

**DETERMINANTS OF PERMANENT WORKFORCE
REDUCTION IN GOVERNMENT: EVIDENCE FROM
LOCAL CANADIAN UNION OFFICIALS**

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ABSTRACT

Few studies have examined the factors associated with the permanent reduction of government employees at the bargaining unit level. This article describes the results from a Canadian survey of 235 local union officials. Over a two-year period, 51.9 percent of local union officials indicated their bargaining unit had a permanent reduction of staff, with an average reduction of more than 15 percent of the unit. Factors related to the decision to reduce the workforce included the demand for the unit's primary service, membership support for the union, the presence of a strike, the perceived commitment of the employer to job security, workplace concessions, and progressive decision-making ideology.

Although the decade of the 1990s was characterized by massive downsizing and restructuring, most of the attention has been focused on the corporate sector. However, nonprofit organizations have captured the attention of some researchers, particularly during the past five years. Long-standing expectations of job security and rewards for loyal service have, in many organizations, been replaced by continual change and massive employee cutbacks [1]. Moreover, there is considerable evidence that many downsizing efforts fail to meet organizational objectives [2].

A substantial body of literature exploring the effect of downsizing on the individual employee has emerged. However, research with the establishment or organization as the unit of analysis is less common, and few researchers have

studied workforce reduction at the bargaining unit level. Additionally, there is little work based on data from union officials.

The current study has two major purposes. First, it examines the incidence of permanent workforce reduction at the bargaining unit level using data collected from 235 local union officials in Canada. Second, it investigates the factors associated with permanent workforce reduction.

BACKGROUND

Recent academic work has focused on a number of issues, including the impact of downsizing on “survivors” [e.g., 3, 4] and on the organization [5]. In addition, there has been research on the effects of unionization on layoff rates [6] and employment growth and decline [7, 8]. However, there is relatively little work investigating the determinants of workforce reduction, and research with the bargaining unit as the unit of analysis is particularly uncommon.

Cameron argued that downsizing strategies may fall under one of three categories—workforce reduction, work redesign, and systematic change [5]. Workforce reduction, which is the most common strategy and the focus of this article, is frequently a short-term approach marked by employee cutbacks through such programs as attrition, early retirement or voluntary severance packages, layoffs, or terminations. This approach is often a band-aid measure that ignores long-term issues and problems.

Work redesign, a medium-term strategy, involves a focus on work processes and a critical evaluation of the need to change or eliminate specific functions, products and/or services. The third strategy, systematic change, is a long-term approach in which the organization’s culture and employee attitudes and values are altered to fit the organization’s goals of reducing costs and improving quality.

The psychological contract between employers and employees has changed [9], and many workers have moved away from the expectation of lifetime employment [10]. However, the growth of new employment relationships is coinciding with an appeal for greater labor-management cooperation, and it remains to be seen how true cooperation can exist when the job security of employees is threatened [11]. In an era characterized by the emergence of new employment relationships, changes in managerial attitudes and behaviors are essential if cooperation between labor and management is going to succeed [12].

Recently, researchers in the United Kingdom and North America have examined the relationship between unionization and employment growth. A study of approximately 1,000 establishments in the United Kingdom found that unionized establishments grew more slowly (by a margin of about 3% annually) than nonunion establishments [13], while the annual growth rate of unionized manufacturing establishments in California was about 4 percent less per year in comparison with nonunion firms [7]. In addition, Long concluded that unionized establishments in Canada also grew more slowly than those in the nonunion sector (with growth

about 3.7% less for unionized manufacturing establishments and 3.9% less for unionized establishments in the nonmanufacturing sector [8]).

Canadian unions have been slower than their European counterparts in developing a vision on work-reorganization issues. A number of industries have been characterized by recent cost cutting as a response to competitive pressures, and deficit-burdened governments have, in the last few years, embarked on spending cuts and the elimination of public sector jobs [14].

METHOD

Data Collection

The data used in this article were collected as part of a larger research project involving private and public sector union officials across Canada. Union officials in all major industry groups were sent a mail survey and asked to complete the instrument with reference to the bargaining unit that they represent. A total of 235 government union officials provided complete responses to the measures used in this article.

Dependent Variables

Two dependent variables were examined in this study. The first dependent variable, presence of a permanent reduction of the workforce, was measured as a dichotomous variable (coded 1 if the number of bargaining unit employees was reduced over a two-year period; 0 otherwise). The second dependent variable, percentage of the bargaining unit reduced, was measured as a half-dichotomous variable (coded 0 if there was no reduction of bargaining unit employees or, for bargaining units experiencing a cutback in employment, the percentage of the reduction over the two-year period).

Independent Variables

While empirical research on the predictors of workforce reduction is somewhat limited, the literature does provide (at times indirectly) some guidance concerning the factors expected to be associated with employment cutbacks. For presentation purposes, the eleven independent variables were grouped under four categories: service demand, human resource issues, labor-management relations, and bargaining unit characteristics.

Service demand was measured by a single item. Union officials were asked to indicate the level of demand for the bargaining unit's primary service using a six-point scale (1 = substantial increase to 6 = substantial decline in demand). It was expected that employers confronted with a declining demand for their service would be more likely to reduce employment [10, 15, 16].

Three variables addressed aspects of human resource management. Based on past research, it was expected that employers with a joint committee addressing training issues and a value system emphasizing the importance of job security [15, 17, 18] would be less likely to reduce bargaining unit employment. Respondents were asked to indicate whether there was a joint labor-management committee that addressed training issues (1 = yes; 0 = no). Commitment to job security was measured by having respondents indicate, using a six-point scale (1 = low commitment to 6 = high commitment), the perceived level of commitment to job security for bargaining unit members. While there was no specific hypothesis relating to workforce reduction and the presence of a human resource management/industrial relations department, the study sought to examine whether such a relationship existed. Presence of a human resource management/industrial relations department was dummy-coded (1 = yes; 0 = no).

Three variables addressed features of the labor-management relationship. The presence of a strike over a five-year period was dummy-coded (1 = yes; 0 = no). Progressive decision-making ideology, a three-item scale adapted from Goll [19], addressed the use of participative decision making, open channels of communication, and explaining proposed changes to those affected (1 = strongly disagree; 6 = strongly agree). The scale, which had a Cronbach's coefficient alpha of 0.89, was calculated by averaging responses to the three items. Number of labor concessions was developed by having respondents indicate whether the union had made concessions relating to wage cuts or freezes, seniority, job assignments, and job classifications. A union making no concessions would receive a score of 0, while the maximum score was 4 (that is, the union made concessions on all four items). It was expected that the presence of a strike and a lower score on the progressive decision-making ideology scale would be associated with workforce reduction.

There is considerable debate over the impact of concession bargaining on union member employment. Although enhanced job security arrangements are frequently associated with transformed human resource management systems [20], union officials (and union members) are often skeptical about the linkage between concessions and job security as a result of a lack of trust in management [21]. The evidence is mixed with regard to the relationship between workforce reduction and concession bargaining [22, 23].

Four variables related to characteristics of the bargaining unit. These included the presence of a major change in policy by the union (1 = yes; 0 = no), membership support for the union (1 = strong disagreement; 6 = strong agreement with the statement "the union has the strong support of its members"), number of bargaining unit members (measured using the natural log), and number of years the union has represented members at the workplace (also measured using the natural log).

It can be argued that major change within the union may be related to a higher probability of workforce reduction. Exploring alternatives to workforce reduction

often requires long-term trust and commitment by both labor and management, and such trust is less likely when the union is undergoing change.

The relationship between membership support for the union and workforce reduction is unclear. It can be argued that membership support may be lower among units experiencing employment cutbacks, but this position may be countered by the view that members may see the union as a source of protection during a workforce reduction.

There is a strong body of literature indicating that workforce reduction behavior may be associated with organization size [24]. Larger organizations may be more likely to have well-developed internal labor markets and greater resources to maintain employment during periods of declining demand [25]. It is expected that workforce reduction will be more common among smaller bargaining units. Similarly, it is anticipated that workforce reduction may be more likely when the bargaining relationship is mature.

RESULTS OF THE RESEARCH

Descriptive Statistics

In terms of the size of the bargaining unit, 40.4 percent of units had fewer than fifty members, 27.7 percent had between fifty and 249 members, and 31.9 percent had 250 or more members. On average, union locals had represented employees for 28.9 years. Union officials perceived a modest commitment by the employer to job security (average score of 3.85 on a 6-point scale), but the mean score for progressive decision-making ideology was quite low (average of 2.74 on a 6-point scale). The descriptive statistics for study participants are provided in Table 1.

Of the 235 union officials who participated in the study, 122 (51.9%) reported there had been a permanent reduction of bargaining unit employees over a two-year period. Among union officials reporting employee cutbacks, the average size of the reduction was 15.2 percent of the workforce.

Multivariate Analyses

Two different estimation techniques were employed in the study. First, *probit* was used to examine the factors related to the presence of permanent workforce reduction of bargaining unit employees. In this model, the focus is on whether the number of bargaining unit members was reduced over a two-year period. Second, *tobit* was used for the second model, which addressed the size of the workforce reduction (in percentage terms).

When examining the results from the two estimation procedures (see Table 2), some trends emerge. In both models, the coefficient relating to service demand

Table 1. Descriptive Statistics

Variable	Mean	S.D.
Demand for Service	2.72	1.27
Joint LMC ^a for Training	0.44	0.50
Commitment to Job Security	3.85	1.56
Human Resource Department	0.58	0.49
Strike	0.20	0.40
Progressive Decision-Making Ideology	2.74	1.29
Number of Concessions	1.66	1.22
Change in Union Policies	0.44	0.50
Union Member Support	3.41	1.53
Bargaining Unit Members (Nat'l Log)	4.97	2.41
Years Local Has Existed (Nat'l Log)	3.18	0.63

^aLabor Management Committee

was significant. As expected, a bargaining unit with declining demand for its primary service was more likely to have experienced a reduction of bargaining unit members.

The perception of union officials regarding the employer's espoused commitment to job security was highly significant ($p < .01$) in both the probit and tobit models; as hypothesized, a higher perceived commitment to job security was associated with a lower probability of permanent workforce reduction and less severe employee cutbacks.

Characteristics of the labor-management relationship were strongly associated with workforce reduction behavior. The presence of a strike was related ($p < .01$) to both the probability of workforce reduction and the size of the cutback. Similarly, the likelihood and size of the workforce reduction was associated with lower scores on the progressive decision-making ideology scale. Finally, an increase in the number of labor concessions was related to workforce reduction efforts.

A major change in union direction/policies was positively but moderately ($p < .10$) associated with permanent workforce reduction. In addition, bargaining units in more mature relationships were more likely ($p < .01$) to report a permanent reduction of bargaining unit employees. As well, the coefficient of union member support was positive and significant ($p < .05$) when considering both models.

Previous research suggests that larger organizations may be more likely to engage in workforce reduction but tend to engage in less severe cutbacks. Although the signs on the coefficients are in the appropriate direction, the relationship between bargaining unit size and workforce reduction behavior was not significant.

Table 2. Multivariate Estimation Results

Variable	Workforce Reduction	Size of Reduction
Demand for Service	0.173** (0.076)	1.806* (1.074)
Joint LMC ^a for Training	-0.081 (0.200)	3.877 (2.917)
Commitment to Job Security	-0.175*** (0.065)	-3.283*** (0.898)
Human Resource Department	-0.029 (0.217)	-3.068 (3.126)
Strike	1.092*** (0.276)	14.540*** (3.348)
Progressive Decision-Making Ideology	-0.175** (0.081)	-3.636*** (1.200)
Number of Concessions	0.169** (0.080)	2.900** (1.132)
Change in Union Policies	0.363* (0.191)	4.486 (2.741)
Union Member Support	0.167** (0.066)	2.034** (0.934)
Bargaining Unit Members (Nat'l Log)	0.040 (0.045)	-0.593 (0.661)
Years Local Has Existed (Nat'l Log)	0.408*** (0.165)	3.407 (2.365)
Constant	-1.911*** (0.700)	-7.599 (10.310)
Log-Likelihood	-118.975	-586.765

^aLabor Management Committee

Note: Standard errors are in parentheses.

* $p < .10$

** $p < .05$

*** $p < .01$

CONCLUSION

This study deviates from most of the previous literature by examining workforce reduction at the bargaining unit level of analysis. Over a two-year period, 51.9 percent of respondents reported the employer had cut the number of bargaining unit employees, with an average reduction of more than 15 percent of the unit.

A number of the key findings relating to the determinants of workforce reduction also merit discussion. As expected, demand for the unit's primary service was associated with workforce reduction. While responding to decline in service demand by cutting employees is a common strategy used by employers, such an approach may result in several negative consequences, such as lower morale among surviving employees, additional training costs, higher turnover and reduced commitment to the employer [2, 5, 26].

Several studies [15, 16] underscore the importance of the organization's espoused commitment to job security and concern for employees as a determinant of workforce reduction behavior. These proportions receive strong support in the present study—in short, a higher commitment to job security for bargaining unit employees was associated with a lower probability of reducing bargaining unit employment and, where cuts were made, the adoption of a less severe reduction strategy.

Workforce reduction was associated with the presence of a strike, a higher number of workplace concessions, and a lower score on the progressive decision-making scale. These findings suggest a relationship between the labor-management relationship and employee cutbacks. Although workforce reduction was related to both strike behavior and greater union concessions, the cross-sectional nature of the data do not permit the testing of causal relationships. The negative relationship between the reduction of bargaining unit employees and progressive decision-making ideology is particularly important in light of the ongoing calls for greater cooperation between labor and management.

Interestingly, employee support for the union was higher among union locals experiencing a reduction of members. It may be that members are more likely to take the union for granted when employment is stable or growing. However, during a period characterized by employee cutbacks, the role of the union may be more visible as members look for assistance and representation in a difficult time.

There are several opportunities for additional research. The cross-sectional nature of the study precludes examining possible causal linkages and the tracking of changes over time. In addition, it would be beneficial to compare the findings with data obtained from employer respondents. Furthermore, there is need for research on the impact of workforce reduction and restructuring on labor-management relations and both employee and organizational performance. These are but a few of the challenges for future study.

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