBB, the responses to these questions provide a first look at the scope and extent of this innovation in collective bargaining. After analyzing these initial data, we suggest two hypotheses warranting deeper investigation with future survey or other suitable data.

Interest-Based Bargaining: Background and Principles

Throughout this century, the institution of collective bargaining has been subject to significant innovations. At the turn of the century, for

example, the Protocol of Peace was advanced by prominent industrialists and social activists as a way to substitute arbitration for strikes. During the 1920s and 1930s, numerous "shop committees" explored work redesign in ways that were variously seen as adjuncts or alternatives to collective bargaining (Douglas 1921). During World War II, the constraints on wage increases under the War Labor Board (WLB) helped fuel the emergence of fringe benefits as a part of workplace employment packages (in contrast to Europe, for example, where matters of health, retirement, and other benefits were largely addressed through public legislation). During the 1960s and 1970s, the growth of negotiations in the public sector was associated with innovation in impasse procedures and other aspects of bargaining, whereas some process innovations (such as the Relationship by Objectives' approach of the FMCS) emerged in the private sector. In the 1980s, a number of collective-bargaining agreements emerged that involved radical reconceptualizations of labor-management relations, such as the Shell Sarnia agreement with the OCAW, the Dayton Power and Light agreement with its unions, and the Saturn Agreement with the UAW. These contracts were short statements of principles drafted as "living agreements" rather than the many hundreds of pages of minutia found in many collective-bargaining agreements.

IBB thus fits into this long tradition of innovations. It is variously termed *mutual gains, interest-based,* or *win-win bargaining*.[1] While the terminology varies, all these approaches share an emphasis on using problem-solving processes in ways that avoid positional contests in bargaining (Cutcher-Gershenfeld 1994). In addition, most of the training in IBB emphasizes the use of joint task forces or committees for data collection prior to bargaining and for off-line generation of options during bargaining. In most cases, special attention is paid to the matter of representing constituents during IBB, which is particularly challenging because constituents tend to first raise issues in positional terms and often emphasize tangible outcomes in ratification (rather than less tangible gains in relationships and trust). Some training in this area even expands the use of interest-based principles to go beyond fostering (cooperative

[1] Many terms have been used over the years to refer to bargaining that features an integrative or problem-solving approach. It was Walton and McKersie's 1965 book that first introduced the term *integrative* as an element of a theory of negotiations. However, it was the publication of the book *Getting to YES!* by Fisher, Ury, and Patton (1991) that served to codify the notion of focusing on interests rather than positions in bargaining. This book used the term *principled negotiation* but became the basis for the term *interest-based bargaining. Mutual-gains bargaining* and *win-win bargaining* are labels that highlight the desired outcomes, although it is our view that the term *win-win* needs to be used cautiously because it may set unrealistically high expectations.

problem solving) and includes various types of restrained forcing (taking into account pressure and power tactics) (Walton, Cutcher-Gershenfeld, and McKersie 1994). It is this set of principles and new approaches to bargaining that is the focus of the analysis in this article.

While there is a long history of innovation in collective bargaining, it is also important to note that the last 40 years also have seen a steady decline in the percentage of the workforce represented by unions. Even though over 40,000 contracts are negotiated each year, only about 10 percent of the private-sector workforce is covered under a collective-bargaining agreement. Moreover, recent innovation in collective bargaining has occurred in parallel with some deeply contentious developments. The early 1980s featured a surge of wage and benefit concessions, many of which were associated initially with the economic recession of 1980–1983 (Cappelli 1983)—such as the UAW concessions to Chrysler as part of the bail-out package for that corporation. Subsequently, a growing number of employers sought concession demands even in the absence of harsh economic difficulties. They were seeking not just wage and benefit concessions but also increased flexibility in work rules and other matters (Mitchell 1985).

In many cases, employer demands for flexibility were based on the successful results achieved in nonunion facilities that were operating with few job classifications, alternative pay systems, and other new work practices (Kochan, Katz, and McKersie 1986). Unions attempted to respond with corporate campaigns, "in plant" strategies, and other attempts to exert leverage without striking (and risking the use of replacement workers)—but only with limited success. Thus, in examining data on IBB, we must be mindful of the parallel power bargaining dynamics that also have been taking place.

The Survey Data

In 1993, President Clinton announced that all federal agencies would conduct a National Performance Review and assigned responsibility for this initiative to Vice President Gore. The goal was for government to assess the needs of its many customers and to ensure continuous improvement in the delivery of services and products to these customers. As part of its efforts to fulfill its responsibility under this policy initiative, the FMCS commissioned a National Performance Review Customer Survey.

This survey, the first of its kind ever conducted by FMCS, interviewed union and management representatives from approximately 1050 randomly sampled contracts from the agency's database. In total, 1557

responses were received from 777 union and 780 management representatives for an overall response rate of 74 percent. Large bargaining units (250 or more workers) were oversampled, as were users of FMCS services. A telephone survey protocol was used to collect the data. The survey was administered by the Center for Survey Research at the University of Massachusetts–Boston.

A report covering the full range of questions addressed in the survey regarding perceptions of the contract and preventive mediation services provided by FMCS, the state of collective bargaining, and priorities for improvement of labor-management relations was submitted to FMCS and summarized elsewhere (Kochan and Cutcher-Gershenfeld 1997; Cutcher-Gershenfeld, Kochan, and Wells 1998). In this article we provide a descriptive overview of the results with respect to IBB and then conduct multivariate analysis on this issue.

The Sample

FMCS provided the University of Massachusetts Center for Survey Research a stratified random sample of 1050 contracts from the contract-expiration notices received between April 1, 1993 and April 1, 1996. A 3-year period was chosen because the average contract duration in the FMCS database is 34 months, and we wanted to ensure that contracts of different lengths had a chance of inclusion. The sample was stratified by size (half the sample is drawn from contracts with bargaining units of 250 or less and half from larger units) and by whether or not the parties used FMCS mediation in their most recent negotiations. Two-thirds were users of mediation, and one-third did not use mediation in their most recent round of negotiations.

Efforts were made to determine who served as the chief negotiator in the negotiations and then to conduct the interview with this person. Among the nonrespondents, 13 were judged to be not eligible given the sampling criteria, 86 could not be found, 2 could not be interviewed due to language difficulties, 97 were not able to be scheduled for an interview during the time available for the study, and 82 refused to be interviewed. The final sample therefore consists of 1557 union and employer respondents, for a response rate of 74.6 percent.

For the analysis in this article, we have further restricted our efforts to just those cases where we have a matched pair of union and management respondents. This is a total of 586 pairs (1172 cases), which comprises over two-thirds of the total sample. Focusing just on these pairs allows us to be sure that we are comparing or contrasting union and management

perceptions of the same subset of relationships and provides a sufficient number of observations to achieve statistical power in the multivariate analysis we conduct.

To account for the oversampling of large units and of users of mediation services, the data were weighted by both size and by users/nonusers of FMCS mediation. The descriptive statistics reported in this article are weighted to reflect the population as a whole. However, for our purposes, the weights would be less helpful or appropriate in the multivariate analysis. Although they will not change the underlying relationship among variables, the disproportionate weighting of one group of observations will violate assumptions of independence and exaggerate estimates of statistical significance. As such, all the multivariate models use unweighted data.[2]

The sample closely matches the industry distribution of unionized firms in the country, although there are some exceptions due to the oversampling of large firms. Forty-five percent of the sample is in manufacturing, for example, which is slightly higher than the 41 percent of unionized manufacturing firms in the national population. Health also is slightly higher, with 9 percent in the sample and 7 percent in the national population. Retail, wholesale, and service operations (all three combined), in comparison, are slightly underrepresented—with 26 percent in the sample and 31 percent in the national unionized population. Construction accounts for about 9 percent of the sample and also is about 9 percent of the national population. The balance of industries or sectors accounts for relatively small portions of the sample, just as they account for relatively small portions of the unionized workforce. Thus the sample reflects the population of bargaining units on file at the FMCS with the proviso that manufacturing and health care are somewhat overrepresented and retail/wholesale services are underrepresented. The stratification, by design, over sampled bargaining units with 250 or more workers, and therefore, the average size of the bargaining units in the sample (554), is considerably larger than the 131 average bargaining unit in the FMCS contract database.

The sample consists of 89.5 percent male and 10.5 percent female respondents. There is a high proportion of small bargaining units (88.7 percent with under 250 employees), although it is worth noting that the

[2] In fact, we have run all multivariate models with the data weighted and unweighted. The results are largely similar, with increasing effects on size and some additional variables registering as statistically significant. For example, the variables on internal disagreements all come in significant for the union respondents when the weights are added. There are no changes in the signs on any of the key variables.

distribution of female respondents is virtually identical in small versus large bargaining units (10.4 versus 10.8 percent, respectively). About 11 percent of the respondents are under age 40, just over half (54 percent) are between 40 and 54, and 35 percent are 55 and older. Interestingly, there is a fairly even distribution based on years of experience as a labor or management representative: 28.7 percent of respondents with under 10 years experience, 38.3 percent with 10 to 20 years of experience, and another 32.9 percent with over 20 years of experience. Assuming that negotiators follow national retirement patterns, more than one-third of the profession will be replaced by a new generation of negotiators within the next 10 years. We will return to focus on the significance of this generational shift in the Discussion section of this article.

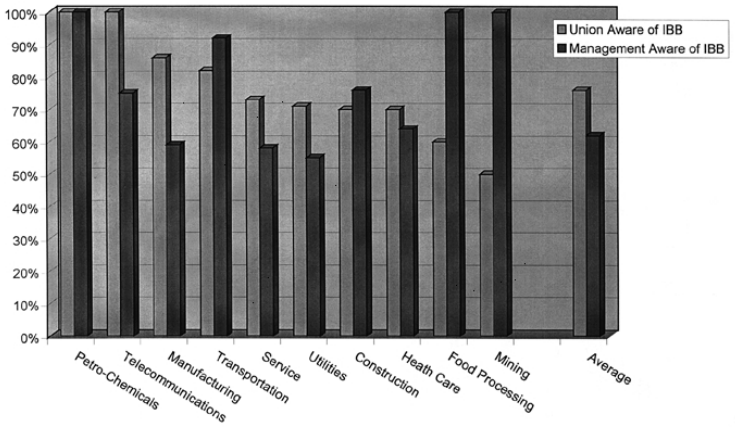
Note that a key limitation of this survey is that it can only serve as a cross-sectional snapshot of collective-bargaining practices. Ultimately, longitudinal data will be needed to track changes in collective bargaining and the fate of this and other innovations. Also, many of the outcome measures center on whether language on a given issue was incorporated into the agreement, not what the specific agreement was or whether language on this issue was already contained in the contract. Still, the data set has the advantage of being the first national random sample of collective-bargaining representatives that includes data on IBB preferences and uses. Also, we have a large number of paired responses, which help to minimize common method bias and allow for useful analysis. Thus this analysis should be viewed as exploratory—designed to describe current practice and help generate hypotheses for future testing.

A Demographic Profile of IBB Bargainers

Respondents were asked if they were familiar with "negotiation based on *interest-based bargaining."* It also was indicated that this is "sometimes referred to as *win-win* or *mutual gains negotiating."* Overall, 62.6 percent of management respondents and 77.2 percent of union respondents report being aware of these new approaches to bargaining (both weighted). The level of awareness varies across industries, as is illustrated in Figure 1, with very high levels of awareness for union and management in petrochemicals, construction, and telecommunications. In some sectors, such as manufacturing, utilities, and transportation, the levels of awareness are much higher among union respondents, whereas in others, such as food processing and mining, the pattern is reversed.

Out of the total set of respondents, 35.4 percent of managers and 48.9 percent of union leaders report having employed this method in contract

FIGURE 1
UNION AND MANAGEMENT AWARENESS OF INTEREST-BASED BARGAINING, BY INDUSTRY



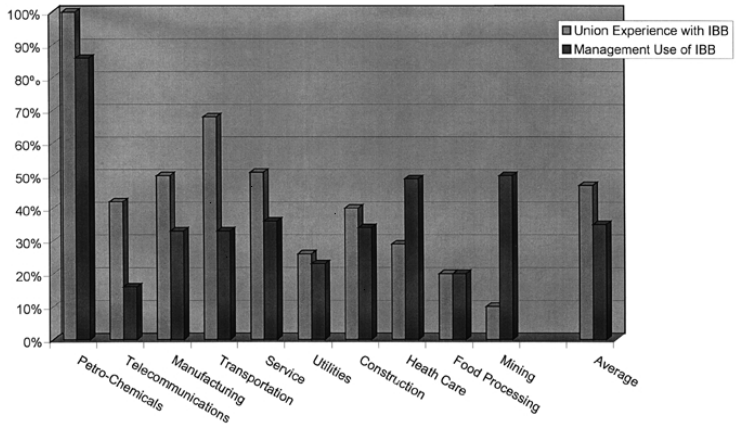
negotiations. Thus, based on these data, approximately one-third to one-half of employer and labor negotiators, respectively, have had at least some experience with IBB to date. Further examination of the matched pairs indicates that approximately 18 percent of negotiations involve negotiators on *both* sides of the table who have experience with IBB practices. Clearly, this innovation is gaining considerable attention and experimentation in collective-bargaining circles today.

Respondents who reported both awareness and some experience with IBB were asked whether or not they preferred using this approach compared with traditional bargaining methods. Approximately 80 percent (79.8 percent) of managers who have employed IBB report that it is their preferred method compared with approximately 60 percent (59.6 percent) of union leaders. There are two ways to interpret these numbers. On the one hand, they suggest that a large majority of lead negotiators who have tried this approach to bargaining also prefer it. On the other hand, over 20 percent of managers and over 40 percent of union leaders who have tried this method do not prefer it, presumably based on their experiences with it to date. If we return to the overall sample (ignoring whether respondents indicated awareness or experience with IBB), these data indicate that approximately one-fourth (24.8 percent of union negotiators and 26.2 percent of management negotiators) prefer the use of IBB principles in negotiating collective-bargaining agreements.

There is considerable variation in levels of experience with IBB across industries and among different types of negotiators. Figure 2 indicates that the use of IBB principles was reported by all union respondents and

FIGURE 2

UNION AND MANAGEMENT USE OF INTEREST-BASED BARGAINING, BY INDUSTRY

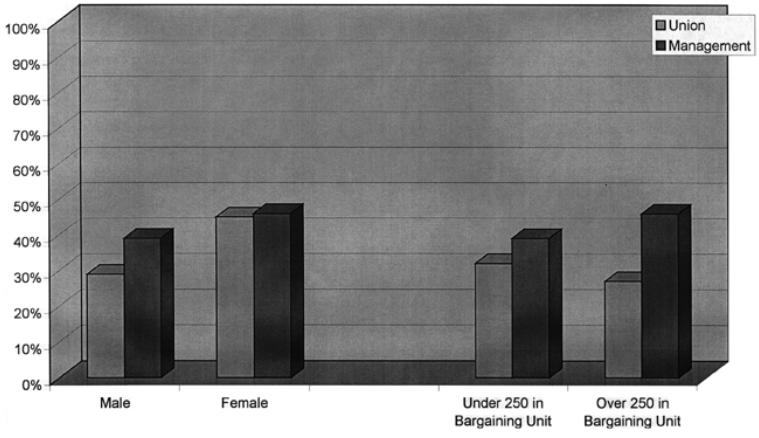


most of the managers in petrochemicals and by more that half the union respondents in transportation, services, and manufacturing. About half the managers in health care and mining reported use of IBB. Some of the numbers are relatively small in a given industry (such as mining), so caution must be exercised in generalizing too broadly with these data. Also, even though these data include only matched cases, there is variation between union and management responses. This can be explained, in part, by the fact that questions were asked around whether IBB had ever been used by the respondent, and many lead negotiators have responsibility for multiple bargaining units. In addition, however, this variation may reflect a degree of error associated with different interpretations of what it means to have "employed IBB."

Respondents who reported awareness of IBB also were asked to rate it as a bargaining technique. Among those who are aware of IBB, 39.2 percent of managers and 28.0 percent of union leaders rate the approach as "excellent" or "very good." Thus, while union negotiators are more likely to be aware of IBB, they are less likely than their management counterparts to rate it favorably.

The distributions by gender and size (Figure 3) indicate that female negotiators tend, on average, to give a higher rating to IBB in comparison with male negotiators. This is consistent with other research suggesting the importance of attending to gender differences among negotiators (Kolb and Williams, forthcoming). Moreover, there is a gap in views between union and management male negotiators but very similar views between union and management female negotiators. While management

FIGURE 3
UNION AND MANAGEMENT RATINGS OF IBB AS "EXCELLENT" OR "VERY GOOD" BY GENDER AND BARGAINING UNIT SIZE



respondents are more favorably disposed toward IBB in both smaller bargaining units (under 250 employees) and larger bargaining units (over 250 employees), the gap in views is much more pronounced in the larger bargaining units. These data suggest that IBB will be more favorably viewed when both lead negotiators are female and that there will be more disagreement about the use of IBB in larger bargaining units. Overall, however, managers express substantially more favorable reaction (preferences and effectiveness ratings) to IBB than do their union counterparts.

First contract negotiations represent the point of entry into the institution of collective bargaining, and they are a key source of public-policy debate. Interestingly, 43 percent of managers reporting on first contracts rate IBB as "excellent" or "very good" in comparison with 39 percent of managers reporting on renewal negotiations. Similarly, 60 percent of union respondents reporting on first contract negotiations give either of the two highest ratings to IBB in comparison with 27 percent of union leaders reporting on renewal negotiations. While the total number of first contracts in the sample is relatively small (28), this still suggests that the lead negotiators in these cases tend to be slightly more oriented toward IBB. In a separate analysis, we have found that threats and use of replacement workers are also more likely in first contract negotiations, which suggests that first contract negotiations may tend toward either highly cooperative or highly conflict-oriented extremes.

Predicting the Likelihood of Use and Preference for IBB

The variations in preferences for and experiences with IBB summarized earlier suggest that this innovation is not being perceived or received in the same way by union and management negotiators. A closer examination of these preferences and experiences therefore may help to identify factors that both explain these patterns and affect further diffusion of this innovation in collective bargaining. In the following multivariate analysis, we use data on the demographic characteristics of the negotiators along with other features of the respondents' negotiations to explain variations in preferences and use of IBB. These should be viewed as exploratory analyses, however, since the data set contains only a few demographic characteristics and the other variables focus only on the parties' most recent negotiations. While preferences and experiences are undoubtedly shaped by a broader array of exposures to collective bargaining, we must assume the most recent experience is a reasonable proxy for this broader set.

The first two variables in the model are experience and gender. There is a common stereotype of the irascible, experienced bargainer locked in on traditional, positional approaches to negotiations. To the extent that this stereotype holds, we would expect more years of experience as a negotiator to be negatively associated with a preference for IBB. We are cautious, however, in codifying this stereotype as a hypothesis and note the potential alternative view of the senior, experienced negotiator who has the emotional distance and balance to explore new ways to bargain. On gender, given the descriptive results, we would expect women to be more likely to have used and to prefer IBB than men, unless gender is correlated with industry or some other variable included in the analysis.

We do not make predictions around use or preferences by industry because we also include in the model measures for competition, technological pressure, and other factors that might be characteristic of the "fixed effects" and other economic aspects of a given industry. Instead, this can be considered a test of what might be considered the "culture" in a given industry. For example, mining has a reputation for having a particularly contentious culture, whereas the service sector is seen as very diffuse or diverse in its bargaining dynamics. Even though the industry measure is in reference to recent negotiations involving the respondent, it is likely that most respondents predominantly bargain in a given industry.

Looking at indicators specifically from the most recent negotiations, we would expect larger bargaining units to be more likely to use IBB given the resources involved in training and the increased likelihood of full-time professionals serving in this role (holding constant for

experience). By contrast, first contracts should be negatively associated with use and preference for IBB given the more limited opportunities for experience and given the more contentious nature of many first contract negotiations.

We would expect the presence of internal disagreements (within negotiating teams) to be negatively associated with IBB given the tendency for intraorganizational conflict to constrain joint problem solving (Walton and McKersie 1965). Cooperative relations, on the other hand should positively predict the use of and preference for IBB. Technological and competitive pressures could go either way—providing a sense of urgency around new ways to bargain or providing pressures that make new ways to bargain particularly risky. Predictions are easier in the case of pressures for wage or benefit concessions and threats around use of replacement workers, both of which are likely to produce a context less amenable to IBB.[3]

Predictions based on region are more complicated, not least of all because of the risk that we will be codifying regional stereotypes in the absence of much prior research that would point one way or another. One hypothesis would be that regions with more "right-to-work" states, such as the Southwest, would be less likely to feature high levels of use or preference for IBB given the more contentious debates around the very presence of a union.

The results from the models of preference for and use of IBB are presented separately in Tables 1 and 2 for union and management negotiators, respectively. Among union leaders, experience is negatively associated with use. Members of the newer generation of union leaders are also significantly more likely to prefer IBB as a method. While these results are consistent with the stereotypical view of more experienced negotiators, longitudinal data are required to determine whether or not this "generational" difference in preference for IBB will remain stable or

[3] The measures for pressure to reduce wages and benefits is constructed out of separate measures for each factor, which are not closely correlated but are conceptually related. As such, we have constructed a combined indicator where both union and management respondents reported either a "3" or "4" (indicating that the factor "moderately influenced" or "heavily influenced" the negotiations) for one *or* the other indicator. A similar method is used for the indicator on domestic and international competition. The next measure includes three factors—pressure to adjust to new technology, pressure to upgrade workforce skills, and pressure for flexibility in work rules or work organization—that are highly correlated. We have combined these arithmetically into a single scale (Cronbach's alpha = 0.71). Also, we have constructed a measure on the degree to which low trust was a factor (again responses of "3" or "4") for both union and management respondents. In addition, there is a measure of intraorganizational disagreements, which is constructed with reference to union and management sides (and only focusing on cases where both sides reported that such disagreements were a factor in the negotiations).

TABLE 1

ASSESSING THE LIKELIHOOD OF REPORTED USE OF IBB AND PREFERENCE FOR IBB UNION LEADERS—UNWEIGHTED LOGISTIC REGRESSION MODEL

	Dependent variables (1 = yes) coefficient (S.E.)	
Independent variables	Union having ever employed IBB	Union preferring IBB
Individual demographics		
Respondent's years of experience (number of years)	–0.017 (0.010)*	–0.021 (0.012)*
Respondent's gender (1 = male)	0.312 (0.308)	0.673 (0.410)*
Recent negotiations industry context		
Petrochemical (1 = yes)	0.957 (0.937)	–0.229 (1.368)
Construction (1 = yes)	0.235 (0.663)	0.825 (0.899)
Health care (1 = yes)	0.875 (0.629)	0.879 (0.880)
Manufacturing (1 = yes)	0.665 (0.588)	1.053 (0.831)
Mining (1 = yes)	0.591 (1.564)	–2.728 (9.367)
Service (1 = yes)	1.108 (0.600)*	1.296 (0.837)
Telecommunications (1 = yes)	1.207 (0.886)	1.540 (1.089)
Transportation (1 = yes)	0.222 (0.854)	1.308 (1.074)
Utilities (1 = yes)	–0.150 (0.752)	0.833 (0.957)
Recent negotiations bargaining dynamics		
Bargaining unit size	1.1E-05 (9.5E-05)	0.0002 (0.0001)
First contract negotiations (1 = first contract)	–0.165 (0.386)	–0.245 (0.461)
Management internal disagreements (4 = heavily influenced)	0.235 (0.092)***	0.191 (0.108)*
Union internal disagreements (4 = heavily influenced)	–0.162 (0.102)	–0.009 (0.121)
Relationship after negotiations (4 = cooperative relations)	0.134 (0.286)	–0.044 (0.338)
Pressure from domestic and international competition (1 = pressure)	0.064 (0.219)	–0.231 (0.267)
Pressure around new technology, upgrading skills, and flexibility in work rules (4 = heavily influenced)	–0.016 (0.131)	–0.091 (0.159)
Pressure to reduce wages and benefits (4 = heavily influenced)	–0.038 (0.224)	–0.385 (0.279)
Threat of replacement workers (1 = threat)	0.011 (0.235)	–0.218 (0.288)
Selected regions		
Mid-Atlantic (NY, NJ, PA)	–0.451 (0.281)	–0.701 (0.362)**
Midwest (MI, OH, IL, IN, WI, MN)	0.221 (0.246)	–0.202 (0.288)
Mountain (CO, MT, IA, UT)	0.375 (0.653)	–0.067 (0.726)
New England (MA, CT, ME, VT, NH, RI)	0.012 (0.454)	–0.016 (0.526)
Southwest (AZ, NM, TX)	–0.240 (0.456)	0.515 (0.482)
West Coast (CA, OR, WA)	0.028 (0.292)	–0.383 (0.354)
Constant	–0.947 (0.713)	–2.450 (0.991)***
–2 log likelihood, model significance	691.263	24.954
Cox and Snell R^2 and Nagelkerke R^2	0.056 and 0.075	0.047 and 0.072

* 0.1 level.

** 0.05 level.

*** 0.01 level.

NOTE: The numbers listed as Cox and Snell R^2 and Nagelkerke R^2 are designed to approximate the way that an R^2 indicates the percent of variance explained and might be used as an approximated measure of the strength of a model.

TABLE 2

ASSESSING THE LIKELIHOOD OF REPORTED USE OF IBB AND PREFERENCE FOR IBB MANAGERS—UNWEIGHTED LOGISTIC REGRESSION MODEL

	Dependent variables (1 = yes) coefficient (S.E.)	
Independent variables	Managers having ever employed IBB	Managers preferring IBB
Individual demographics		
Respondent's years of experience (number of years)	–0.009 (0.011)	–0.035 (0.012)***
Respondent's gender (1 = male)	0.030 (0.313)	0.089 (0.323)
Recent negotiations industry context		
Petrochemical (1 = yes)	0.033 (0.953)	–0.627 (0.965)
Construction (1 = yes)	–1.127 (0.655)*	–1.184 (0.670)*
Health care (1 = yes)	–0.197 (0.600)	–0.517 (0.592)
Manufacturing (1 = yes)	–1.123 (0.570)**	–1.390 (0.570)***
Mining (1 = yes)	–0.384 (1.537)	0.028 (1.541)
Service (1 = yes)	–1.104 (0.590)*	–1.463 (0.600)**
Telecommunications (1 = yes)	–0.330 (0.868)	–1.323 (0.902)
Transportation (1 = yes)	0.368 (0.838)	–0.847 (0.857)
Utilities (1 = yes)	–0.372 (0.733)	–0.621 (0.720)
Recent negotiations bargaining dynamics		
Bargaining unit size	0.0001 (0.0001)	–0.0002 (0.0001)
First contract negotiations (1 = first contract)	–0.387 (0.420)	–0.811 (0.504)
Management internal disagreements (4 = heavily influenced)	0.008 (0.133)	–0.118 (0.148)
Union internal disagreements (4 = heavily influenced)	0.093 (0.099)	0.024 (0.107)
Relationship after negotiations (1 = cooperative relations)	0.307 (0.289)	0.639 (0.301)**
Pressure from domestic and international competition (1 = pressure)	0.085 (0.223)	0.278 (0.239)
Pressure around new technology, upgrading skills, and flexibility in work rules (4 = heavily influenced)	0.343 (0.131)***	0.231 (0.141)*
Pressure to reduce wages and benefits (4 = heavily influenced)	0.329 (0.226)	0.361 (0.243)
Threat of replacement workers (1 = threat)	–0.333 (0.293)	–0.361 (0.331)
Selected regions		
Mid-Atlantic (NY, NJ, PA)	–0.034 (0.290)	–0.259 (0.311)
Midwest (MI, OH, IL, IN, WI, MN)	–0.085 (0.249)	–0.201 (0.266)
Mountain (CO, MT, IA, UT)	0.355 (0.643)	0.067 (0.681)
New England (MA, CT, ME, VT, NH, RI)	0.376 (0.450)	0.132 (0.463)
Southwest (AZ, NM, TX)	–0.482 (0.505)	–0.095 (0.514)
West Coast (CA, OR, WA)	0.120 (0.293)	–0.310 (0.327)
Constant	–0.268 (0.720)	0.581 (0.742)
–2 log likelihood, model significance	40.015**	40.310**
Cox and Snell R^2 and Nagelkerke R^2	0.074 and 0.099	0.075 and 0.105

* 0.1 level.

** 0.05 level.

*** 0.01 level.

NOTE: The numbers listed as Cox and Snell R^2 and Nagelkerke R^2 are designed to approximate the way that an R^2 indicates the percent of variance explained and might be used as an approximated measure of the strength of a model.

decline among these newer negotiators as they learn more about its effects and gain further experience. These two competing explanations need to be tested before conclusions about a lasting generational difference can be reached.

Of all the industry controls, only the service sector is significant—with a positive likelihood of predicting use of IBB (and preferences that are approaching significance and in the same direction). There is weak effect (approaching statistical significance) for size. Union leaders from larger bargaining units are somewhat more likely to prefer IBB.

The measure for internal management disagreements is positive and statistically significant in predicting use of and preference for IBB. This is not what we predicted and raises more questions than it answers. Does this suggest that union leaders are more likely to experiment when management is not unified? Or is it more likely for internal divisions in management to be more visible to the union as a result of an IBB process? As we predicted, the sign on union internal divisions is negative for use (where it is approaching statistical significance) and preference (where it is not). These findings are consistent with the expectation that intraorganizational relations (within the company or the union) are highly interdependent with IBB, but they also suggest a more complex relationship than previously assumed.

Among the economic factors affecting these negotiations that were measured in the survey, only the existence of wage and benefit pressures is negatively associated with the use of IBB (approaching statistical significance). None of the other measures of the economic context predict either preference for or use of IBB by union negotiators. Thus economic factors do not appear to be significant in affecting union preferences for or use of this innovation.

Finally, one regional effect is observed—a negative sign for the Mid-Atlantic states of New York, New Jersey, and Pennsylvania. These are all states with a reputation for mature and perhaps somewhat contentious negotiations. These findings point to reduced use of IBB and, perhaps more important, reduced preference for IBB in this region. We do not find evidence for other regional effects around IBB.

Turning to Table 2, we see that the profile for managers is both similar in some respects and different from what we found with union leaders. The models are consistent in that managers with fewer years of experience as negotiators are also more likely to prefer IBB. While a statistically significant effect is not also present on use of IBB, the sign is also negative. These findings again suggest that IBB use and preference may

well be a generational phenomenon, but the same generational versus learning caveats noted earlier apply to these results.

Among managers, the industry effects are more salient. Management negotiators in the construction, manufacturing, and service industries are less likely to use IBB. The same pattern holds for preferences for IBB. Particularly interesting is the contrast between union and management responses in the service sector, with use of IBB significantly higher among union respondents and significantly lower among management respondents. This may reflect a broader experience base among union negotiators—spanning many more relationships than their management counterparts or different conceptions in this industry.

There is a tendency (approaching statistical significance) for managers from smaller bargaining units to prefer IBB, and there is a significantly lower likelihood of a preference for IBB among managers who had just recently negotiated a first agreement. Managers who report more cooperative relations in the recent negotiations highlighted in the survey also report a higher preference for IBB. Finally, there is a clear substantive link between IBB for managers (use and preference) and the presence of pressures around technology, flexibility, and training. These findings suggest that managers' views of IBB are shaped by recent bargaining experience and that IBB is particularly salient for managers in the context of changing technology and work operations. None of the regional indicators have an impact on IBB use or preference for managers.

Impact of IBB Preference and Use on Selected Bargaining Outcomes

IBB is likely to diffuse and gain further acceptance in collective bargaining if it delivers on its promise of generating mutual gains for the parties. On the other hand, it is likely to lose support over time if, in the end, it is perceived to be or in fact is simply used as a power tactic to achieve one party's objectives at the other's expense. Thus in this section we use these survey data to explore the extent to which the results of these contract negotiations reflect a pattern of mutual gains or power bargaining. Several limitations of these data make this an exploratory analysis. The cross-sectional nature of the data urge caution about cause-and-effect interpretations (i.e., we cannot tell if experience with IBB necessarily influenced behavior during the negotiation in question or whether preferences lead to outcomes or outcomes shape preferences). Note also that the measure of reported use of IBB is of any prior use, not necessarily use in the most recent negotiation for which outcomes are reported. Further,

while the respondents reported whether the agreements reached in their most recent bargaining round contained language on the issues discussed below, we do not have data on the specific content of these provisions. Moreover, there is a tendency that we have reported elsewhere (Cutcher-Gershenfeld, Kochan, and Wells 1999) for union and management respondents—even in matched pairs—to report different contractual outcomes (with each side more likely to report what would be favorable outcomes for that side). This adds some additional "noise" to the analysis. For all these reasons, we limit this final analysis to exploratory cross-tabulations rather than full multivariate causal modeling.

The results presented in Table 3 point to a positive relationship between use of IBB and some contractual outcomes. In particular, both union and management respondents who have past experience with IBB are also more likely to report contracts with increased flexibility in work rules, new pay arrangements, language on team-based work systems, and new language on joint committees. At the same time, little or no observable effect is associated with use of IBB on outcomes such as wage increases, benefits increases, wage reductions, benefit reductions, or health and safety issues. The results indicate that the impact of IBB is primarily observable on more complex issues associated with the

TABLE 3

CONTRACT OUTCOMES AND USE OF IBB WEIGHTED RESPONSES AMONG MATCHED PAIRS

New contract language on:	Union reps who have ever used IBB	Union Reps who have not ever used IBB	Managers who have ever used IBB	Managers who have not ever used IBB
Items typically advanced by management				
Reduction in base wages	2.5%	3.5%	4.8%	4.4%
Reduction in benefits	18.0%	22.0%	26.1%	28.0%
Increased flexibility in work rules	24.5%	22.7%	43.1%	37.5%
Items typically advanced by labor				
Wage increase	96.3%	96.2%	92.1%	93.3%
Benefit increase	69.6%	70.3%	54.5%	56.3%
Improved job security	34.0%	22.3%	8.5%	12.4%
Union security	28.3%	23.9%	9.1%	13.5%
Additional potential bargaining issues				
Increased worker input in management decisions	19.1%	10.2%	17.6%	16.9%
Profit sharing, gain sharing, pay for knowledge	16.0%	10.0%	12.2%	6.5%
Team-based work system or job rotation	13.2%	5.0%	8.5%	5.6%
Establishment or restructuring of a joint committee	28.8%	18.0%	17.6%	12.2%
Worksite safety or health issues	41.8%	40.0%	29.9%	31.0%

changing nature of work and that it is less salient on basic economic issues. These findings support cautious optimism about IBB—suggesting that it is not a panacea but that a change in the bargaining process does facilitate certain types of contractual outcomes.[4]

The cautious optimism based on use of IBB is strongly tempered by the results presented in Table 4. Here we compare the outcomes for respondents who have a stated preference for IBB against those who do not (but who have past experience with it). The results are quite dramatic and help to explain why IBB is controversial as a method.

There is just one issue—increased worker input into management decisions—where both union and management respondents report a preference for IBB and were more likely to negotiate this outcome. While this is consistent with the findings in Table 3, the parallel stops here. The patterns displayed by most of the other issues reflect more of a power-bargaining than a mutual-gains dynamic. For example, work rule flexibility and benefit reductions are more likely among union negotiators who

TABLE 4

CONTRACT OUTCOMES AND PREFERENCES FOR IBB WEIGHTED RESPONSES AMONG MATCHED PAIRS

New contract language on:	Union reps who prefer IBB	Union reps who do not prefer IBB	Managers who prefer IBB	Managers who do not prefer IBB
Items typically advanced by management				
Reduction in base wages	2.7%	2.8%	5.9%	2.6%
Reduction in benefits	18.8%	13.1%	21.3%	46.2%
Increased flexibility in work rules	29.1%	21.3%	40.4%	50.5%
Items typically advanced by labor				
Wage increase	94.0%	98.1%	94.1%	84.6%
Benefit increase	50.9%	86.1%	50.9%	75.6%
Improved job security	26.1%	41.0%	8.1%	12.0%
Union security	27.4%	26.9%	11.1%	5.0%
Additional potential bargaining issues				
Increased worker input in management decisions	25.7%	11.1%	20.8%	12.5%
Profit sharing, gain sharing, pay for knowledge	13.7%	19.4%	16.2%	5.1%
Team-based work system or job rotation	9.4%	17.8%	11.0%	2.6%
Establishment or restructuring of a joint committee	29.9%	20.4%	14.8%	33.3%
Worksite safety or health issues	41.0%	38.5%	25.0%	55.3%

[4] The picture is a bit more complex on the issues of employment security and job security, where we see a clear impact associated with union experience with IBB and a reverse tendency among managers. This complexity is further apparent in Table 4, which is discussed below.

prefer IBB, whereas the reverse is true among managers. Should this pattern persist, it would likely reinforce a fear often expressed by union negotiators, i.e., that adopting a more problem-solving approach will make them more vulnerable to traditional management power tactics. On other issues, the reverse pattern is observed—language on teams and new pay systems are more likely with managers who prefer IBB and union negotiators who do not. In this case, then, managers appear to be approaching these as mutual-gains issues, whereas union negotiators are not, perhaps seeing them as what are called "modern operating agreements" being forced by managers. Finally, benefit increases and job security outcomes are more likely among both union and management negotiators who prefer more traditional negotiating methods. Taken together, these results suggest that power bargaining and one-sided views of the bargaining agenda are as much a part of how these parties perceive IBB as are mutual-gains perspectives.[5]

Overall, these results suggest some promise for IBB but pose some warning signals as well. There do seem to be some direct effects on workplace issues such as worker input, teams, joint committees, and pay systems associated with IBB experience of both parties, which would suggest that these process innovations are important. But union and management negotiators, even in the same bargaining relationships, perceive IBB in very different ways and may be using it to achieve results that are not likely to be perceived by their constituents or by their counterparts on the other side of the table as consistent with the mutual gains promised by this approach. While, as noted earlier, we see these results as very tentative, they suggest the need for further monitoring and analysis of the substantive results associated with this approach.

Discussion

We presented these data here for two reasons. First, they provide the only current nationally representative snapshot of what we see as a promising but clearly controversial and still evolving innovation in collective

[5] We also attempted to test for linkages (e.g., contracts containing both work rule flexibility and job security outcomes or teams and new pay systems) or tradeoffs (e.g., both benefit increases and decreases) among these issues but found contradictory relationships between use of IBB and these outcomes. Union leaders who used IBB were more likely to negotiate these linkages, whereas the reverse was true for managers. Use of IBB was not significantly related to negotiation of benefit tradeoffs for either union or management negotiators. The fact that statistically significant effects were found around IBB and linkages across issues does suggest the value of further research along these lines, but the contradictory nature of these findings again points to a more situational view of the impact of IBB.

bargaining. Second, we hope to use these results to stimulate further research on how IBB is being practiced, its patterns of diffusion, and its sustainability.[6]

At the heart of this article lies the view that process matters. That is, the way bargaining is conducted has important implications for outcomes. We have only been able to present data on some of the possible outcomes associated with collective bargaining, but the findings suggest that exposure to and experience with IBB is at best only partly achieving the substantive mutual gains promised by this approach. Although proponents of IBB urge that even highly distributive issues can benefit from a problem-solving approach, that is not the dominant experience among U.S. negotiators today.

A picture of IBB in the United States emerges from this analysis that is both promising and somewhat troubling. On the one hand, a very high percentage of lead negotiators are familiar with the concept. A surprisingly high number report experience with it. While union respondents tend to report more experience with IBB, they also rate it lower than management respondents. Female and newer (less experienced) negotiators, on average, give IBB a higher rating. These variations suggest that IBB is currently in a developmental, trial mode. It is a relatively new innovation that has not yet been incorporated into standard collective-bargaining practice.

We end with two hypotheses suggested by the data: (1) As a new cohort of negotiators (including more women) takes over from their more senior male counterparts, there will be greater interest in and use of IBB techniques. (2) Whether these techniques in fact produce a generational shift and get institutionalized as the norm in the collective-bargaining process of the future will depend on whether or not these negotiators can generate positive results for all the parties to the process. Otherwise, negotiators or constituents will come to see IBB as unbalanced or overly susceptible to power dynamics, and support for this innovation will erode. If these exploratory results are indicative, it will take quite a bit of "bargaining over how to bargain" before IBB is able to dependably deliver on the mutual gains that it promises. We conclude that this is the central challenge facing new cohorts of bargainers and a critical area for further research.

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[6]A second National Performance Review Survey has not been completed. The data are available from FMCS.

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