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Strike Settlement and Economic Activity : An Empirical Analysis Le règlement des grèves et l'activité économique

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Résumé de l'article

Cet article traite de l'efficacité des conflits de travail en regard des cycles économiques. Même si les formes de négociations ne permettent pas de prédire l'issue dans l'évolution d'une grève, plusieurs analystes en matière de relations professionnelles ont estimé que les règlements de grèves étaient davantage aux travailleurs en période d'expansion économique. D'autres analystes ont souligné que, proportionnellement, un plus grand nombre de grèves se réglaient favorablement aux travailleurs, lorsque celles-ci étaient nombreuses, touchaient un plus grand nombre de salariés et qu'elles étaient de courte durée. Toutefois, il n'y a guère eu d'études approfondies visant à connaître les causes d'efficacité d'une grève en se basant sur l'analyse des cycles économiques.

L'étude précédente est fondée sur une seule série de données, soit celles que publie chaque année le ministère canadien du Travail. Ces données, qui sont analysées ici pour la période de 1901 à 1953, fournissent des renseignements sur les causes et les résultats des grèves au Canada. Même s'il s'agit de critères plus ou moins bien tranchés, on a de fait rangé les grèves en trois catégories quant à leurs résultats: règlements surtout favorables aux travailleurs, règlements surtout favorables aux employeurs et règlements de compromis. De 1901 à 1953, on a estimé que 56.7 pour cent des grèves se sont terminées par un règlement favorable aux salariés ou par un compromis. On y voit aussi que les travailleurs ont davantage réussi à obtenir des gains quand l'enjeu portait sur les salaires.

Le degré de succès des grèves a été vérifié en regard de l'activité économique au moyen d'une analyse de régression linéaire en choisissant comme variables explicatives un indicateur de l'activité économique, le mouvement des prix, la fréquence, la durée et l'ampleur des grèves, une approximation factice (dumny) pour les deux périodes de guerre ainsi qu'une mesure linéaire. La variable dépendante consistait dans le nombre absolu des grèves et le pourcentage de celles où les salariés avaient obtenu des gains substantiels ou mitigés.

Le résultat de cette analyse indique que, de 1901 à 1953, les travailleurs ont gagné moins de grèves, aussi bien en chiffres absolus qu'en pourcentage, pendant lespériodes d'expansion économique. L'inflation leur a cependant permis d'accroître le nombre de leurs gains. Dans l'ensemble, on observe qu'assez peu de grèves se sont réglées substantiellement à l'avantage des salariés, mais que, dans beaucoup d'autres, ils ont obtenu des gains partiels. Rien ne montre que le type de grève non plus que les deux guerres n'aient eu de répercussions sur le degré d'efficacité des grèves.

Dans la dernière partie de son étude, l'auteur analyse quelques-unes des raisons pour lesquelles les travailleurs déclarent souvent la grève lorsque leurs chances de succès sont limitées. L'explication la plus plausible en est que l'on admet l'existence de différences de pouvoir de marchandage parmi les syndicats et aussi le fait que les salariés négocient davantage en faveur des structures de salaire plutôt qu'en faveur des niveaux de salaires.

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Strike Settlement and Economic Activity

An Empirical Analysis

R. Swidinsky

This paper explores the relationship between the outcome of strike and the level of economic activity. The findings are based on Canadian data for the period 1901-1953.

In this paper we explore the relation between the outcome of strikes and the level of economic activity. Several writers, but particularly Griffen (1939) and Rees (1953), have argued that strike settlements have in general favoured workers during upswings in the business cycle.¹ Our findings based on Canadian data for the period 1901-1953 tend, however, to contradict this view of union strike success. Similarly, our findings offer little support to the arguments by Knowles (1952) and Hicks (1968) that a higher proportion of worker victories or compromises occurred when strikes were more numerous, large and short. Unfortunately, because of the discontinuity of our data in 1954 we cannot be certain that our conclusions also hold for the 1960's and 1970's.

STRIKE SUCCESS AND ECONOMIC ACTIVITY

The conventional explanations of the cyclical variance in industrial conflict are generally faced with problems of theoretical indeterminacy.

Not only are they ambiguous as to when conflict occurs, they are equally incapable of predicting the outcome of the strike process. The

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¹ According to Griffen (1939, p. 90) there was a decline in the number of successful strikes in the trough years 1881, 1894, 1897, 1900, 1904, 1912, 1914, 1921 and 1927. Rees (1953, pp. 378-379) observes additional declines in 1930 and 1938, but he also observes an increase from 1930 to 1932. Unfortunately, neither Rees nor Griffen employ multivariate analysis to test for the cyclical sensitivity of strike success.

general thrust of the theoretical arguments is that periods of prosperity present labour with a tactical advantage in the bargaining process. The monetary loss facing striking workers is mitigated in periods of high employment by the increased capacity of unions to provide strike pay and by the growing availability of temporary employment opportunities. Also, in a tight labour market, the wage losses that arise from a strike are readily made up through the higher take-home pay resulting from increased wages and overtime pay once the strike is concluded. Hence, periods of prosperity are likely to result in inflated wage claims and a more frequent resort to the strike threat by workers.

The ambiguity of most bargaining models rests with the anticipated reaction of employers. Rees (1953) takes the position that, given the enhanced profits firms are likely to experience in a rising market, management may well estimate the opportunity cost of a strike, which is measured as foregone profits minus the discounted value of any expected decrease in wage costs, to be excessive. The positive correlation between the opportunity cost of disputes and economic activity is likely to cause management to yield more often to labour's demands in periods of prosperity. Hence, as Sapsford (1975) points out, despite a cyclical increase in the frequency of strike threats, strike frequency may actually decrease.

Vanderkamp (1970) argues, however, that the opportunity cost of a dispute to the firm is lowest in an expansionary economy. He reasons that: (1) output reduction produces a greater relative reduction in profits at business cycle troughs because of the existence of fixed costs; and (2) full capacity in the industry during peak business activity reduces the likelihood of a permanent loss of sales to other firms. If so, employer resistance to labour's demands is likely to be countercyclical, and the increased frequency of strike threats in an expanding economy is likely to produce an increased frequency of strikes as well.

The analyses of cyclical strike frequency by Ashenfelter and Johnson (1969) for the U.S., Pencavel (1970) and Sapsford (1975) for the U.K. and Vanderkamp (1970) for Canada support the latter of these competing hypotheses. The mutual hardening of positions held by labour and management during a cyclical expansion increases the number of wage negotiations proceeding to the strike stage. What is less clear, however, is whether the mutual hardening of attitudes yields an advantage to either labour or management.

A priori, there is no reason why either party to the dispute should gain the advantage. On the one hand, striking workers have additional resources to withstand a strike of considerably longer duration, but as Levitt (1953) points out, they may also have additional financial obligations. During prolonged prosperity, workers tend to accumulate sizeable long-term financial commitments which would be jeopardized by a strike. But it is just these financial commitments that may compel workers to hold firm in their wage demands. In effect, the impact of an economic expansion on union behavior may be to shift Hicks' (1968, p. 143) union's resistance curve upwards and to make it more inelastic with respect to time.

On the other hand, the wage an employer would be willing to pay if unconstrained by trade union pressure is also likely to increase in an expansionary economy. Moreover, if the firm's opportunity cost of a strike diminishes with economic activity, the employer's concession curve will similarly become more inelastic with respect to strike duration. Thus, whether the final wage settlement, which is determined by the intersection of the union's resistance and employer's concession curves, is closer to the union's wage demands in an expansionary or a recessionary economy remains ambiguous. The results will clearly depend on the relative shifts of the concession and resistance curves and these shifts cannot be predicted by existing bargaining models.

In the remainder of this paper we will attempt to determine whether strike results are indeed sensitive to economic conditions. Presumably, the aggressive stance adopted by labour during periods of prosperity reflects to some extent rising expectations of success, but it would be interesting to determine whether these expectations are, in fact, realized. The following section describes the historical set of data employed to test for the relation between strike results and economic performance. Section III provides the empirical analysis of the aggregate data and Section IV provides some disaggregated results. In the final section, we attempt to reconcile the apparent inconsistency between strike frequency and strike success.

STRIKE SUCCESS DATA

From 1901 to 1953, the Canadian Department of Labour published annually information on the major issues, the duration, the magnitude and the results of strikes.² This information was compiled from detailed

² Canada Department of Labour, *The Labour Gazette*, Ottawa, monthly. Publication of data on strike results was discontinued in 1954.

reports submitted by the representatives of employees and employers involved in a dispute. While this method of data gathering poses no major problems for the more factual information, it is less accurate in identifying the causes and results of strikes. Not only is there the possibility of inaccuracy at the reporting stage, there is also the possibility of error at the interpreting stage. Furthermore, the classification of strike results poses several conceptual problems. (1) Should the appropriate criterion for judging strike success be based on the differential between the settlement and the union's final pre-strike demands, the employer's final pre-strike offers, or on the profitability of the strike as measured by wage gains and income losses? (2) Should strike success be assessed only in terms of the workers' expressed demands? Workers may, for example, strike for increased wages in order to head off a wage reduction, or they may inflate their demands to improve their bargaining position. Finally, (3) should the possible long-run consequences of a strike, such as more rapid mechanization or the eventual migration of the struck firm, be included in judging the results of strikes?

The general criterion for categorizing the outcome of strikes is based on the view that strikes in which workers gained the major part of their expressed pre-strike demands were deemed to have been resolved in favour of employees. Strikes in which workers failed to gain the major part of their demands were deemed to have been resolved in favour of employers, and strikes settled in some intermediate range were classified as compromises.³ A fourth category included strikes that were unsettled or not reported, or where the outcome was indefinite, but this category seldom included more than 10 percent of total strikes.

Table 1 presents the results of all strikes summarized by decade for the period 1901-1953. In this 53 year period, only 27 percent of all strikes were resolved in favour of workers. There are, however, strong grounds for treating compromise settlements as outcomes favourable to workers. In many instances, a compromise represents material concessions by the employer in response to the pressures of a strike. If we accept the view that a compromise settlement is a

³ The exact criterion that was used to classify strike results is not known, but one can conceivably have chosen some variant of the following system for classification. A settlement where a union won at least 66 percent of its demands is a substantial union victory; where it won less than 33 percent, a substantial employer victory; where it won between 33 and 66 percent, a compromise. Nonwage demands can be converted into monetary units and treated similarly.

TABLE I

Percentage Distribution of the Outcome of Strikes: 1901-1953

In Favour	1901-	1910-	1920-	1930-	1940-	1950-	1901-
of	1909	1919	1929	1939	1949	1953	1953
Workers	28.7	30.8	23.1	31.7	25.6	19.6	27.0
Compromise	24.4	29.1	23.9	32.8	31.3	37.1	29.7
Workers and							
Compromise	53.1	59.9	47.0	64.5	56.9	56.7	56.7
Employers	33.2	31.4	42.0	30.1	35.2	31.0	33.9
Indefinite	13.7	8.7	11.0	5.4	7.9	12.2	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Number							
of Strikes	1,102	1,506	1,176	1,410	2,306	816	8,316

SOURCE: Canada Department of Labour, The Labour Gazette, Ottawa, monthly.

partial victory for workers (or a partial defeat for management), more than half of all strikes, 56.7 percent, were at least partially successful. By way of comparison, an estimated 60.4 percent of all strikes in the U.S. from 1901 to 1937 were resolved at least partially in favour of workers.⁴ However, since the decision criterion was very likely different in the two countries, this comparison may be somewhat misleading.

The disaggregated data in Table II shows that workers were remarkably successful in strikes involving wage increases. Between 1912 and 1953, workers were at least partially victorious in two-thirds of all disputes over wage increases and over wage increases and other changes. Strikes against wage reductions proved somewhat less successful, but this is understandable given the economic climate in which wage reductions generally were initiated. Workers were equally unsuccessful in strikes involving union principles. Least successful, however, were strikes over hours and working conditions. Only 44.5 percent of the 907 strikes over such issues were resolved either substantially or partially in favour of workers.

It thus appears that strikes over wage increases are easier to win or that workers attach far greater significance to the resolution of strikes where wage increases are at issue. This is, perhaps, because

⁴ See Griffen (1939, p. 92). Griffen is of the opinion that the number of failures between 1880 and 1937 was depressingly high.

workers rank wages as the single most important factor in their employment contract, or because they consider nonwage factors as largely within the jurisdiction of management decision making. Equally plausible is the argument that workers can readily calculate the net benefits of a strike over wage increases but not over nonwage issues. For management, however, the implications for profits of changes in hours and other conditions of work are as readily apparent as the implications of changes in wages.

REGRESSION ANALYSIS OF STRIKE SUCCESS

The relation between strike settlement and economic activity is explored through the following basic linear regression model:

 $\mathbf{R}_{t} = \mathbf{a} + \mathbf{b} \mathbf{Y}_{t} + \mathbf{c} \triangle \mathbf{P}_{t} + \mathbf{d} \mathbf{S}_{t} + \mathbf{e} \mathbf{D}_{t} + \mathbf{f} \mathbf{M}_{t} + \mathbf{g} \mathbf{W} \mathbf{D} + \mathbf{h} \mathbf{T}$

- where R = a measure of union strike success specified alternatively as
 - 1) the number of strikes settled in favour of workers (V);
 - 2) the number of strikes settled in favour of workers or in a compromise (VC);
 - the proportion of strikes settled in favour of workers (V/S);
 - 4) the proportion of strikes settled in favour of workers or in a compromise (VC/S).
 - Y = an economic activity variable defined as constant dollar GNP per capita as a percent of trend.
 - $\triangle P$ = the percentage change in the consumer price index defined as 100 (P-P₋₁)/P₋₁.
 - S = the total number of strikes for which a definite outcome was recorded.
 - D = the average duration of strikes defined as the ratio of timeloss in mandays to the number of workers involved in strikes.
 - M = the average size of strikes defined as the average number of workers involved per strike.
 - WD = a wartime dummy variable set equal to unity for the years 1914-1918 and 1940-1945 and zero otherwise.
 - T = a linear trend variable set at unity in 1901.
 - t = a time period subscript.

TABLE 2

Percentage Distribution of the Outcome of Strikes by Cause: 1912-1953

Major Cause	Total Number				
	of strikes	Workers	Compromise	Employers	Indefinite
For Wage Increases	1,784	31.2	32.3	30.3	6.2
For Wage Increase					
and Other Changes	1,674	29.3	40.1	15.1	15.5
Against Wage					
Reductions	406	23.4	27.3	41.1	8.2
Hours and Working					
Conditions	907	23.9	20.6	48.5	7.0
Unionism and Other					
Issues	2,229	31.4	20.3	39.0	9.3

SOURCE: Canada Department of Labour, The Labour Gazette, Ottawa, monthly.

The economic activity, price change, wartime dummy and time trend variables have been commonly included as explanators of strike activity and their presence in our strike success model is based on similar considerations. The unemployment rate is perhaps the more adequate indicator of cyclical economic conditions, but because a reliable historical series on unemployment is not available for Canada, the deviation from trend of GNP per capita employed previously by Vanderkamp (1970) is used as a proxy measure. The ΔP variable is generally assumed to take into account the special forces of price inflation on strike activity and, presumably, strike success. Not only will workers strike more frequently but they will also be more determined to win when inflation erodes their real incomes. Positive Y and ΔP coefficients in all specifications of the model would, of course, reveal that striking workers have a higher success rate during periods of economic expansion and price inflation.

The wartime dummy is included in the model in order to capture the special circumstances that prevailed during 1914-1918 and 1940-1945. Given the emphasis on production, employers were pressured not only to minimize the incidence of strikes but also to settle whatever strikes resulted without delay. One would thus expect a sharp rise in relative strike success during the war periods. The sign of the trend coefficient cannot be predicted with certainty, but given the sharp increase in strikes in the last three decades, it is very likely to be positive. One would not expect a three-fold increase in strike frequency in the face of a secular decline in the rate of worker success.

The remaining explanatory variables are designed to capture the impact of the «shape» of industrial conflict on its effectiveness.⁵ Hicks (1968, p. 145) has argued that lengthy strikes generally result in employer victories, and Knowles (1952, pp. 240-259) has similarly conconcluded from the British strike experience that unions were victorious more frequently when strikes were numerous, involved many workers and were of short duration. Our model attempts to capture the shape of industrial conflict by the S, M and D variables, but it should be recognized that these elements of industrial conflict may be sensitive to economic conditions. The S coefficient is expected to be positive in all model specifications, although the positive relation between strike frequency and absolute strike success can rest on more obvious grounds. The M coefficient is expected to be positive and the D coefficient negative.

The estimates presented in Table III are based on aggregate annual data for the period 1901-1953.⁶ The overall explanatory powers of the four models are mixed, with the proportionate models being relatively weak in explaining the variance in strike success. This is not unexpected. Whereas most of the explanatory powers of equations (1) and (2) are contained in the strikes variable, the explanatory powers of equations (3) and (4) rest primarily with the remaining variables, and these variables alone cannot fully explain the variance in relative strike success.

All four equations show that union strike success tended to decline as economic activity accelerated. The estimated coefficients in equations (2) and (4), for example, suggest that if real per capita GNP rose by 5 percent above trend workers would lose two additional strikes, or an additional 1.3 percent of all strikes in which they were engaged. By contrast, price inflation appears to have given unions strong leverage in overcoming management resistance to their demands. This result suggests that during inflationary periods, unions are less hesitant in making demands which lead to strike situations because they realize that the probability of winning such strikes is considerably higher.

⁵ There has been a growing interest among industrial relations analysts, particularly sociologists, in the various dimensions, or shape, of industrial conflict. See Britt and Galle (1974).

⁶ Data on strike success and strike shape are gathered from Canada Department of Labour, *Labour Gazette*, Ottawa, monthly. Data on Y and $\triangle P$ are taken from Vanderkamp (1970, Appendix).

Our results do not support the hypothesis that the environment prevailing during the war years made it easier for workers to win strikes. The explanation may lie in the fact that in a war environment strikers generally lack the support of public opinion. The trend coefficients show that the number and proportion of strikes substantially won by workers had declined with time, but that the number and proportion of strikes at least partially won by workers had increased. This implies an increased effectiveness of the strike, a trend that has been inferred by Lipsky and Farber (1976, p. 392) from the observed changes in strike frequency, size and duration. Assuming that the estimated trend coefficient is stable, our calculations suggest that workers would have at least partially won 16 percent more strikes in 1974 than in 1901. One would suspect, however, given the technological changes and the spread of unionism, especially into the public sector since 1950, that the trend towards compromise settlements has been accelerating in the last two decades. If this is indeed so, it would provide at least a partial explanation for the sharp upward trend in strikes in Canada since the early 1960's.

The inference that strike effectiveness has been increasing over time rests on the hypothesized impact of the shape of industrial conflict on the ability of workers to win strikes. However, our results fail to support any of the hypothesized relationships between the strike shape variables and strike effectiveness. Strike frequency, as expected, exerts a positive effect on absolute strike success, but it has no significant effect on relative strike success. Neither the size nor duration of strike variables comes through significantly in any of the equations. Furthermore, the signs of the D and M coefficients are not consistent with expectations in several equations.

SOME DISAGGREGATED RESULTS

In this section we derive estimates of the union success equation for strikes disaggregated into wage and nonwage issues.⁷ The regression result that aggregate union strike success is correlated negatively with economic performance may be attributed to some statistical peculiarity, such as the mix of strike issues. For example, if there is a cyclical

⁷ All strikes in which wage increase was at least one of the issues involved are included in the wage category. Strikes over hours, working conditions, unionism and other issues are included in the non-wage category. Strikes over wage reductions are omitted.

TABLE 3

Regression Equations for Strike Success

Équation	(I)	(2)	(3)	(4)
Dependent	. ,			
Variable	V	VC	V/S	VC/S
Constant	48.71*	33.19*	66.46*	80.84*
	(2.53)	(2.57)	(5.98)	(8.88)
Yt	-0.42*	-0.38*	-0.29*	-0.23*
	(2.14)	(2.93)	(2.54)	(2.57)
$\triangle Pt$	0.89*	1.21*	0.72*	0.90*
	(1.99)	(4.04)	(2.79)	(4.26)
St	0.35*	0.59*	0.01	-0.01
	(8.35)	(21.12)	(0.23)	(0.34)
Dt	-0.22	0.06	-0.19	0.02
	(0.98)	(0.37)	(1.47)	(0.23)
Mt	0.03	0.01	0.01	-0.01
	(1.40)	(0.18)	(1.03)	(0.89)
WD	-0.48	-3.19	1.18	0.03
	(0.08)	(0.79)	(0.34)	(0.09)
Т	0.70*	0.22	-0.35*	0.22*
	(3.33)	(1.55)	(2.91)	(2.26)
R ²	75.9	95.8	33.8	41.0
Durbin-Watson	1.56+	1.50 +	1.22	1.57 +

* Significant by the criterion of a t-value (entered in parenthesis) greater than 1.96.

Durbin-Watson test for serial correlation is inconclusive at the 5 percent level of significance. Test reveals positive serial correlation in equation (3).

increase in those categories of strikes that have a lower rate of success, the proportion of total strikes won may well demonstrate a countercyclical pattern even if each category has a cyclical response.

The proportions of strikes over wage and nonwage issues (VCW/SW and VCN/SN, respectively) that were at least partly successful were regressed on the dependent variables included in the aggregate equations for the period 1913-1953.⁸ The results, reported as equations (5) and (6), do not alter the basic conclusions derived from the aggregate equations, but there are several significant differences.

(5)
$$VCW/SW_t = 75.91 - 0.17 Y_t + 1.16 \Delta P_t - 0.05 SW_t + 0.19 D_t$$

(7.65) (1.57) (4.08) (1.23) (1.42)
+ 0.01 M_t - 1.47 WD + 0.30 T R² = 43.4
(0.46) (0.45) (2.40) DW = 1.62

⁸ Disaggregated data is available only from 1913 to 1953.

(6) $VCN/SN_t = 94.25 - 0.41 Y_t + 0.17 \Delta P_t + 0.01 SN_t - 0.08 D_t$ (6.55) (2.50) (0.52) (1.05) (0.38) - 0.02 M_t + 3.52 WD - 0.003 T R² = 27.1 (0.89) (0.72) (0.02) DW = 1.51

First, the disaggregated results are expectedly weaker. The economic activity indicator remains negative but it is no longer significant in strikes over wage increases. It would thus appear that the aggregate results must be due to the proportionately greater loss of strikes over hours, working conditions and union issues in the upswing of the business cycle. Presumably, unions are more selective in the timing of strikes for higher wages, or more determined to win these strikes.

Price inflation, by contrast, had a sizeable positive impact on the success of wage related strikes but not on the success of nonwage strikes. This finding is predictable. Price inflation, with its incumbent erosion of real wages, strengthens workers' arguments for wage increases and weakens management's arguments against such adjustments, especially if profit levels are also inflated. The rival positions on working conditions and union issues would appear to depend far less on the pace of price changes.

The variables that delineate the shape of industrial conflict as well as the wartime dummy remain insignificant in the disaggregated equations. However, the upward trend in union strike success still shows up, but only in strikes involving wage increase. Unions appear not to have increased their share of nonwage strikes won over time.

STRIKE FREQUENCY AND STRIKE SUCCESS

Given the counter-cyclical behavior of worker strike success, how can one explain the observed cyclical swings in strike frequency? Presumably, unions would wish to avoid strikes during periods when the probability of success was relatively low, but this appears not to have been the case. There are several plausible explanations for this apparent inconsistency.

One possibility is that expressed wage demands do not accurately reflect the target wages striking workers have in mind. There may be a tendency for workers to inflate their wage claims on the assumption that the resulting compromise settlement will be near the target wage.⁹ Thus, a settlement that appears to be a defeat for workers may, in fact, be a sizeable victory. But this argument is not entirely persuasive. For one, if such a strategy is successful, why would it not be employed during recessionary periods as well?

An alternative argument along similar lines is that in a cyclical expansion union expectations increase more rapidly than management's, partly because workers operate on a shorter time horizon. The process of compromise implies that although wage settlements are increasing they are doing so at a slower rate than wage demands. Thus the widening gap between expressed demands and wage settlements gives the impression of a union defeat in spite of the fact that there is also a widening gap between the settlement and management's final prestrike offer. The appropriate measure of success is perhaps the latter gap, but our data, unfortunately, does not yield this kind of information.

A somewhat different but equally plausible explanation of the conflicting cyclical behavior of strike frequency and worker strike success is contained in the assumption that employers initiate strikes. According to Ashenfelter and Johnson (1969, p. 37) an employer has the options of giving in to the union's final demand or taking a strike. Clearly, a profit maximizing employer will opt for the alternative that yields higher profits, and his calculations of profits will involve the initial benefits sought by the union and the decay rate of the union's demands during the course of the strike.

In a rising market, the union's initial demands and the decay rate of these demands makes the taking of a strike the more profitable alternative. But as Vanderkamp (1970, p. 220) points out, this approach fails to come to grips with the familiar problem that if the information necessary for making these profit calculations is available to either or both sides in the dispute, the need for a strike disappears. Clearly, if unions gained access to such information, their wage demands would stop just short of the point where strike-taking became the more profitable alternative.

Perhaps the most fruitful approach in reconciling the observed behavior of strike frequency and strike success is to assume that workers bargain primarily over wage and benefit structures. In a rising market, some workers, given the nature of their product and labour

⁹ Comay, Melnik and Subotnik (1974) provide some interesting insights into the process of reaching a compromise settlement.

markets, can increase their bargaining power in relation to other groups of employees. The more powerful unions proceed to extract concessions from their employers to the limit of their bargaining power, and, in so doing, disrupt the previously accepted structure of wages. Other unions will attempt to preserve the wage structure by making compensating demands but, given the relative weakness of their bargaining power, they will be forced into a strike situation. Many employers would find it more profitable to accept a strike rather than to yield to the demands of relatively weaker unions. Furthermore, the bargaining position of these unions implies that a smaller proportion of strikes will be settled in favour of workers. Also, unorganized workers, concerned with their deteriorating position, will attempt, perhaps prematurely, to form unions and to make wage and other demands on their employers.¹⁰ These initial efforts are likely to encounter strong employer reaction and the ensuing strikes are likely to result in a considerably lower rate of worker success.

To make the model consistent, one has to assume that in a depressed market, bargaining power becomes less dispersed so that even the more powerful unions cannot disrupt seriously the structure of wages and other benefits. This approach is probably the direction in which bargaining theory out to proceed, but the development of the appropriate model is beyond the intended scope of this paper.

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¹⁰ There is some evidence to show that trade union growth is cyclical. See Ashenfelter and Pencavel (1969).

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Le règlement des grèves et l'activité économique

Cet article traite de l'efficacité des conflits de travail en regard des cycles économiques. Même si les formes de négociations ne permettent pas de prédire l'issue dans l'évolution d'une grève, plusieurs analystes en matière de relations professionnelles ont estimé que les règlements de grèves étaient davantage aux travailleurs en période d'expansion économique. D'autres analystes ont souligné que, proportionnellement, un plus grand nombre de grèves se réglaient favorablement aux travailleurs, lorsque cellesci étaient nombreuses, touchaient un plus grand nombre de salariés et qu'elles étaient de courte durée. Toutefois, il n'y a guère eu d'études approfondies visant à connaître les causes d'efficacité d'une grève en se basant sur l'analyse des cycles économiques.

L'étude précédente est fondée sur une seule série de données, soit celles que publie chaque année le ministère canadien du Travail. Ces données, qui sont analysées ici pour la période de 1901 à 1953, fournissent des renseignements sur les causes et les résultats des grèves au Canada. Même s'il s'agit de critères plus ou moins bien tranchés, on a de fait rangé les grèves en trois catégories quant à leurs résultats: règlements surtout favorables aux travailleurs, règlements surtout favorables aux employeurs et règlements de compromis. De 1901 à 1953, on a estimé que 56.7 pour cent des grèves se sont terminées par un règlement favorable aux salariés ou par un compromis. On y voit aussi que les travailleurs ont davantage réussi à obtenir des gains quand l'enjeu portait sur les salaires.

Le degré de succès des grèves a été vérifié en regard de l'activité économique au moyen d'une analyse de régression linéaire en choississant comme variables explicatives un indicateur de l'activité économique, le mouvement des prix, la fréquence, la durée et l'ampleur des grèves, une approximation factice (dumny) pour les deux périodes de guerre ainsi qu'une mesure linéaire. La variable dépendante consistait dans le nombre absolu des grèves et le pourcentage de celles où les salariés avaient obtenu des gains substantiels ou mitigés.

Le résultat de cette analyse indique que, de 1901 à 1953, les travailleurs ont gagné moins de grèves, aussi bien en chiffres absolus qu'en pourcentage, pendant les

périodes d'expansion économique. L'inflation leur a cependant permis d'accroître le nombre de leurs gains. Dans l'ensemble, on observe qu'assez peu de grèves se sont réglées substantiellement à l'avantage des salariés, mais que, dans beaucoup d'autres, ils ont obtenu des gains partiels. Rien ne montre que le type de grève non plus que les deux guerres n'aient eu de répercussions sur le degré d'efficacité des grèves.

Dans la dernière partie de son étude, l'auteur analyse quelques-unes des raisons pour lesquelles les travailleurs déclarent souvent la grève lorsque leurs chances de succès sont limitées. L'explication la plus plausible en est que l'on admet l'existence de différences de pouvoir de marchandage parmi les syndicats et aussi le fait que les salariés négocient davantage en faveur des structures de salaire plutôt qu'en faveur des niveaux de salaires.

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