

The Probability of Union Membership in the Private Sector

Ignace Ng

Volume 47, numéro 1, 1992

URI : <https://id.erudit.org/iderudit/050742ar>

DOI : <https://doi.org/10.7202/050742ar>

[Aller au sommaire du numéro](#)

Éditeur(s)

Département des relations industrielles de l'Université Laval

ISSN

0034-379X (imprimé)

1703-8138 (numérique)

[Découvrir la revue](#)

Citer cet article

Ng, I. (1992). The Probability of Union Membership in the Private Sector. *Relations industrielles / Industrial Relations*, 47(1), 43–58. <https://doi.org/10.7202/050742ar>

Résumé de l'article

Même s'il est généralement admis que les lois du travail ont un impact sur le niveau de syndicalisation, il existe très peu d'études dont le but principal est d'analyser l'influence qu'exercent différentes dispositions législatives sur la probabilité de devenir syndiqué. Au contraire, les études qui ont été faites dans le passé se concentraient principalement sur l'impact exercé par des facteurs économiques, des caractéristiques d'ordre démographique ou encore des facteurs d'ordre perceptif concernant l'appartenance à un syndicat. Parmi les quelques études qui ont porté sur des dispositions légales, la méthodologie retenue a consisté en l'utilisation d'une seule variable prête-nom visant à cerner une loi du travail en particulier, telle la loi Landrum-Griffin (Roomkin et Juris 1978), la loi Wagner (Mancke 1971), et les lois concernant le droit au travail (right-to-work laws) (Hirsch 1980). La seule exception qui existe dans la littérature est l'étude réalisée par Hundley (1988), qui examine l'interaction existant entre, d'une part, le degré de probabilité pour un travailleur du secteur public de devenir membre d'un syndicat et, d'autre part, diverses dispositions législatives concernant la juridiction exclusive, la sécurité syndicale, l'obligation de négocier et les procédures de règlement des différends.

Le but de cette étude est d'élargir le champ des connaissances à partir des travaux de Hundley. Plus précisément, l'objectif principal est de tester de façon empirique l'effet de diverses dispositions législatives relatives au processus d'accréditation sur la probabilité d'appartenance à un syndicat dans le secteur privé. En plus des dispositions légales, certains facteurs d'ordre démographique et occupationnel ont aussi été considérés dans l'analyse.

Afin de tester ces relations, un échantillon aléatoire de 10% a été construit à partir du *Relevé des effectifs syndicaux*, ce qui représente 2781 employés du secteur privé. Les données du *Relevé des effectifs syndicaux* avaient été colligées en décembre 1984 dans le cadre du Programme des relevés spéciaux de Statistique Canada. Toutes les variables utilisées, à l'exception des variables de nature législative, sont fondées sur ce relevé. Les données concernant les variables législatives ont été tirées de renseignements fournis par Kumar et Dow (1983), Craig (1983), et Peach et Kuechle (1985). En raison du fait que la variable dépendante est de nature binaire, la procédure d'évaluation est utilisée afin d'établir la signification statistique des variables indépendantes.

Les résultats montrent que des huit variables légales considérées, cinq étaient statistiquement significatives, conformément aux hypothèses. La disposition législative autorisant les agents de négociation ayant bénéficié d'un soutien inférieur à 50% à faire une demande en accréditation augmente la probabilité d'une appartenance syndicale. De même, une disposition stipulant la représentation équitable pour les travailleurs tend à avoir un impact positif sur l'appartenance syndicale. Ce résultat, en particulier, corrobore la notion voulant que là où il existe une protection accordée aux salariés à l'égard de leur syndicat, il y aura une demande plus forte pour les services fournis par le syndicat et une augmentation correspondante de la probabilité d'une appartenance syndicale.

D'autre part, dans les juridictions où la définition du terme «employé» comporte plus d'exclusions et là où il est permis à des salariés de ne pas se joindre au syndicat pour des motifs d'ordre religieux, la probabilité de l'appartenance syndicale est moindre. De plus, si le syndicat a besoin de l'appui de la majorité des salariés au sein de l'unité de négociation afin d'être accrédité, la probabilité de l'appartenance syndicale sera moindre que s'il n'a besoin que de l'appui de la majorité des personnes qui participent au vote. Les résultats de l'étude indiquent aussi que la probabilité d'une appartenance syndicale n'est pas affectée par l'obligation pour la Commission d'accréditer le syndicat sans qu'un vote ne soit pris si l'appui dont bénéficie l'agent négociateur dépasse un certain pourcentage. De plus, la disposition obligeant la Commission à tenir un vote avant l'audition, s'il est prouvé que l'employeur s'est livré à des pratiques déloyales, n'a aucun effet sur la syndicalisation. Enfin, il n'y a, non plus, aucun lien entre la disposition interdisant les arrêts de travail à l'occasion des négociations pour une première convention collective et la probabilité d'accès à la syndicalisation.

Quant aux caractéristiques d'ordre démographique et occupationnel, les résultats de l'étude montrent que les personnes mariées sont plus enclines à se syndiquer alors que celles dont les conjoints travaillent le sont moins. L'âge est également relié de façon significative à l'appartenance syndicale, mais l'éducation et le sexe ne le sont pas. Les résultats indiquent aussi que la probabilité d'accès à la syndicalisation est plus élevée chez les cols-bleus et les travailleuses et les travailleurs à plein temps.

The Probability of Union Membership in the Private Sector

Ignace Ng

The purpose of this study is to empirically test for the effect of various labor provisions governing the certification process on the probability of union membership in the private sector.

It is generally agreed that one of the most important factors affecting the rapid growth of Canadian union membership in the post-war years and in the late sixties has been the change in labor legislation. For example, few would dispute that P.C. 1003 was largely responsible for the growth of industrial unions in the late forties and that the growth of public sector unionism in the late sixties and early seventies can be attributed to the enactment of the *Public Service Staff Relations Act* (PSSRA) in 1967. Given the importance of labor laws on union membership, it is somewhat disconcerting that in spite of the numerous studies on the determinants of union membership, very few have examined the impact of legislative provisions on unionization.

A review of published research on union membership reveals that time-series studies (Ashenfelter and Pencavel 1969; Bain and Elsheikh 1976; Fiorito 1982; Kumar and Dow 1986) have generally focused on economic factors. On the other hand, cross-sectional studies (Moore and Newman 1975; Schmidt and Strauss 1976; Lee 1978) have been mainly concerned with identifying the relationship between union membership and demographic characteristics. Some recent cross-sectional studies have however taken a more psychological bend, focusing instead on perceptual and attitudinal factors, such as job satisfaction, role ambiguity and perceived instrumentality of unions (Kochan 1979; Le Louarn 1980; Farber and Saks 1980).

Several studies in the literature did acknowledge the importance of legislative provisions on unionization. Attempts to control for their impact were made by including a dummy variable in the estimating equation to represent the *Landrum-Griffin Act* (Roomkin and Juris 1978), the *Wagner Act* (Mancke 1971), and right-to-work laws (Hirsch 1980). Others indirectly controlled for the legislative provisions by adding a dummy variable to reflect the political party in power or the existing political climate (Maki 1982; Ng 1987).

* NG, I., School of Business, University of Victoria, B.C., Canada.

From this brief survey of the literature,¹ it appears that a comprehensive study examining the impact of various legislative provisions on unionization is warranted. These provisions affect the ability of unions and management to convince the employees in the proposed bargaining unit to vote for or against unionization during the certification process. In a sense, then, these laws determine the supply of, and the demand for, union services. The interaction between demand and supply should in turn affect the probability of an individual worker becoming unionized.

To the best of my knowledge, the only study that has examined the relationship between the likelihood of an individual worker becoming a union member and legislative provisions is the study by Hundley (1988). The results of the study showed that the probability of becoming a union member is greatest in states where there are mandatory agency shop provisions and where impasses are to be resolved through arbitration instead of strikes. On the other hand, the probability is lowest in states where a right-to-work law is in effect.

The purpose of this paper is to expand upon the above analysis. Specifically, the objective of this study is to empirically test for the effect of various labor provisions governing the certification process on the probability of union membership in the private sector. The present study contributes to the unionization literature in several ways.

First, while the findings of Hundley indicate that labor policies have an impact on union membership, his conclusion applies only to public sector workers. Whether this conclusion holds for private sector workers has yet to be determined. Thus, by focusing on private sector legislation, the present study adds to our understanding of the impact of labor policies on unionization. It is also worth noting that Canada is the only place where data for this study can be gathered. Following the *Snider* case of 1925, Canadian workers in the private sector operate under one of the 11 labor codes in existence, depending on the type of industry they work for and their province of residence.² As such, there is enough variability in the Canadian private sector labor legislation to allow for an analysis of how different legislative provisions affect private sector unionization.

Another contribution of this study is that by including legislative provisions governing the certification process in the analysis, the present study is considering a set of variables that have received no attention in

1. From a comprehensive review of the union membership literature, the reader may wish to consider Fiorito and Greer (1982).

2. For employees in industries of an interprovincial nature (for example, airline and trucking), the relevant statute is the Canada Labour Code. For all other employees, they fall under the appropriate provincial Labour Code.

past research. Furthermore, the results may also have some practical implications. For example, if the results show that there is a positive relationship between union membership and the policy that does *not* require the union to have majority support before applying for certification, the trade union movement may therefore want to lobby for such a policy in provinces where it is not in effect.

Finally, the unit of analysis in this study is the individual worker. While individual data has been used in several U.S. union membership studies (Hundley 1988; Duncan and Leigh 1980; Lee 1978), there are no comparable published Canadian studies. The present study addresses this issue and as noted by Kumar and Dow (1986), micro level analysis is needed to "understand fully why and how unions grow" in Canada.

The next section presents a model of union membership, followed by a section on the data used. The empirical results are presented in the section after that, and the last section presents some concluding remarks.

MODEL SPECIFICATION

Following the model developed by Hundley (1988) which itself is based upon the notion that the worker demand for union services is a cost-benefit analysis (Hirsch and Addison 1986), three sets of factors are identified to explain variations in union membership among individuals. They include: (1) demographic characteristics, (2) occupational characteristics, and (3) the labor laws.

Demographic Characteristics

The effect of individual characteristics on the likelihood of an individual joining a union has received considerable attention in the union membership literature (Fiorito and Greer 1982; Hirsch and Addison 1986). The individual characteristics that are considered in this study include gender, age, education, marital status, family size and occupational status of spouse. Each of these variables is discussed below, explaining its interaction with the demand for union services.

With regard to the effect of gender on union membership status, the general consensus is that males have a greater propensity to join unions. The usual explanation is that because of their lower turnover rate, males are more likely to be around to reap the long-run benefits of unionization, thus increasing their willingness to become union

members. In a recent study, however, Fiorito and Greer (1986) found that "gender variations in unionism measures are due to confounding influences". That is, if gender differences in occupations, permanency of jobs, labor force attachments, and job satisfaction are controlled for, female workers are just as likely to join unions as their male counterparts.

The relationship between an individual's age and propensity to join a union is indeterminate. On one hand, because of the seniority provisions associated with unionism, older workers are more likely to benefit from unionism, thereby increasing their willingness to join a union. On the other hand, as pointed out by Hundley, the wage benefits resulting from unionization tend to be higher for younger workers than for older workers. It is therefore anticipated that the latter will be less willing to join a union. Because of these competing explanations, it is therefore not clear as to which direction age would affect the probability of union membership.

It is anticipated that education and the probability of union membership are inversely related. Since educated workers have greater individual bargaining power (Fiorito and Greer 1982), they are less likely to depend upon unions to secure higher wages and better fringe benefits from the employer. It therefore follows that educated workers would be less supportive of unions.

Finally, it is expected that those individuals who have greater family responsibilities may have more union inclinations because of the higher wages and job security associated with unionization.³ Thus, married workers and/or those with a large family are more likely to be favorable towards unions. On the other hand, those employees who have a spouse working full-time may see a lesser need for unionization, and are therefore less union-prone.

Occupational Characteristics

Because a worker's demand for union services is influenced by the nature of the job held, a number of studies (Duncan and Stafford 1980; Hundley 1988) have tried to capture this effect by incorporating several control variables representing different occupational characteristics in their estimating equations. Among those characteristics most often examined include the hazardous nature of the job, the physical demands of the job, and the extent to which the job involves repetitive actions. Unfortunately, the data used in this study do not allow for such fine distinctions. Thus, to control for the possible effects of the occupational

3. This is not to say that these factors are not important to workers without family responsibilities. The point however is that those with family responsibilities tend to place more emphasis on these factors than those without the responsibilities.

characteristics, a number of industry control dummies are added to the estimating equation. In addition, a variable representing blue-collar occupations is included in the analysis. The general consensus is that workers in blue-collar occupations are more likely to be pro-union than those in other occupations. The effect of part-time work is also controlled for. It is anticipated that employees who work part-time are less likely to become union members. To the extent that part-time workers have less attachment to the labor force, they may not perceive the long-run benefits associated with unionism and are therefore less likely to join a union.⁴

The Labor Laws

The rationale for the inclusion of labor policies in the estimating equation is that they affect union membership through their impact on either the supply of union services or the demand for union services by the workers. Using this dichotomy, a total of eight specific legislative provisions are considered in this study. These policies are by no means exhaustive and they are chosen mainly because prior research (Craig 1983; Wood and Kumar 1983; Peach and Kuechle 1985) have made it possible to conveniently ascertain where these policies are in force.

In all Canadian jurisdictions, the bargaining agent is required to show that it has some support from the proposed bargaining unit before the Labor Relations Board will consider its application for certification. The minimum percent support required ranges from a low of 25 percent (Saskatchewan) to a high of 50 percent (Alberta). Because of the costs associated with signing prospective union members, a low minimum required support will therefore signify a low cost of organizing. Trade unions in turn will be more willing to offer their services to the workers. Other things equal, this should translate into higher union membership.

In several jurisdictions, the Labor Relations Board is required to certify a bargaining agent without a certification vote if during the application stage, the bargaining agent shows that its support exceeds some pre-specified percentage. This particular provision therefore provides an opportunity for the bargaining agent to save on the campaigning and canvassing costs of certification elections. Thus, where such a provision is in effect, it is expected that the lower organizing cost will be associated with greater supply of union services and therefore, higher union membership.

4. It can also be argued that unions themselves are not willing to organize part-time workers. These workers cost more to organize because of their reluctance to collective action and at the same time, the union dues collected are likely to be less because the earnings of part-time workers are generally less than those of full-time employees.

When a certification election is held, majority status is usually based on either the proposed bargaining unit or those who took part in the vote.⁵ In those jurisdictions where the bargaining agent needs the support of the majority in the *bargaining unit* before it can become certified, the cost of organizing is higher than in those jurisdictions which require a majority of *those voting*. In the latter case, the union needs not be concerned with the fence-sitters (that is, those who are not likely to take part in the vote), whereas in the former case, the union needs to spend time and money to convince these workers to come forward and vote for the union. With the higher cost of organizing, it is therefore expected that union membership will be lower in jurisdictions where majority status is based upon the bargaining unit.

After a union has shown to have the required support to apply for certification, it can in some provinces choose between the *regular* certification process or the *prehearing vote* procedure as the method of union recognition. The default is the regular process. Thus, the union has to request for the prehearing vote procedure and the Labor Relations Board will generally approve the request if there is some evidence of unfair labor practices by the employer.

The major difference between the regular process and the prehearing procedure is that in the latter case, the certification vote is taken *before* management has had the chance to make representations to the Board and to the employees. The use of the prehearing vote is therefore more likely to generate an outcome favorable to union than the regular certification procedure. Thus, in those jurisdictions which make specific reference to the use of the prehearing vote, union membership should be higher. This relationship is however expected to be weak because in those jurisdictions which make no reference to prehearing vote procedure, the Labor Relations Board may still call for such a vote procedure.

In all jurisdictions, individuals performing managerial functions or employed in a confidential capacity in matters relating to labor relations are not allowed to join a union. In some jurisdictions, however, there are additional restrictions as to who can become a union member. For example, in Alberta, dentists, architects, lawyers and engineers employed in their professional capacity are also excluded from union coverage. Hence, where there are additional restrictions to union coverage, it is anticipated that union membership will be lower. Similarly, in those jurisdictions which allow individuals not to join a union on religious grounds, it is expected that union membership will be lower.

5. In some jurisdictions where majority status is based on those who voted, there is an added requirement that over 50 % of the bargaining unit took part in the vote.

In several jurisdictions, newly certified bargaining units are required to go through arbitration to resolve any impasse resulting from the negotiations of their first contract. From the workers' perspective, this particular provision reduces their perceived costs of union membership, since it prohibits workstoppages during first-contract negotiations. Other things equal, the demand for union services should be higher in these jurisdictions. Finally, it is expected that in those jurisdictions which have explicit provisions regarding the duty of fair representation by unions, workers are better protected against unfair and discriminatory treatment by their union. In a sense, this piece of legislation minimizes the individual's costs of joining a union and thus indirectly increases the demand for union services. Where this legislation is in effect, it is therefore expected that union membership will be higher than where it is not in force.

THE DATA

The primary data source for this study is the Survey of Union Membership (SUM). This survey was conducted in December 1984 under the Special Surveys Program of Statistics Canada.⁶ The data from the survey were available for sale in May 1986 through the Household Surveys Division of Statistics Canada, and the data set contained individual information regarding the respondent's demographic characteristics, employment status, union status, industry of work, occupation and province of residence. To generate the sample for this study, a 10 percent random sample, stratified by province, was drawn from the survey. From this initial sample, respondents with employment in the private sector were chosen, giving a final sample size of 2781 workers.

The dependent variable is a dummy variable which takes on the value of 1 if the individual worker is a union member and 0 otherwise. The information for this variable and those explanatory variables representing the demographic and occupational characteristics of the workers are obtained from SUM. With regard to the "labor laws" variables, the information is derived from Wood and Kumar (1983), Craig (1983), and Peach and Kuechle (1985). All the legislative variables are binary coded. They are set to 1 if they are relevant to the particular individual, and 0 otherwise. Table 1 defines the variables of this study. It also reports the

6. Additional information on the Survey of Union Membership can be obtained from the Special Surveys Group of Statistics Canada at (613) 990-9478.

sample means of the variables. Table 2 presents the legislative variables and the jurisdictions where these policies are in effect.⁷

TABLE 1
Variable Definitions and Means

Variable	Definition	Sample Means
UNION	Respondent is a union member	0.23
MALE	Respondent is male	0.55
A2534	Respondent is between 25 and 34 years old	0.29
A3544	Respondent is between 35 and 44 years old	0.22
A4554	Respondent is between 45 and 54 years old	0.14
AGE55	Respondent is over 55 years old	0.10
HS	Respondent has a high school diploma	0.55
SPS	Respondent has some post secondary education	0.10
DIP	Respondent has a post secondary diploma	0.13
DEG	Respondent has a university degree	0.09
MARRIED	Respondent is married	0.66
FSIZE	Respondent's family size	3.32
SPOUSEW	Respondent's spouse works full-time	0.41
PTIME	Respondent is a part-time employee	0.18
BLUE	Respondent is a blue-collar worker	0.33
MINES	Employed in mines, quarries or oil wells	0.03
MANUF	Employed in manufacturing	0.21
CONST	Employed in construction	0.07
TRANS	Employed in transport and communication	0.06
TRADE	Employed in finance, insurance and real estate	0.30
COMMU	Employed in community, business and personal services	0.31
APPLY	Minimum support required for certification application is less than 50%	0.68
AUTO	Boards are mandated to certify without a vote if support exceeds some prespecified %	0.67
MAJBAR	Majority status based upon bargaining unit	0.27
PRE	Boards are mandated to conduct a prehearing vote if the bargaining agent has a prespecified percentage of support	0.30
EXCL	Additional restrictions on the definition of an employee	0.46
EXEMPT	Refusal to join a union permitted on religious grounds	0.41
FIRST	Workstoppages prohibited during first contract negotiations	0.26
DUTY	Statute provides for the duty of fair representation	0.41

7. Although the legislative provisions examined were as of 1983, these provisions have been in effect for some time. For example, the provision requiring representation by unions has been in force in Ontario since 1968 (Craig, 1983).

TABLE 2
Labor Provisions by Province

	APPLY	AUTO	MAJBAR	PRE	EXCL	EXEMPT	FIRST	DUTY
British Columbia	X	X		X		X	X	X
Alberta		X			X			
Saskatchewan	X					X		
Manitoba						X	X	
Ontario	X	X		X	X	X		X
Québec	X	X	X				X	X
New Brunswick	X	X	X	X				
Nova Scotia	X	X			X			
Prince Edward Island	X				X			
Newfoundland	X		X					

Note: The construction of this table is based on the information provided in Craig (1983), Peach and Kuechle (1985), and Wood and Kumar (1983).

THE EMPIRICAL RESULTS

Since the dependent variable is binary coded, the logit analysis is used as the estimation procedure. The empirical results are presented in Table 3, with the first column reporting the estimated logit coefficients.⁸ The effect of a unit change in the independent variables on the probability of union membership, evaluated at the underlying probability levels of 0.23 and 0.5 respectively, is presented in the last two columns.⁹

Overall, most of the demographic variables perform as expected. Married individuals relative to single workers are more likely to become union members but those with spouses working full-time are less union-prone. The size of the family is however unrelated to membership status. This is also true for gender, thus corroborating with the findings of Fiorito and Greer (1986). The negative sign on the DEGR variable suggests that degree holders are less likely to join a union. This relationship is however

8. The specification presented in Table 3 was chosen because of its similarity to that of Hundley's model. A number of alternative specifications were tried and some of the explanatory variables did experience some changes in statistical significance.

9. For a discussion of how the estimated logit coefficients are converted into the figures reported in the last two columns of Table 3, please see Pindyck and Rubinfeld (1981).

not statistically significant. In fact, none of the educational variables are significant.

TABLE 3
Determinants of Union Status (Logit Results)
(N=2781)

Independent Variables	Logit Coefficient	T-Statistics	Change in P=0.23	Probability at P=.5
MALE	-.10	1.62	-.107	-.025
A2534	.35**	4.41	.068	.087
A3544	.29**	3.35	.055	.072
A4554	.28**	2.97	.053	.070
AGE55	.22**	1.99	.041	.055
HS	.05	0.64	.009	.012
SPS	.11	0.95	.020	.027
DIP	.06	0.56	.011	.015
DEGR	-.01	-0.06	-.002	-.003
MARRIED	.16**	2.17	.030	.040
FSIZE	-.01	-0.72	-.002	-.003
SPOUSW	-.17**	-2.80	-.029	-.042
PTIME	-.33**	-3.67	-.053	-.082
BLUE	.51**	7.29	.102	.125
MINES	.81**	3.19	.172	.192
MANUF	.97**	4.34	.211	.225
CONST	.64**	2.71	.132	.155
TRANS	1.08**	4.61	.238	.246
TRADE	.28	1.23	.053	.070
COMMU	.97**	4.27	.211	.225
APPLY	.25**	2.33	.047	.062
AUTO	-.11	-0.84	-.019	-.029
MAJBAR	-.45**	-2.29	-.070	-.111
PRE	.01	0.10	.002	.003
EXCL	-.40**	-2.90	-.063	-.099
EXEMPT	-.24*	-1.74	-.040	-.060
FIRST	.10	0.71	.017	.025
DUTY	.32**	3.20	.062	.079
Intercept	3.36**	13.29		

The positive estimated coefficients on all four age variables indicate that workers over 25 years old are more likely to be union members than those under the age of 25 (the control group). The size of the estimated coefficients suggests that as we move to higher age brackets, the probability of union membership declines. For example, at the underlying probability of 0.23, those between the age of 25 and 34 have a .027 higher probability of joining a union than those over 55 years old.

With regard to the occupational variables, the empirical results indicate that blue-collar workers are more union-prone whereas part-time employees are less likely to join a union. Both findings therefore support prior expectations. With the exception of one variable, all the industry controls are statistically significant. The estimated coefficients of the

control variables differ in size, thus indicative of the extent to which union membership varies across industries.

Turning to the variables of interest, the results show that of the eight legislative variables under consideration, five were statistically significant with the expected signs. Legal provisions allowing bargaining agents with less than 50 percent support to apply for certification increase the probability of union membership. In jurisdictions where such provisions are in force, the probability of union membership is .047 higher than in jurisdictions where a minimum 50 percent support is required, assuming an underlying probability level of 0.23.

The non-significance of the variable AUTO suggests that the probability of union membership is unaffected by whether or not the Board is *required* to certify without a vote if the support for the agent exceeds a certain percentage. This is not surprising because where such a provision is not in place (for example, Saskatchewan), it is still likely that the Board will certify the agent without a vote even though it is not required to do so. In other words, this particular legal provision may be redundant in terms of whether the Board will certify the agent without a vote.

The results show that if during a certification vote, the union needs the support of the majority in the bargaining unit before it is to be certified, there will be less union members than in the case where the union only needs the majority of those voting. This is consistent with the view that the cost of organizing is lower in the latter case than in the former case. At an underlying probability level of 0.23, the provision requiring majority status to be based upon the bargaining unit will reduce the probability of union membership by 0.07 to 0.16.

The estimated coefficient on the prehearing vote variable is not significantly different from zero. In other words, a legal provision requiring the Board to conduct a prehearing vote if there is evidence of unfair labor practices by the employer has no effect on union membership. A possible explanation for this finding is that the Board would have conducted the hearing even if it was not required to do so. Hence, turning this into a requirement has no impact on the frequency of prehearing votes and thus on union membership.

As expected, in jurisdictions where there are more exclusions in the definition of an employee, the probability of union membership is lower than in jurisdictions where there are no such exclusions. Similarly, the presence of a law allowing individuals not to join a union on religious grounds is also associated with a lower probability of union membership. The provision which prohibits workstoppages for first-contract negotiations is however unrelated to the probability of union membership. It can be argued that while such a provision reduces the

cost of joining a union for the workers, it can also reduce the ability of the union to secure better benefits for its members. This reduction in benefits may offset the reduction in costs, thus leaving the probability of union membership unaffected.

Lastly, the empirical results show that a statute providing fair representation for the workers has a positive impact on union members. At an underlying probability level of 0.23, such a provision increases the probability of union membership to 0.292. This result therefore supports the notion that where there is explicit protection for the workers against their unions, there will be a higher demand for union services and a corresponding increase in the probability of union membership.

CONCLUDING REMARKS

The purpose of this paper has been to examine the extent to which the probability of union membership is affected by demographic characteristics, occupational characteristics and labor policies. The results for the first two sets of factors show that married workers are more union-prone whereas those with working spouses are less likely to become union members. Age is also significantly related to the probability of union membership but education and gender are not. The results also indicate that blue-collar workers and full-time employees have a higher probability of becoming union members.

The most important finding of this paper however is that labor provisions do affect the probability of union membership. This result corroborates with that of Hundley even though the samples used differ in terms of sectors and national boundaries. Turning to the specific provisions, the results show that if the trade union movement wants to increase its membership, it should lobby for a reduction in the minimum support requirement during certification application, and for a majority status based upon those voting during certification elections. The trade union movement may also wish to support statutes protecting the workers against their own unions. It should however oppose legislation that narrows the definition of an employee, and that allow workers to be exempted from joining a union. Lastly, it appears that there is nothing to gain in terms of union membership if the labor movement is to lobby for provisions that would force the Board to certify without a vote and/or conduct a prehearing vote if some minimum support level is met.

Further research in this area is warranted for several reasons. First, the present study has examined only a small fraction of existing legal provisions in Canada. An examination of how other laws affect unionization is therefore desirable. For example, one line of research that could prove useful is to examine how strike laws affect unionization.

Second, given the relative scarcity of micro level studies in Canadian union membership, further studies would be needed before the main findings of the present study can be generalized. Third, further analysis of public policies can add to existing research in union membership and political parties by linking the latter to specific policies and thus indirectly to trade union membership.

REFERENCES

- ANTOS, J.R., M. CHANDLER and W. MELLOW. 1980. "Sex Differences in Union Membership". *Industrial and Labor Relations Review*, Vol. XXXIII, 162-169.
- ASHENFELTER, O. and J.-H. PENCAVEL. 1969. "American Trade Union Growth: 1900-1960". *Quarterly Journal of Economics*, Vol. LXXIII, 434-448.
- BAIN, G.S. and F. ELSHEIKH. 1976. "Trade Union Growth in Canada: A Comment". *Relations Industrielles*, Vol. 31, 482-490.
- CRAIG, A.W.J. 1983. *The System of Industrial Relations in Canada*. Scarborough, Ontario: Prentice-Hall Canada Inc.
- DUNCAN, G.M. and D.E. LEIGH. 1980. "Wage Determination in the Union and Nonunion Sectors: A Sample Selectivity Approach". *Industrial and Labor Relations Review*, Vol. XXXIV, 24-34.
- DUNCAN, G.J. and F.P. STAFFORD. 1980. "Do Union Members Receive Compensating Wage Differentials?" *American Economic Review*, Vol. CXX, 355-371.
- FARBER, H.S. and D.H. SAKS. 1980. "Why Workers Want Unions: The Role of Relative Wages and Job Characteristics". *Journal of Political Economy*, Vol. LXXXVIII, 349-369.
- FIORITO, J. 1982. "Models of Union Growth: A Test of the Bain-Elsheikh Model for the U.S.". *Industrial Relations*, Vol. 21, 123-127.
- FIORITO, J. and C.R. GREER. 1982. "Determinants of U.S. Unionism: Past Research and Future Needs". *Industrial Relations*, Vol. 21, 1-32.
- . 1986. "Gender Differences in Union Membership, Preferences and Beliefs". *Journal of Labor Research*, Vol. 7, 145-164.
- HIRSCH, B.T. 1980. "The Determinants of Unionization: An Analysis of Interarea Differences". *Industrial and Labor Relations Review*, Vol. XXXIII, 147-161.
- HIRSCH, B.T. and J.T. ADDISON. 1986. *The Economic Analysis of Unions: New Approaches and Evidence*. Boston: Allen & Unwin.
- HUNDLEY, G. 1988. "Who Joins Unions in the Public Sector? The Effects of Individual Characteristics and the Law". *Journal of Labor Research*, Vol. 9, 301-323.
- KOCHAN, T.A. 1979. "How American Workers View Labor Unions". *Monthly Labor Review*, Vol. CII, 23-31.
- KUMAR, P. and E. DOW. 1986. "Econometric Analysis of Union Membership Growth in Canada, 1935-1981". *Relations Industrielles*, Vol. 41, 236-253.

- LEE, L.F. 1978. "Unionism and Wage Rates: A Simultaneous Equations Model with Qualitative and Limited Dependent Variables". *International Economic Review*, Vol. XIX, 415-433.
- LE LOUARN, J.Y. 1980. "Predicting Union Vote from Worker Attitudes and Perceptions". *Proceedings of the Industrial Relations Research Association*, Madison, WI: IRRRA, 72-82.
- MAKI, D. 1982. "Political Parties and Trade Union Growth in Canada". *Relations Industrielles*, Vol. 37, 876-885.
- MANCKE, R.B. 1971. "American Trade Union Growth, 1900-1960: A Comment". *Quarterly Journal of Economics*, Vol. LXXXV, 187-193.
- MOORE, W.J. and R.J. NEWMAN. 1975. "On the Prospects for American Trade Union Growth: A Cross-Section Analysis". *Review of Economics and Statistics*, Vol. LVII, 435-445.
- NG, I. 1987. "The Economic and Political Determinants of Trade Union Growth in Selected OECD Countries". *Journal of Industrial Relations*, Vol. 29, 233-242.
- PEACH, A.D. and D. KUECHLE. 1985. *The Practice of Industrial Relations*. Ontario: McGraw-Hill Ryerson Ltd.
- PINDYCH, R.S. and D.L. RUBINFELD. 1981. *Econometric Models and Economic Forecasts*. New York: McGraw-Hill.
- ROOMKIN, M. and H.A. JURIS. 1978. "Unions in the Traditional Sectors: The Mid-Life Passage of the Labor Movement". *Proceedings of the Industrial Relations Research Association*, Madison, WI: IRRRA, 212-222.
- SCHMIDT, P. and R.P. STRAUSS. 1976. "The Effect of Unions on Earnings and Earnings on Unions: A Mixed Logit Approach". *International Economic Review*, Vol. XVII, 204-212.
- WOOD, W.D. and P. KUMAR, Eds. 1983. *The Current Industrial Relations Scene in Canada*. Kingston: Industrial Relations Centre, Queen's University.

La probabilité d'appartenance à un syndicat dans le secteur privé

Même s'il est généralement admis que les lois du travail ont un impact sur le niveau de syndicalisation, il existe très peu d'études dont le but principal est d'analyser l'influence qu'exercent différentes dispositions législatives sur la probabilité de devenir syndiqué. Au contraire, les études qui ont été faites dans le passé se concentraient principalement sur l'impact exercé par des facteurs économiques, des caractéristiques d'ordre démographique ou encore des facteurs d'ordre perceptif concernant l'appartenance à un syndicat. Parmi les quelques études qui ont porté sur des dispositions légales, la méthodologie retenue a consisté en l'utilisation d'une seule variable prête-nom visant à cerner une loi du travail en particulier, telle la loi Landrum-Griffin (Roomkin et Juris 1978), la loi Wagner (Mancke 1971), et les lois concernant le droit au travail (right-to-work laws) (Hirsch 1980). La seule exception qui existe dans la littérature est l'étude réalisée par Hundley (1988), qui examine l'interaction existant entre, d'une part, le degré de probabilité pour un travailleur du secteur

public de devenir membre d'un syndicat et, d'autre part, diverses dispositions législatives concernant la juridiction exclusive, la sécurité syndicale, l'obligation de négocier et les procédures de règlement des différends.

Le but de cette étude est d'élargir le champ des connaissances à partir des travaux de Hundley. Plus précisément, l'objectif principal est de tester de façon empirique l'effet de diverses dispositions législatives relatives au processus d'accréditation sur la probabilité d'appartenance à un syndicat dans le secteur privé. En plus des dispositions légales, certains facteurs d'ordre démographique et occupationnel ont aussi été considérés dans l'analyse.

Afin de tester ces relations, un échantillon aléatoire de 10% a été construit à partir du *Relevé des effectifs syndicaux*; ce qui représente 2781 employés du secteur privé. Les données du *Relevé des effectifs syndicaux* avaient été colligées en décembre 1984 dans le cadre du Programme des relevés spéciaux de Statistique Canada. Toutes les variables utilisées, à l'exception des variables de nature législative, sont fondées sur ce relevé. Les données concernant les variables législatives ont été tirées de renseignements fournis par Kumar et Dow (1983), Craig (1983), et Peach et Kuechle (1985). En raison du fait que la variable dépendante est de nature binaire, la procédure d'évaluation est utilisée afin d'établir la signification statistique des variables indépendantes.

Les résultats montrent que des huit variables légales considérées, cinq étaient statistiquement significatives, conformément aux hypothèses. La disposition législative autorisant les agents de négociation ayant bénéficié d'un soutien inférieur à 50% à faire une demande en accréditation augmente la probabilité d'une appartenance syndicale. De même, une disposition stipulant la représentation équitable pour les travailleurs tend à avoir un impact positif sur l'appartenance syndicale. Ce résultat, en particulier, corrobore la notion voulant que là où il existe une protection accordée aux salariés à l'égard de leur syndicat, il y aura une demande plus forte pour les services fournis par le syndicat et une augmentation correspondante de la probabilité d'une appartenance syndicale.

D'autre part, dans les juridictions où la définition du terme «employé» comporte plus d'exclusions et là où il est permis à des salariés de ne pas se joindre au syndicat pour des motifs d'ordre religieux, la probabilité de l'appartenance syndicale est moindre. De plus, si le syndicat a besoin de l'appui de la majorité des salariés au sein de l'unité de négociation afin d'être accrédité, la probabilité de l'appartenance syndicale sera moindre que s'il n'a besoin que de l'appui de la majorité des personnes qui participent au vote. Les résultats de l'étude indiquent aussi que la probabilité d'une appartenance syndicale n'est pas affectée par l'obligation pour la Commission d'accréditer le syndicat sans qu'un vote ne soit pris si l'appui dont bénéficie l'agent négociateur dépasse un certain pourcentage. De plus, la disposition obligeant la Commission à tenir un vote avant l'audition, s'il est prouvé que l'employeur s'est livré à des pratiques déloyales, n'a aucun effet sur la syndicalisation. Enfin, il n'y a, non plus, aucun lien entre la disposition interdisant les arrêts de travail à l'occasion des négociations pour une première convention collective et la probabilité d'accès à la syndicalisation.

Quant aux caractéristiques d'ordre démographique et occupationnel, les résultats de l'étude montrent que les personnes mariées sont plus enclines à se

syndiquer alors que celles dont les conjoints travaillent le sont moins. L'âge est également relié de façon significative à l'appartenance syndicale, mais l'éducation et le sexe ne le sont pas. Les résultats indiquent aussi que la probabilité d'accès à la syndicalisation est plus élevée chez les cols-bleus et les travailleuses et les travailleurs à plein temps.

JIR

THE JOURNAL OF INDUSTRIAL RELATIONS

The Journal of the Industrial Relations Society of Australia
Editor: Braham Dabscheck, The University of New South Wales

December 1991 — Volume 33 Number 4

Articles

John Niland

William A. Howard

Industrial Relations at Work: A Survey of the Survey

David H. Plowman

The Making of the Australian Workplace Industrial Relations Survey

Ron Callus

The Workplace and the New Institutionalism: Industrial Relations at Work

Margaret Gardner

Workplace Relations: A Review of the Australian Workplace Industrial Relations Findings

Michelle Brown and David Worland

The Workplace Survey and Management Structures

Stephen Deery and Peter Gahan

The Australian Workplace Industrial Relations Survey and Industrial Conflict

Gerard Griffin

The Australian Workplace Industrial Relations Survey and Trade Unionism

Bradon Ellem

Analyzing Workplace Industrial Relations: The Australian Workplace Industrial Relations Survey Typology

Jim Kitay

The Australian Flexibility Paradox

Roy Green and Duncan MacDonald

Beyond Size and Sector: A View from Overseas

Paul Marginson

Published quarterly. Subscriptions: Australia \$45, overseas \$55 (surface mail). Single issues: \$12 (including postage), overseas \$14 (surface mail). Prices quoted are in Australian dollars and remittances should be in Australian dollars. Order from the Business Manager, **Journal of Industrial Relations**, GPO Box 4479, Sydney, NSW 2001, Australia.