



Title:

The Impact of Labor Disputes on the Fabric of French Society From 1950 to the Mid-80's0

Author:

Borrel, Monique, University of California, Berkeley

Publication Date:

10-01-1992

Series:

Working Paper Series

Publication Info:

Institute for Research on Labor and Employment

Permalink:

<http://escholarship.org/uc/item/3mq3b9wt>

Keywords:

Borrel, labor disputes, France

Abstract:

The theoretical and empirical model presented here aims to demonstrate that strikes played a key role in social and political changes that reshaped French society from 1950 to the mid-80's. This model is based on the differentiation between 3 categories of strikes: localized disputes, strike waves and generalized disputes, and national action days, whose determinants and impact on the fabric of French society were significantly different.

Copyright Information:

All rights reserved unless otherwise indicated. Contact the author or original publisher for any necessary permissions. eScholarship is not the copyright owner for deposited works. Learn more at http://www.escholarship.org/help_copyright.html#reuse



THE IMPACT OF LABOR DISPUTES ON THE FABRIC
OF FRENCH SOCIETY FROM 1950 TO THE MID-80's

by

MONIQUE BORREL

October 1992

The model of strikes presented in this working paper arose from my personal analyses of the French social and political situation that I conducted from 1973 to 1984, and published in a quarterly journal, La Conjoncture Sociale Française. These analyses provided the basis on which I developed the theoretical framework of French strikes.

My stay at the Institute of Industrial Relations was invaluable, in that it allowed me to achieve two objectives:

- . To assess to what extent the French model of strikes is different from the economic and political models developed mainly by American authors;

- . To carry out a comprehensive empirical analysis, and build an econometric model to support my theory of French strikes.

I would like to thank the Institute of Industrial Relations for its hospitality and wonderful working conditions, including office space, computer facilities and the library.

I am also very grateful to anonymous referees who reviewed a first version of my paper for helpful comments.

The theoretical and empirical model presented here aims to demonstrate that strikes played a key role in social and political changes that reshaped French society from 1950 to the mid-80's. This model is based on the differentiation between 3 categories of strikes: localized disputes, strike waves and generalized disputes, and national action days, whose determinants and impact on the fabric of French society were significantly different.

THE TWO MAIN EXPLANATORY MODELS OF STRIKES

Most of the research on strikes has developed within the setting of two main explanatory models: the economic model and the organizational/political model.

According to the economic model (1) strike activity is related to the business cycle. Workers engage in strike actions to secure a more favorable share of resources by putting pressure on markets mechanisms (2)

In the political model (3) strikes are positively related to workers' organizational capacity, and negatively related to their political position in national power structure (4).

Shorter and Tilly showed that the rise of labor organizations in France increased the average size of strikes. In addition, "unions increased the success rate of strikes by timing them during periods of prosperity" (Franzosi, 1989, p 355)

Korpi and Shalev showed that labor may renounce the strike weapons when it believes that it can more efficiently pursue its objective through the political arena. Labor can achieve this objective under two conditions: it has to be effectively organized with a high degree of centralization, and its political power has to be enduring. If labor is divided and fails to conquer political power, strike activity remains at a high level. However, leftist governments may translate into more strikes if they are forced to take actions contrary to workers' interests.

Therefore, fluctuations in strike activity since the end of the XIXth century have been explained by either an economic model or a political one depending on countries and periods.

Ashenfelter and Johnson for the period from 1952 to 1967, and Snyder for the periods from 1900 to 1948 and 1949 to 1970, showed that the economic model has prevailed in the United States since World War II, whereas prior to World War II fluctuations in strike activity were explained mainly by political and institutional determinants.

In France, political variables were found to be significant predictors of strike activity prior to World War II (Shorter and Tilly for the period from 1890 to 1938, and Snyder for the period from 1900 to 1948) whereas neither the economic model nor the political one seems able to explain strike variations in the postwar period (Snyder for the period from 1949 to 1970).

The findings related to French strikes were substantiated by a few authors who calculated correlation coefficients between strikes and some economic indicators, and found that most of these coefficients were insignificant (Goetz-Girey for the period from

1914 to 1962, Scardigli from 1950 to 1970, and Fisher from 1959 to 1969).

The thesis that in the postwar period political determinants were no longer significant and gave way to economic predictors has been developed by some American authors (5). However, this idea does not seem to apply to French strikes.

Dubois argued that the economic context is no longer the main determinant, and the impact of social and political factors is the strongest. For Adam and Reynaud, the economic model does not hold because the authors who explained strikes by economic determinants excluded periods of social outbreak from their calculations. Both authors view strikes as primarily a political phenomenon insofar as strikes lead to another kind of power sharing between employers and employees, what they call a rearrangement of the rules of the game.

MAIN CHARACTERISTICS OF THE MODEL PRESENTED IN THIS STUDY

The model presented here is based on the differentiation between 3 categories of strikes: localized disputes, strike waves and generalized disputes, and national action days. The cross correlation function calculated between localized disputes and generalized disputes shows that these two data sets are uncorrelated (6)

These 3 categories of strikes are different for 2 reasons: they are influenced by different factors, and their impact on society is different.

LOCALIZED DISPUTES are conflicts of an economic nature. They are localized both in space (a firm or an establishment) and in time. Workers' objective, as far as localized disputes are concerned, is to obtain temporary improvements in their material conditions, mainly wage increases.

French localized disputes conformed to a simplified version of the economic model (since collective bargaining at the firm level was very weak throughout the period of time considered in this research): they were negatively related to unemployment, and positively related to inflation and to the level of labor mobilization. Their impact on the working of the French industrial society remained within the limits of their influence on hourly wages.

GENERALIZED DISPUTES and STRIKE WAVES are conflicts of a "sociological" nature. They are strike movements launched simultaneously in a large number of firms or establishments, and based on common demands. Workers' objective, as far as generalized disputes and strike waves were concerned, was to obtain the creation of permanent redistributing mechanisms which would guarantee steady and institutionalized improvements in their material working and living conditions.

Generalized disputes and strike waves resulted in radically modifying the very nature of wage-earners, that induced them to go on strike whenever they wanted some material improvements, and they played a key role in reshaping social conditions in France. The regression results presented in this study show that strike waves

and generalized disputes were the most powerful predictors of the 3 strategic components of the French social policy: social benefits, minimum wage and working hours.

To a large extent social policy was not dependent on economic conditions, but resulted from the power relationship between workers on the one hand, and the government and employers on the other hand, and the power relationship was related both to the level of strikes, and the determination of the left to gain political power.

NATIONAL ACTION DAYS are conflicts of a political nature: their objective was to facilitate the conquest of political power by the left.

The high level of workers' spontaneous combativeness revealed by the magnitude of both strike waves and generalized disputes from 1950 to 1968 induced leftist political parties into strengthening coordination in their strategies. Once coordination in their strategies was under way, leftist unions and parties were in a position to organize political mass demonstrations on the occasion of national action days. These mass demonstrations made workers aware of their number, which resulted in the emergence of a left-oriented electoral majority, and ultimately the victory of the socialist-communist coalition in 1981.

A few important differences between the model presented here and most of economic and political models of strikes should be emphasized:

- 1) This model is an attempt to remedy the lack of integration between the economic and the political approaches of strikes;
- 2) Contrary to most models which rely almost exclusively on official data, this study was based on data sets constructed from a variety of sources, especially newspapers;
- 3) The emphasis is not on the predictors of strikes, but rather on their impact on society, especially the effects of strikes on policy-makers and political leaders;
- 4) An attempt has been made to provide quantitative measures of political phenomena, even though more remains to be done in this area (7);
- 5) The magnitude of strike waves and generalized disputes depended primarily on the spontaneous combativeness of workers, not on their organizational capacity. Only national action days were related to workers' organizational capacity. Some French authors also argued that the biggest industrial conflicts in the last fifty years, especially strike waves, were set off spontaneously. It seems that in the French pattern of strikes, labor organizations played a role much more limited than usually attributed by organizational and political models (8). French unions did not time strikes. They tried to get involved in them after strikes had started, and then to negotiate the outcome of the conflicts.

LOCALIZED DISPUTES: MAIN DETERMINANTS AND IMPACT ON WAGES

Regression calculated with annual data (Equation 2)

The regression results of equation 2 show that during the period from 1960 to 1983 localized disputes were positively related to annual variations both in price and unemployment benefit per unemployed. (9)

The economic model developed by American authors assumes that workers may decide to strike when a current contract has not been renewed prior expiration based on their calculation of short term economic costs and benefits of striking. (10)

The French economic model is much simpler, since collective bargaining within firms was very weak throughout most of the period considered in this study.

On the one hand, the main objective of employees, as far as localized disputes were concerned, was to compensate losses in real wages resulting from price increases.

On the other hand, the two main components of the economic costs for potential strikers were:

- . Possible losses in wages resulting from striking. The impact of possible wage losses on the decision to strike depended on workers' financial situation which was closely connected to the unemployment level;

- . Possible dismissal of strikers: both the fear of being dismissed and not finding another job when unemployment rate ran high acted as a deterrent on workers' strike behavior.

However, the effect of both possible wage losses and possible dismissal on the decision to strike was partly or fully offset depending on the level of unemployment benefits. Workers were all the more likely to decide to strike that unemployment compensations were rewarding.

As a result, the same unemployment rate did not have the same impact throughout the period considered in this study, since the levels of unemployment compensations fluctuated significantly.

This led us to consider two different determinants of localized disputes:

- . Over a short period of time and with regression results based on quarterly data, the most relevant variable was the variations in the number of unemployed (cf. equations 1.1 to 1.5). The level of unemployment compensations was assumed to remain stable throughout every sub-period;

- . Over an extended period of time (more than 20 years) the most relevant predictor of localized disputes was the variations in unemployment benefits (cf. equation 2)

Localized disputes were significantly related to two other variables: strike waves and labor mobilization.

The effect of strike waves on localized disputes is obvious: when workers engaged en masse in strike waves, they were not available for localized disputes. The same goes true for one of the components of the variable, labor mobilization: the Algerian War resulted in less localized disputes, since workers were mainly

engaged in generalized disputes to protest the war.

The other four components of the variable, labor mobilization synthesizes the effects of workers' behavior which alternately leaned toward more political mobilization or more economic mobilization within firms.

Economic mobilization was related to the economy and the state of collective bargaining at the national level. Sweeping changes in the economy: sudden and rapid increase in unemployment in 1975 followed by a rapid economic recovery in 1976 resulted in more localized disputes. Collective bargaining at the national level boosted localized disputes when characterized either by confrontation (in 1967) or class collaboration (in 1970). It curbed localized disputes when far-reaching measures of social policy were implemented (in 1968, 1982 and 1983).

Political mobilization was related to election periods and the state of the relationships between leftist parties. Political mobilization always decreased during the quarter when a national election occurred, and it also decreased significantly during the three years after the Socialists and the Communists had broken down negotiations in September 1977. It increased markedly during the period 1971-1977 when the Socialists and the Communists engaged in far-reaching political agreements. (cf. Equation 2 - Labor Mobilization1)

Regressions calculated with quarterly data (Equations 1.1 to 1.5)

The period from 1951 to 1983 was divided into five sub-periods:

1951-1959.1: Expansion with moderate unemployment rate and medium inflation

1959.2-1966: Expansion with moderate unemployment rate and low inflation

1967-1973.1: Expansion with medium unemployment rate and inflation

1973.2-1979: Slowdown in growth with very rapid increase in unemployment and inflation

1980-1983 : Stagnation with very high level of unemployment rate and very rapid increase in prices

The sub-periods were differentiated using four criteria: the average increases in production, unemployment and prices, and the level of unemployment benefits (cf. Table 1)

The results of the tests for structural changes were the following:

Test of differential slope vectors: $F = 2.537$

Test of differential intercepts : $F = 19.224$

Test of differential regressions : $F = 8.872$

All three tests are significant at .01 or under. Therefore, the hypothesis of structural changes was accepted. This means that significantly different localized dispute distributions were related to different economic contexts.

The results of the regressions on a quarterly basis substantiate the results obtained with annual data, and provide some additional information.

Labor mobilization had value 0 throughout the sub-period 1959-1966 (Equation 1.2). This sub-period was also characterized by an inflation rate markedly lower than during the other sub-periods. Therefore, the variable price does not appear in equation 1.2 since its impact on localized disputes was insignificant.

The sub-period 1969-1973 was the period during which the power relationship between employers and employees was the most favorable to employees, with medium unemployment rate while the level of unemployment compensations was markedly higher than during the period from 1950 to 1958. This explains why the variable unemployment was insignificant.

Tables 1 and 2 also show that the economic model presented in this article explains only partly the fluctuations in localized dispute distributions during both sub-periods with very low level of localized disputes: the value of the adjusted correlation coefficient is only .24 in equation 1.2 (1959-1966) and .46 in equation 1.5 (1980-1983).

Finally, a Gauss law adjustment on each of the five localized dispute distributions was calculated using the chi-square test. Since the test was positive for every distribution, we accepted the hypothesis that localized disputes conform to the Gauss curve.

This result means that the highest level localized disputes can reach is necessarily limited whatever the economic context may be. For example, during the sub-period 1973-1979, where the mean of localized dispute distribution was the highest of all the sub-periods, the probability that the number of man-days lost exceeds 1.5 million was only 2 per thousand. Although this figure of man-days lost is very high for localized disputes, it is much below the level of the most mobilizing strike waves, whose level reached over 13 million man-days lost.

Consequently, the fact that localized dispute distributions follow the Gauss law provides a scientific basis for the descriptive criterion (11) used to establish the two data sets by separating localized disputes from generalized disputes, i.e. the fact that localized disputes are restricted both in space and time.

Impact of localized disputes on hourly wages (Equation 4)

Localized disputes and unemployment rate were the 2 main predictors of the variable, hourly wage. Increases in localized disputes and/or lower unemployment rate put more pressure on employers to grant higher wage increase.

In addition, a few exceptional events altered employers' behavior: strike waves resulted in higher wage increases while the strengthening of the right which materialized through de Gaulle's accession to power translated into wage decreases.

Table 1 - Levels of localized disputes, production, unemployment, prices and unemployment benefits by sub-periods from 1951 to 1983

	Loc.Disputes (thousands)	Production %	Unemp.Rate %	Prices %	Unemp.Benef. mill.Francis
1951-59.1	412	+ 1.2	1.8	1.6	2.5
59.2-1966	263	+ 1.4	1.5	1.0	5.6
1967-73.1	400	+ 1.3	3.0	1.3	5.7
73.2-1979	584	+ .6	5.4	2.6	9.7
1980-1983	285	- .2	11.2	2.8	12.8

LOCALIZED DISPUTES

Average number of man-days lost per quarter for 13 million employees

PRODUCTION

Average increase in industrial production per quarter
(excluding construction and seasonally adjusted)

UNEMPLOYMENT RATE

Average unemployment rate per quarter

PRICES

Average increase in consumer prices per quarter

UNEMPLOYMENT BENEFITS

Real average unemployment benefits for 1,000 unemployed
(in million francs) Estimation for the period 1951-1958

GENERALIZED DISPUTES AND STRIKE WAVES: MAIN DETERMINANTS AND IMPACT ON SOCIAL POLICY

Generalized Disputes and Strike Waves: Definition

Strike waves were strike movements launched simultaneously in a great number of firms both nationalized and private, and based on common demands. These disputes affected all employees. They lasted from 5 to 10 weeks, and did not stem from a union call to strike. During the period from 1950 to 1985, there were four strike waves of a very broad scope: from 5 to 15 million man-days lost in 1950, 1953, 1963 and 1968, and a movement of a lesser scope, about 1 million man-days lost in 1982. (12)

The model developed in this study does not propose any explanation why strike waves occurred. But it does take into account the impact of man-days lost during strike waves on social policy.

Generalized disputes other than strike waves can be divided into 5 categories, depending on whether they affected a greater or lesser number of branches at the national or local levels (13):

- National strikes that affected several nationalized firms (14);
- National strikes that affected only one branch of the nationalized or private sector (14);
- Strikes that affected several activities of the private sector in

one or several regions during the period from 1950 to 1959;
Strikes that affected only one branch of the private sector in
one region during the period from 1950 to 1960;
Strikes that affected all establishments of a private firm during
the period from 1967 to 1979.

Most of these strikes were related to wage demands, except for
national strikes that affected one branch of the nationalized or
private sector. Among this category some strikes were related to
job suppression in branches where labor was massively reduced
beginning 1975.

Almost all generalized disputes were launched by employees
spontaneously, and did not stem from a union call to strike. This
shows that the externality of the call for strike action is not a
descriptive criterion likely to distinguish between localized
disputes and generalized disputes. (15)

The only criterion that actually discriminates is the
criterion of how the dispute spreads out in space. A localized
dispute is a collective work stoppage limited to a specific firm or
establishment. A generalized dispute is a collective work stoppage
that affects a great number of firms, or a great number of
establishments of the same firm, simultaneously and based on
common demands.

The main determinants of generalized disputes (Equation 3)

The 2 main predictors of generalized disputes were the
variations in net wages and the variations in wage gap. Generalized
disputes decreased in periods when there was a decrease in real net
wages for workers and office workers and/or an increase in the wage
gap between senior executives and workers and office workers.

There are two assumptions underlying this explanatory model of
generalized disputes:

1) Employees acted as if they stuck to an a priori objective of
increase in real net wages, and adjusted the level of generalized
disputes in order to achieve this objective. This assumption is
consistent with the idea that generalized disputes sought to
provide employees with steady improvements of their material
conditions. From 1950 to 1977, generalized disputes resulted in an
increase in net wages of about 4% per annum. However, during the
subsequent period from 1978 to 1985, employees acted as if they had
given up the objective of such a rapid increase in net wages: their
objective was only the maintaining of the purchasing power of real
net wages

2) The significant relationship between generalized disputes and
the wage gap between executives and workers and office workers
substantiates the egalitarian trend which characterized generalized
disputes in France.

Generalized disputes had 2 additional explanatory variables,
in common with localized disputes: strike waves and labor
mobilization.

As already explained for localized disputes, when workers were
engaged en masse in strike waves, they were not available for

generalized disputes. In the same way, a few exceptional events affected labor's determination to strike (cf. Equation 3 - Labor Mobilization²).

Some events boosted labor mobilization: the economic crisis in 1975 and the industrial policy in 1984. Others resulted in a wait-and-see attitude among workers which weakened mobilization: government changes in 1956 and 1958, presidential elections in 1965 and 1981, agreements between leftist parties and unions in 1966 and 1972, and agreements between employers and unions in 1968 and 1970.

Impact of strike waves and generalized disputes on social policy (Equations 5, 6 and 7)

The regression results presented in Table 3 show that strike waves and to a lesser extent generalized disputes were powerful predictors of the 3 strategic components of the French social policy: social benefits, minimum wage and working hours.

In particular, 1968 strike waves resulted in very rapid increases in minimum wages (20.3% in 1968 and 10.7% in 1969), and a significant decrease in working hours (- 4.5% in 1969).

In addition to strike waves and generalized disputes, other 3 variables had a significant impact on social policy.

The economic crisis from mid-74 to mid-75 resulted in higher increases in social benefits and minimum wage in 1975.

Since the left had promised to significantly reduce working hours once in office, its accession to power in 1981 resulted in a decrease in annual working hours the same magnitude as in 1969.

The state of the power relationship between the left and the right also affected government's behavior in matters of social policy. This "politicization" of social policy started with de Gaulle's accession to power in 1958. Whenever the government viewed the power relationship as more favorable to the right, this resulted in lower increases, or even decrease (in 1958) in social benefits and minimum wage, and conversely.

Impact of strike waves and generalized disputes on union audience (Equations 8 and 9)

There are 2 series of data on union audience in France:

- . The data relating to union representatives who have been elected by workers within firms every year since 1969. Results of labor elections measure to what extent workers rely on unions to champion their material interests both at the firm level and in national collective bargaining
- . Data relating to union members. The breakdown of union members by organization mirrored employees' political and ideological preferences, and variations in the global number of union members measured to what extent workers relied on unions to help support political changes advocated by the left.

Workers' confidence in union organizations to champion their interests, resulting in their electing more union representatives, was positively related to 2 main factors:

- . The 1968 strike waves and, to a lesser extent, generalized disputes;
- . High levels of coordination in leftist strategies.

The 1975 economic crisis boosted the number of union representatives temporarily, since workers felt that they were in a more vulnerable situation and needed additional support from unions to protect their interests.

Variations in union membership depended mainly on 2 factors: the 1968 strike waves, and the state of the relationships between the Socialists and the Communists.

French authors noticed that significant increases in union members used to follow after strike waves. For example, the number of CGT members rocketed to 4 or 5 millions after the 1936 strike waves from about 800,000 in 1935. Then, it fell off to reach only one million in 1939.

A unique phenomenon occurred in 1968: the increase in union members of more than 12% resulting from the 1968 strike waves kept on strengthening over the next 9 years (16). This phenomenon was made possible because of the strategy of leftist parties initiated in 1966 and aimed at conquering political power.

The number of union members increased by 2.4% on average annually from 1968 to 1977, and decreased by - 3.3% from 1978 to 1980. Then, the drop in union members accelerated since 1981. The number of union representatives followed the same pattern: it increased by 4,200 on average annually from 1969 to 1977, by 1,600 from 1978 to 1981, and then decreased. The reversal in trend occurred in 1977 when the Communists and the Socialists broke off negotiations on the updating of their government program.

This explanatory model of union audience only applied to the period from 1968 to 1981, since its main assumption is that union audience was closely related to the strategy toward the conquest of political power conducted by the left during this period. After 1981, union power was based primarily on social legislation implemented by the leftist government, and it has become much less dependent on spontaneous unionization.

NATIONAL ACTION DAYS AND THE CONQUEST OF POLITICAL POWER BY THE LEFT

The idea developed in this part is the following: the magnitude of both strike waves and generalized disputes from 1950 to 1968 was the decisive factor that induced leftist political parties into achieving coordination in their strategies. Once under way of strengthening coordination in their strategies, leftist parties were in a position to orchestrate national action days. These mass demonstrations made workers aware of their number, and ultimately led to a left-oriented electoral majority.

Left coordination (Equation 10)

Left coordination was positively related to the compound variable that synthesizes the effects of both strike waves and generalized disputes from 1950 to 1964, and then to the 1968 strike waves. It was negatively related to a few events that temporarily diminished pro-left feelings among the French electorate.

The magnitude of both strike waves and generalized disputes from 1950 to 1964, which signaled a very high level of employees' spontaneous combativeness, strengthened the determination of leftist unions and parties to use this combativeness in order to conquer political power. But at first they had to overcome their doctrinal quarrels and achieve coordination in their strategies, since they could not conquer political power if divided.

A major step toward more coordination was taken in 1966 with national agreements between the Socialists and the Communists on the one hand, and between the CGT and the CFDT on the other hand. Then, the 1968 strike waves gave the left fresh impetus to proceed toward stronger coordination.

National Action Days (Equation 11)

Once coordination in their strategies was under way, leftist unions and political parties were able to direct employees' spontaneous combativeness toward political demonstrations on the occasion of national action days.

National action days were both strike movements and demonstrations usually set off by several union confederations (in most cases, the CGT and the CFDT), and supported by leftist political parties. The number of man-days lost for each action day fluctuated between 100,000 and 1,200,000. (17)

Equation 11 shows that national action days were positively related to the level of coordination in leftist strategies, and negatively related to the state of collective bargaining at the national level. This suggests that had collective bargaining grown stronger, national action days would not have reached such magnitude, and the left might not have won the 1981 elections.

Left Vote (Equation 12)

The development of national action days from 1966 to 1977 induced a lasting politicization in employees' behavior. This politicization allowed the left to conquer political power, first at the local level: cantonal elections in 1976 and municipal elections in 1977, then at the governmental level: presidential and parliamentary elections in 1981.

Equation 12 shows that from 1967 to 1981, variations in left vote were positively related to the magnitude of national action days, and negatively related to the same few events that affected left coordination.

During the period from 1950 to 1968, the mass mobilization of employees on the occasion of generalized disputes or strike waves

was their only means to reverse the power relationship in their favor, in order to obtain steady improvements in their material working and living conditions.

But during the subsequent period from 1969 to 1977, leftist unions and parties succeeded in organizing mass demonstrations on the occasion of national action days. These mass demonstrations made employees aware of their number and of their strength. So that the idea that the left could conquer political power has grown increasingly strong among employees since 1969.

This politicization resulted in lower levels of generalized disputes: insofar as employees were convinced that their demands would be satisfied once the left had conquered political power, ballot papers replaced strike actions. It also translated into the emergence of a left-oriented electoral majority in France.

Therefore, the victory of the socialist-communist coalition in May-June 1981 resulted logically from the development of national action days, even though this victory occurred after 3 years of underlying disunion in leftist unions and political parties.

CONCLUSION

The econometric model presented in this article tried to achieve three objectives:

- . To show that, as far as localized disputes were concerned, French strikes conformed to a simplified version of the economic models;
- . To demonstrate that both strike waves and generalized disputes had a significant impact on the radical social changes that occurred in France from 1950 to the mid-80's;
- . To show how national action days, which were made possible by the magnitude of strike waves and generalized disputes, resulted in the victory of the socialist-communist coalition in the 1981 parliamentary and presidential elections.

The main social changes that reshaped French society from 1950 to the mid-80's were the following:

- . The rapid increase in the purchasing power of social benefits: + 7.4% per annum on average from 1951 to 1978. In 1985, social benefits accounted for 37% of national net income up from 17% in 1950;
- . The rapid increase in the purchasing power of guaranteed minimum wage: + 5.3% annually on average from 1968 to 1985;
- . The steady reduction in annual working hours which decreased by - 10 hours per annum on average from 1969 to 1983;
- . The increase in the number of union members by 24% on average annually from 1968 to 1977, and the increase in the number of union representatives by 18% on average annually over the same period. This resulted in the significant weakening of employers' power within firms for the benefit of unions.

The 1968 strike waves acted as an accelerator of three of the main changes: the development of an egalitarian trend with rapid increases in lowest wages, the reduction of working hours, and the strengthening of union power.

Table 2 - Regression Results between Localized Disputes and the variables, Unemployed, Price, and Labor mobilization (quarterly data)

1.1.	LOCDISP = - 1.232 UNEMP + 3.250 PRICE + 27.141 LABMOB + 37.678			
	R ² = .70 (.200) (.769) (4.700) (2.080)			
	DW = 2.061			
	51.1-59.1			
1.2.	LOCDISP = - .831 UNEMP +		25.159	
	R ² = .24 (.267)		(1.473)	
	DW = 2.127			
	59.2-66.4 (62.3,4 & 64.2 excl)			
1.3.	LOCDISP =	14.829 PRICE + 28.359 LABMOB + 22.585		
	R ² = .68 (4.312) (4.789) (5.951)			
	DW = 2.215			
	67.1-73.1 (67.4 & 68.2,3,4 excl)			
1.4.	LOCDISP = - 2.477 UNEMP + 15.456 PRICE + 11.008 LABMOB + 29.459			
	R ² = .86 (.391) (3.402) (.944) (8.698)			
	DW = 1.564			
	73.2-79.4			
1.5.	LOCDISP = - 2.396*UNEMP + 4.674*PRICE + 17.956 LABMOB + 26.853			
	R ² = .46 (1.190) (1.985) (6.373) (6.707)			
	DW = 2.525			
	80.1-83.4			

Comments on Tables 2 and 3

In Table 2, some quarters have been excluded from the regression for the following reasons: unemployment figures for 62.3&4 are not reliable. In 64.2 & 67.4, the correlation between localized disputes, unemployed and price is very bad. In 68.2,3&4, the very low figures of localized disputes are insignificant because the 1968 strike wave almost brought them to a halt.

In Table 3, 1955 has been excluded from the regression in equations 3 and 4 because wage data seem questionable.

In table 3, the second and third columns are dedicated to variables of conflict: strike wave, generalized disputes and national action days, except for equations 2 and 3 where column 3 represents economic variables. The fourth column is dedicated to economic variables: price, unemployment rate, wage gap, economic crisis and collective bargaining. The fifth column is dedicated to political and union-related variables: labor mobilization, power relationship, event and left coordination.

Ordinary Least Squares were used to calculate every equation.

Standard errors are in parentheses.

R² is the adjusted R square coefficient.

DW is the Durbin Watson statistic.

significant at .01 or under

* significant at .05

' not significant

Table 3 - Regression results based on annual data

2.LOCDISP =	1.013 STRIWAV	+ 1.254 UNBENEF	+ .961 PRICE	+ 1.101 LABMOB1	+ 8.700
R ² = .94	(.283)	(.424)	(.097)	(.074)	(.781)
DW = 2.152					
1960-1983					
3.GENDISP =	1.184 STRIWAV	- .910 NETWAGE	+ .522 WAGEGAP	+ 1.079 LABMOB2	+ 11.594
R ² = .87	(.291)	(.144)	(.103)	(.112)	(.453)
DW = 1.773					
1951-1985 (55 excl)					
4.HOURWAGE =		.168 LOCDISP	- .327 UNEMRAT	+ .839 EVENT1	+ 2.444
R ² = .82		(.025)	(.044)	(.096)	(.473)
DW = 1.815					
1951-1985 (55 excl)					
5.SOCBENEF =	.133 STRIWAV1	+ .173 GENDISP	+ 7.924 ECOCRIS	+ 1.085 POWEREL1	+ 3.419
R ² = .88	(.014)	(.028)	(1.181)	(.083)	(.408)
DW = 1.831					
1951-1985					
6.MINWAG =	.249 STRIWAV2	+ .175 GENDISP	+ 2.697 ECOCRIS	+ .917 POWEREL1	+ .603
R ² = .97	(.013)	(.052)	(.782)	(.081)	(.198)
DW = 1.907					
1968-1985					
7.WORKHOUR =	-.041 STRIWAV3	+ .024 GENDISP		3.726 EVENT2	- 1.108
R ² = .82	(.007)	(.036)		(.593)	(.406)
DW = 2.473					
1969-1985					
8.UNIONREP =	1.137 STRIWAV3	+ .796 GENDISP	+ 19.885 ECOCRIS	+ 6.084 LEFTCOOR	+ .356'
R ² = .96	(.068)	(.366)	(5.073)	(.764)	(4.679)
DW = 1.994					
1969-1981					
9.UNIONMEM =	.113 STRIWAV4	+ .018 GENDISP		.486 POWEREL2	+ .695'
R ² = .94	(.012)	(.085)		(.076)	(.835)
DW = 2.776					
1968-1980					
10.LEFTCOOR=	.154 STRIWAV5	+ .068 GENDISP		.673 EVENT3	+ 1.205*
R ² = .85	(.027)	(.048)		(.210)	(.667)
DW = 1.957					
1966-1980					
11.NATDAYS =			- 1.242 COLBARG	+ 2.266 LEFTCOOR	+ 1.797*
R ² = .94			(.154)	(.189)	(.706)
DW = 1.494					
1966-1980					
12.LEFTVOT =	1.578 NATDAYS			3.873 EVENT3	- 5.328
R ² = .96	(.255)			(.232)	(1.765)
DW = 1.929					
1967-1981					

Equation 1.1 to 1.5

LOCALIZED DISPUTES

Number of man-days lost in a quarter for 13,000 employees
(deseasonalized)

UNEMPLOYED

Variations in the number of unemployed per quarter
(deseasonalized)

$$\frac{(\text{Number of Unemployed})_t - (\text{Number of Unemployed})_{t-1}}{(\text{Number of Unemployed})_{t-1}}$$

PRICE

Variations in price per quarter in %

LABOR MOBILIZATION

This variable stands for exceptional events that either boosted localized disputes (value 1), or reduced them significantly (value -1). The main events were:

- . Significant change in government in 1956 and 1958, and national elections likely to bring significant change in 1974 and 1978
- . Strong coordination in leftist strategies in 1971, 1973 and 1976, and breakdown in leftist coordination in 1978
- . Policy aimed at restraining wage increases in 1952 and 1969

Equation 2

LOCALIZED DISPUTES

Annual number of man-days lost for 130,000 employees

STRIKE WAVE

When workers engaged en masse in strike waves, they were not available for localized or generalized disputes. The variable was given value -6 in 1953 and 1968, and value -2 in 1982, according to the number of man-days lost

UNEMPLOYMENT BENEFIT

Annual variations in unemployment benefit per unemployed in constant Francs

$$\frac{(\text{Unemployment Benefit})_t - (\text{Unemployment Benefit})_{t-1}}{(\text{Unemployed})_t - (\text{Unemployed})_{t-1}}$$

Only since 1959 has this variable become available. This explains why the regression has been calculated only from 1960.

PRICE

Annual variations in price in %

LABOR MOBILIZATION1

This variable measures the impact of economic or political events that either strengthened or weakened the determination of labor to engage in strike actions, either localized or generalized disputes. This variable was given values from -8 to 8. The main events that affected the level of labor mobilization were:

- . The 1975 economic crisis increased labor mobilization significantly
- . Collective bargaining at a national level affected labor

mobilization from 1966 to 1970, and in 1982-1983. It increased labor mobilization when social policy was aimed at restraining wage increases, and reduced it when collective bargaining resulted in rapid wage increases or significant changes in social legislation

. From 1965 to 1983, labor mobilization always decreased during the quarter when a national election occurred, because workers were expecting a possible victory of the left that would have brought about sweeping changes in their working and living conditions.

. The Algerian War in 1960-1962 resulted in less localized disputes, since workers engaged in generalized disputes to protest the war

. From 1971 to 1981, labor mobilization was also affected by workers' perception of the relationships between the Socialists and the Communists (This variable is different from the variable: Left coordination which measures the objective level of coordination in leftist strategies). When workers viewed the leftist coordination as tighter, they engaged in more localized disputes, and conversely.

Equation 3

GENERALIZED DISPUTES

Number of man-days lost for 130,000 employees

STRIKE WAVE - cf. Equation 2

NET WAGE

This variable has been calculated from the average annual net wages for "Workers" and "Office Workers". Average annual net wage = Wage and bonus - Social contributions for illness, unemployment and pensions. The variable used in the regression is: Annual increase in average real net wages in % - Annual increase expected by employees in %. The annual increase expected by employees was estimated by the average annual increase in real net wages during a given period:
+ 3.21% from 1951 to 1967, + 4.37% from 1969 to 1977, and
+ 0.20% from 1978 to 1985.

WAGE GAP

Ratio of Annual net wages for "Senior Executives" to Annual net wages for "Workers" and Office Workers". The variable used in the regression is the annual variation in Wage gap in %:

$$\frac{(\text{Wage Gap})_t - (\text{Wage Gap})_{t-1}}{(\text{Wage Gap})_{t-1}}$$

LABOR MOBILIZATION2

This variable has been constructed according to the same principles as the variable: Labor mobilization in Equation 2. The main difference between the two variables is that only the most important events affected generalized disputes.

. Both the 1975 economic crisis and the 1984 policy aimed at restructuring the French industrial sector translated into more generalized disputes

. The Algerian War also translated into more generalized

disputes

. Some events likely to change dramatically the power relationship between the left and the right, or between employees and employers, resulted in a wait-and-see attitude among workers, and therefore less generalized disputes: government changes in 1956 and 1958; presidential elections in 1965 and 1981; national agreements between the CGT and the CFDT in 1966, and between the Socialists and the Communists in 1972; and collective bargaining between the government, employers and unions in 1968 and 1970

Equation 4

INDUSTRIAL HOURLY WAGE

Annual variations in average real wages for Workers in %
LOCALIZED DISPUTES - cf. Equation 2

UNEMPLOYMENT RATE

Ratio of the number of unemployed to labor force

EVENT1

A few exceptional events had a significant impact on employers' behavior. Strike waves in 1950, 1968 and 1982 pressured employers into granting workers rapid wage increases, while de Gaulle's accession to power in 1958-1959 translated into wage decreases. The variable was given the following values: 6 in 1968, 4 in 1951 and 1982, 2 in 1983, - 4 in 1959 and - 6 in 1958.

Equation 5

SOCIAL BENEFITS

Annual increase in the purchasing power of social benefits in %
Social benefits include compensations for illness, professional injuries, unemployment, vocational training, pregnancy, pensions and family allowances. Social benefits accounted for about 17% of national net income (national income - social contributions and taxes) in 1950, and 37% in 1985. The purchasing power of social benefits increased annually by 7.4% on average from 1951 to 1977, and by 3.8% from 1978 to 1985.

STRIKE WAVE1

Number of man-days lost for 130,000 employees
Man-days lost in 1950 were spread over 3 years from 1950 to 1952, 1953 man-days lost were spread over 5 years from 1953 to 1957, 1963 man-days lost were spread over 3 years from 1963 to 1965, and 1968 man-days lost were spread over 3 years from 1968 to 1970

GENERALIZED DISPUTES - cf. Equation 3

ECONOMIC CRISIS

This variable was given value 1 in 1975, and 0 otherwise.
Economic crisis in my model is defined mainly by a sudden and very rapid increase in unemployment rate. This happened once throughout the period from 1950 to the mid-80's: the

unemployment rate increased by 28% during the fourth quarter of 1974. In the short term, this economic crisis resulted in significant increases in social benefits, minimum wage, union representatives, and localized and generalized disputes in 1975. These short term effects are different from the long-term effects resulting from a lasting upward trend in unemployment

POWER RELATIONSHIP1

This variable measures changes in the power relationship between the left and the right, as viewed by the government. It synthesizes the impact of 4 components and was given values from - 6 to 6. The 4 components are:

- . Significant victories of the right in 1958, 1967, 1968, 1973 and 1974
- . Summit agreements/breakdown between the Socialists and the Communists
- . Results of the leftist parties in national elections
- . The Algerian War in 1960-1962

Equation 6

GUARANTEED MINIMUM WAGE

Annual increase in the purchasing power of minimum wage in %.
Minimum wage increased annually by 4.7% on average from 1970 to 1982, and by 1.7% from 1983 to 1987
From 1951 to 1967 minimum wage increased by only 1.3% per annum on average, and regression results are insignificant for that period.

STRIKE WAVE2

Number of man-days lost for 130,000 employees
1968 man-days lost were spread over 1968 and 1969

GENERALIZED DISPUTES - cf. Equation 3

ECONOMIC CRISIS - cf. Equation 5

POWER RELATIONSHIP1

This is the same variable as in equation 5, except in 1968, 1973 and 1974.

. In 1968, the legislative elections and the mass demonstrations of the right in June did not affect the power relationship, since the increase in minimum wage was decided late May.

.In 1973 and 1974 the power relationship was given a higher value than in equation 5 because of the "custom" for winning presidential candidates to boost the minimum wage

Equation 7

WORKING HOURS

Decrease in the number of annual working hours in %.
From 1969 to 1983 annual working hours decreased by - 10 hours per annum on average.

STRIKE WAVE3

Number of man-days lost for 130,000 employees
1968 man-days lost were spread over 1969 and 1970

GENERALIZED DISPUTES - cf. Equation 3
EVENT2

This variable was given value 1 in 1982, and 0 otherwise.
The significant decrease in working hours in 1982 resulted from the accession of the left to power, since the leftist political parties had promised to reduce working hours significantly if they won the presidential elections.

Equation 8

UNION REPRESENTATIVES

Annual increase in the number of union representatives within firms over 50 employees. Union representatives within firms were allowed by a bill voted in December, 1968.

STRIKE WAVE3 - cf. Equation 7
GENERALIZED DISPUTES - cf. Equation 3
ECONOMIC CRISIS - cf. Equation 5
LEFT COORDINATION - cf. Equation 10

Equation 9

UNION MEMBERSHIP

Annual variations in the number of union members in % in the 3 main French union organizations, the CGT, the CFDT, and FO

STRIKE WAVE4

Number of man-days lost in 1968 for 130,000 employees

POWER RELATIONSHIP2

This is the same variable as in equation 5 except in 1968, and from 1977 to 1980.

. The 1968 mass demonstrations of the right did not affect the perception of the power relationship by workers

. The breakdown in the socialist-communist coalition in September 1977 had a very strong impact on workers' morale, which resulted in their feeling of the left losing ground very rapidly.

Equation 10

LEFT COORDINATION

Level of coordination in strategies of leftist unions and political parties. This variable was given values from 0 to 8. Two criteria were used to quantify the level of coordination in leftist strategies:

1. Agreements between the Communists and the Socialists at two levels: electoral agreements on common lists of candidates, and agreement on a common political program
2. Summit agreements on unity of action between the CGT and the CFDT

STRIKE WAVES

Number of man-days lost for 130,000 employees

The figure for 1966 and 1967 is the average number of man-days lost for generalized disputes and strike wave between 1953 and 1964. Man-days lost in 1968 were spread over 7 years beginning in 1971. The impact of the 1968 strikes has been delayed for 3 years because of mounting feelings of fear towards the left among the French electorate (cf. explanation given about the variable Event3)

GENERALIZED DISPUTES

Number of man-days lost for 130,000 employees. This variable was given one-year lagged values.

EVENT3

This variable measures the impact of a few events that affected pro-left feelings among the French electorate. It was given value - 3 in 1968 and 1969 because protest movements and riots in May-June 1968 scared part of the electorate who shied away from the left. It was given value - 3 in 1975 because of the economic crisis, and value - 1 in 1978 following the breakdown in the communist-socialist coalition.

Equation 11

NATIONAL ACTION DAYS

Number of man-days lost for 130,000 employees

The first national action day ever organized by leftist unions and political parties occurred in 1966

LEFT COORDINATION - cf. Equation 10

COLLECTIVE BARGAINING

This variable measures the state of collective bargaining between the government, employers and unions at the national level. It was given values from -4 to 4. However, this first attempt to quantify the state of collective bargaining would need upgrading.

Equation 12

LEFT VOTE

Variations in left votes in presidential, parliamentary, municipal or cantonal elections (in %).

For example, left votes in 1976 = increase in left vote between the 1970 cantonal elections and the 1976 cantonal elections.

NATIONAL ACTION DAYS

Annual average of man-days lost due to national action days over several years, according to the periodicity of elections. For example, national action days in 1976 = average of man-days lost over six years, from the second quarter of 1970 to the first quarter of 1976.

EVENT3 - cf. Equation 10

Sources of information and data (18)

Labor Disputes

In the beginning, this research had to overcome a major statistical problem in order to construct reliable data sets of the 3 categories of labor disputes throughout the period from 1950 to the mid-80's, on a quarterly basis. (19)

My methodology was based on 2 main sources of information: the official statistics published by the French Ministry of Labor, and information on strikes provided by national daily newspapers, union magazines and a few other publications.

As for the official statistics, only since 1975 has the French Ministry of Labor published 2 separate data sets related to localized disputes on the one hand, and generalized disputes and national action days on the other hand. Unfortunately, many disputes that the Ministry included in the data relative to localized disputes were actually generalized disputes. Furthermore, since 1981 a great number of generalized disputes has not been taken into account in the official statistics.

Regarding the other source of information, daily newspapers and other magazines "hold a wealth of valuable time-series data on conflict" (Franzosi, 1987). However, they are very time-consuming since they involve primary data collection.

The main components of my methodology can be summarized as follows:

- a) I recorded every generalized dispute and every national action day from daily newspapers and other magazines throughout the period from 1950 to the mid-80's. Then I wrote down a brief description of each conflict including date, reason of conflict, and number of strikers.
- b) I estimated the number of man-days lost for each conflict based on its description. Then I compared each estimate with official data, when available.
- c) I constructed the data set of localized disputes by deleting the number of man-days lost relating to generalized disputes from the data of localized disputes published by the Ministry of labor.

Other variables

Sources for economic variables including sources for the dependent variables, hourly wage, social benefit, minimum wage and working hours, are official data from INSEE and the French Ministry of Labor.

Political variables of column 5 in Table 3 are the result of an attempt to quantify political and union-related events.

The dependent variable, union representatives, relies on official data. The French Ministry of Labor published annual data of union branches and union representatives from 1969 to 1981, and then in 1985 and 1987.

I used 2 sources of information to construct the dependent variable, union membership: data published by union magazines (Le Peuple, Syndicalisme CFDT and FO Hebdo), and estimations by French experts on union matters.

I calculated the dependent variable, left vote, from official data.

FOOTNOTES

(1) The two main independent variables taken into account in the economic models are:

- . Unemployment as % of labor force (Indicator of prosperity);
- . Several lagged moving average of % change in real wages
(Indicator of the expectations-achievements gap in real wages)

(2) "Under capitalism, increased or decreased wealth is distributed through the invisible hand of market mechanisms. Bargaining between workers and employers is the way usually taken to ensure an equitable distribution of scarce and fluctuating resources in a market economy. Engaging in strikes and taking strikes are the means by which labor and management, respectively, can acquire knowledge about each other's concession curves in a bargaining situation characterized by limited information" (Franzosi, 1989, p 353)

(3) The main independent variables taken into account in political models are:

- . Union membership as % of labor force (This indicator measures workers' mobilization or organizational capacity for collective action);
- . An indicator of crisis or political shifts: number of cabinet changes or/and election year in France; % Democrats in Congress and/or party of the President in the United States

(4) "Hibbs (1978) and Korpi and Shalev (1980) have argued that direct access to political power has provided labor with a means to achieve a more favorable distribution of resources that is less costly than strikes: the government machinery itself. Under working-class control of the government, the locus of conflict over the distribution of resources shifts from the labor market and the private sector, where strike activity is the typical means of pressure, to the public sector, where political exchange prevails" (Franzosi, 1989, p 355)

(5) "To the extent that national labor relation systems move towards increased size and stability of union membership, institutionalization of collective bargaining and political integration of labor, the determination of strike fluctuations shifts from a primarily political to an economic process" (Snyder, 1975, p 275)

(6) The parameters of the cross-correlation function between localized disputes and generalized disputes calculated on a quarterly basis for the period from 1951 to 1986 are the following:
- .0036 for the average, and .0016 for the variance. Thus, we accepted the hypothesis that these two data sets are uncorrelated. The Pearson correlation coefficients calculated on a quarterly basis for the period from 1966 to 1980 are the following: .114 between localized disputes and national action days, and - .040 between generalized disputes and national action days. These coefficients are not significantly different from zero.

(7) "The empirical basis of these models is weak. Many of the phenomena theorized to affect strikes have received little attention on the empirical level" (Franzosi, 1989, p 355)

(8) The main assumption of the political models is that "without organization there is no collective action, at least no successful and sustained collective action" (Franzosi, 1989, p 354). Unions take workers dissatisfaction and translate it into action.

(9) Other studies showed that strike activity was negatively related to unemployment rate and positively related to unexpected inflation. For example, the two major findings of Vroman's study are the following:

"Strike incidence is positively related to uncompensated unexpected inflation over the previous contract";

"Strike incidence is positively related to the tightness of the labor market as measured by the inverse of the unemployment rate for prime-aged males". (Vroman, 1989 , p 816 & 820)

(10) "Where union membership is large and relatively stable, the political position of labor firmly established and collective bargaining well institutionalized, assumptions underlying the economic models hold well: 1) Workers and unions (act as if they) calculate short term economic costs and benefits of striking 2) Work stoppages occur where parties cannot agree prior to expiration of a current contract 3) Therefore aggregate strike activity fluctuates primarily in response to changes in business prosperity and (actual minus expected) wage changes" (Snyder, 1975, p 265)

(11) This criterion is used in the definition of localized disputes given by the French Ministry of Labor: "A localized dispute is a collective work stoppage which stems from a call to strike in a specific firm or establishment. In the beginning, this work stoppage is not likely to gain ground in the future. Therefore, this dispute is localized both in space and in time".

(12) In 1950 strikes were launched because the government refused to grant an exceptional bonus to all employees. In 1953 strikes were related to the Laniel decrees which jeopardized the status of employees in government agencies and nationalized firms. In 1968 strikes followed after several years characterized by an austere social policy: regulation of the right to strike in 1963, committees of wage regulation initiated in 1964, ordinances about social security in 1967. In 1982 the reason for striking was the governmental refusal to compensate wage losses resulting from the reduction of weekly working hours for all employees.

(13) Generalized disputes that affected employees working in government or public service agencies were not taken into account in this research.

(14) The main activities affected by these disputes were the following: electricity; public transportation; coal industry, metallurgy of iron and steel, iron and potash mines; banks, insurance companies and saving banks; arsenals; dockyards; private and nationalized car industries; construction; metallurgy; printing and press; merchant navy; dockers; chemical industry; social security agencies.

(15) This criterion of externality is used by the French Ministry of Labor to establish the two data sets of labor disputes along with the criterion of the dispute spread in space: "A generalized dispute is a collective work stoppage which stems from a call to

strike from outside the firm or the establishment, and which can affect the latter not only at the national level, but also at the local level".

(16) "In spite of their magnitude, the May 1968 strikes resulted in a lower number of new union members than in 1936 over the next few months. But unlike previous situations (in 1936 and 1945), unionization kept on growing until 1976" (Bouzonnie, 1987, p 67).

(17) Four main categories of demands appeared during national action days:

Increases in purchasing power of wages, especially increases in lowest wages in 1966, 1969, 1973 and 1976;

Increases in pensions and early retirement in 1971;

Extended and strengthened union rights in 1967, 1972 and 1974;

Overall protest against social policy of government and employers in 1967 and 1977.

(18) The data sets used in this research as well as Tables of generalized disputes and national action days from 1950 to the mid-80's are available from the author upon request

(19) I explained in detail the methodology I devised to build strike data sets in my article published by La Revue Francaise des Affaires Sociales in 1983 (p117-118).

REFERENCES

- Adam, Gérard. Histoire des Grèves. Paris: Bordas, 1981.
- Adam, Gérard & Jean-Daniel Reynaud. Conflits du Travail et Changement Social. Paris: Presses Universitaires de France, 1978.
- Andersen, Gösta Esping. Politics Against Markets, The Social Democratic Road to Power. H. Princeton, NJ: Princeton, 1985.
- Ashenfelter, Orley and George E. Johnson. "Bargaining Theory, Trade Unions and Industrial Strike Activity," American Economic Review, (1969), 35-49.
- Ashenfelter, Orley and John E. Pencavel. "American Trade Union Growth: 1900-1960," Quarterly Journal of Economics, (1969), Vol.83, 434-48.
- Bain, G.S. and E. Elsheikh. Union Growth and the Business Cycle: An Econometric Analysis. Oxford: Blackwell, 1976.
- Borrel, Monique. La Conjoncture Sociale Française de 1950 a 1980. Esquisse d'une Théorie des Conflits. Unpublished Thesis, Paris I University, 1982.
- Borrel, Monique. "Relations entre les Conflits du Travail et la Vie Socio-économique en France de 1950 à 1982," Revue Française des Affaires Sociales, (Avril-Juin, 1983), 115-137.
- Bouzonnie, Huguette. "L'évolution des Effectifs Syndicaux depuis 1962: Un Essai d'Interprétation," Revue Française des Affaires Sociales, (Octobre-Décembre, 1978), 59-82.
- Caire, Guy. La Grève Ouvrière. Paris: Editions Ouvrières, 1978.
- Cousineau, Jean-Michel. "Imperfect Information and Strikes: An Analysis of Canadian Experience, 1967-1982," Industrial and Labor Relations Review, (April, 1986), Vol. 39, No3, 377-387.
- Cronin, James. Industrial Conflict in Modern Britain. London: Croom Helm, 1979.
- Dubois, Pierre. "Recherches Statistiques et Monographiques sur les Grèves," Revue Française des Affaires Sociales, (Avril-Juin, 1980), 29-55.
- Edwards, Paul K. "Time Series Regression Models of Strike Activity: A Reconsideration with American data," British Journal of Industrial Relations, (November, 1978), 320-334.
- Edwards, Paul K. Strikes in the United States, 1881-1974. Oxford: Blackwell, 1981
- Fisher, Malcolm. Mesure des Conflits du Travail et de leurs Répercussions Economiques. Paris: OCDE, 1973.
- Flora, Peter and Arnold J. Heidenheimer. The development of Welfare State in Europe and America. London: Transaction Books, 1981.
- Franzosi, Roberto. "One Hundred Years of Strike Statistics: Methodological and Theoretical Issues in Quantitative Strike Research," Industrial and Labor Relations Review, (April, 1989), 348-362.
- Franzosi, Roberto. "The Press as a Source of Socio-Historical Data: Issues in the Methodology of Data Collection from Newspapers," Historical Methods, (Winter, 1987), Vol.20, No1, 5-16.
- Goetz-Girey, Robert. Le Mouvement des Grèves en France, 1919-1962. Paris: Sirey, 1965.

- Gramm, Cynthia L. "The Determinants of Strike Incidence and Severity: A Micro-level Study," *Industrial and Labor Relations Review*, (April, 1986), Vol.39, No3, 361-376.
- Gramm, Cynthia L. "New Measures of the Propensity to Strike During Contract Negotiations, 1971-1980," *Industrial and Labor Relations Review*, (April, 1987), Vol.40, No3, 406-417.
- Hibbs, Douglas Jr. "Industrial Conflict in Advanced Industrial Societies," *American Political Science Review*, (1976), Vol.70, No4, 1033-1058.
- Jenkins, J. Craig. "Resource Mobilization Theory and the Study of Social Movements," *Annual Review of Sociology*, (1983), Vol.9, 527-553.
- Kaufman, Bruce. "Bargaining Theory, Inflation, and Cyclical Strike Activity in Manufacturing," *Industrial and Labor Relations Review*, (1981), Vol.34, No3, 333-355.
- Kaufman, Bruce. "The Determinants of Strikes in the United States, 1900-1977," *Industrial and Labor Relations Review*, (1982), Vol.35, No4, 473-490.
- Korpi, Walter. "Conflict, Power and Relative Deprivation," *American Political Science Review*, (1974), Vol.68, No4, 1569-1578.
- Korpi, Walter, and Michael Shalev. "Strikes, Power and Politics in the Western Nations, 1900-1976," in M. Zeitlin, ed., *Political Power and Social Theory*. Greenwich, Conn.: JAI Press, Vol.1, 301-334, 1980.
- Korpi, Walter. *The Democratic Class Struggle*. London: Routledge, 1983.
- Mandel, Ernest. *Long Waves in Capitalist Development*. Cambridge: Cambridge University Press, 1980.
- Mauro, Martin J. "Strikes as a Result of Imperfect Information," *Industrial and Labor Relations Review*, (1982), Vol.35, No4, 522-538.
- Merrien, Francois-Xavier. "Etat et politiques Sociales: Contribution à une Théorie néo-institutionnaliste," *Sociologie du Travail*, (1990), No3.
- Paldam, Martin and Peder Pedersen. "The Macroeconomic Strike Model: A Study of Seventeen Countries, 1948-1975," *Industrial and Labor Relations Review*, (1982), Vol.35, No4, 504-521.
- Pencavel, John H. "An Investigation into Industrial Strike Activity in Britain," *Econometrica*, (1970), Vol.37, No147, 239-256.
- Scardigli, Victor. *Societe Francaise et Conflits Sociaux*. Paris: CREDOC, 1973.
- Screpanti, Ernesto. "Long Cycles in Strike Activity: An Empirical Investigation," *British Journal of Industrial Relations*, (1987), Vol.25, No1, 99-124.
- Shalev, Michael. "Trade Unionism and Economic Analysis: The Case of Industrial Conflict," *Journal of Labor Research*, (1980), Vol.1, No1, 133-173.
- Shorey, John. "Time Series Analysis of Strike Frequency," *British Journal of Industrial Relations*, (March, 1977), Vol.XV, 63-75.
- Shorter, Edward and Charles Tilly. *Strikes in France, 1830 to 1968*. London: Cambridge University Press, 1974.

- Skeels, Jack W. "The Economic and Organizational Basis of Early United States Strikes, 1900-1948," *Industrial and Labor Relations Review*, (1982), Vol.35, No4, 491-503.
- Snyder, David. "Institutional Setting and Industrial Conflict: Comparative Analyses of France, Italy and the United States," *American Sociological Review*, (June, 1975), 259-278.
- Stern, Robert N. "Methodological Issues in Quantitative Strike Analysis," *Industrial Relations*, (February, 1978), 32-42.
- Vroman, Susan B. "A Longitudinal Analysis of Strike Activity in U.S. Manufacturing: 1957-1984," *American Economic Review*, (September, 1989), 816-826.

CHRONOLOGY

This chronology includes the main events that had a significant impact on the dependent variables considered in Tables 2 and 3

- 1950 Feb.4: The socialist secretaries resigned because the government refused to grant all employees an exceptional bonus. For the first time since 1944 the government did not include Socialists
Act on Collective Agreements
- 1952 Socialist and union leaders censured the Pinay policy that froze employees' purchasing power
- 1953 April-May: Municipal elections. The Socialists rejected any agreement with the Communists
August 10: Publication of the Laniel Decrees which jeopardized the status of employees in government agencies and nationalized firms. The Decrees proposed new regulations in matters of recruitment, dismissal, promotion and pensions much less favorable to employees
- 1955 Sept.15: Renault agreement on wage increases and three-week paid vacation yearly for its employees. Union leaders and Renault management agreed on exploring all possible means of conciliation before resorting to strike action or lock-out during the next 2 years
Oct.-Nov.: Similar agreements were concluded by other firms in the car and aeronautic industries
- 1956 Jan.: Parliamentary elections. No agreement between the Socialists and the Communists
Jan.: The Mollet (socialist) government was supported by the Communists
Feb.28: Act on three-week paid vacation for all employees
- 1957 May: The Mollet government was reversed
The CGT and the CFDT often succeeded in achieving unity of action within firms
May: National agreement on the creation of a system of pensions for employees to complement the existing system
- 1958 Feb.: Act on one month's notice to be granted by employers whenever they dismissed an employee
June 1: de Gaulle took office
Nov.: Parliamentary elections. No agreement between the Socialists and the Communists
Dec.28: Devaluation of the French currency
Dec.31: National agreement between employers and unions to create a national insurance system for the unemployed
- 1959 Jan.: Governmental ordinance on profit-sharing
March: Municipal elections
- 1960 Jan.: The Algerian War started
- 1962 Jul.1: End of the Algerian War
Nov.: Parliamentary elections. Agreement between the Socialists and the Communists before the runoff
Dec.22: Renault agreement on four-week paid vacation for its employees

- 1963 July 27: Employees' rights to strike in public service agencies were curtailed by a law that created a five days' notice, made staggered strikes illegal, and allowed actions against strikers
- 1964 March: Cantonal elections
Oct.: Committees of wage regulation were established in nationalized firms
- 1965 March: Municipal elections. Agreement between the Socialists and the Communists
Dec.: Presidential elections. The leftist candidate, F. Mitterrand, was supported both by the Communists and the Socialists
- 1966 Jan.10: First summit agreement on unity of action between the CGT and the CFDT
Dec.: First agreement ever signed by the Socialists and the Communists to support the best placed candidates in the runoff of parliamentary or municipal elections
Dec.: Act protecting pregnant employees against being dismissed
- 1967 March: Parliamentary elections. Withdrawal agreement between the Socialists and the Communists in favor of the best placed candidates
May 16: de Gaulle requested increasing powers to run the country
August: Governmental ordinances on profit-sharing and social security. The ordinances reduced social security compensations while increasing contributions
End of the year: The CGT questioned unity of action with the CFDT
- 1968 May 27: Grenelle negotiations between the government, employers and union leaders. The guaranteed minimum wage increased by 20%
May 31: Mass demonstrations to support de Gaulle throughout the country
June: Parliamentary elections. Agreement between the Socialists and the Communists
Dec.: An act allowed union representatives and union branches within firms
- 1969: Feb.10: National agreement between employers and unions on job security
March: The Tillsitt negotiations between employers and unions on wages failed
May: Act on four-week paid vacation for all employees
June: Presidential elections. No agreement between the Socialists and the Communists on a unique candidate
August: Devaluation of the French currency and austerity measures
Dec.10: "Progress Contract" signed by unions and management in the nationalized sector of electricity. Unions except the CGT, the most powerful union in this sector, agreed on not initiating strikes on wages during 2 years. The contract guaranteed wage increases commensurate with the increase in

- the gross national product and the prosperity of the sector
- 1970 Similar contracts were concluded in other firms, particularly in the public transportation sector and in the coal industry
- March: Cantonal elections. Agreement between the Socialists and the Communists before the runoff
- April 20: Agreement between employers and unions on workers' monthly pay
- July: Agreement between employers and unions on job security
- July 9: Agreement between employers and unions on vocational training
- July 12: Act creating a paid pregnancy leave
- Dec.1: Second summit agreement on unity of action between the CGT and the CFDT
- 1971 March: Municipal elections. Local agreements between the Socialists and the Communists before the runoff
- May: Opening of the negotiations between the Socialists and the Communists on a common program of government
- Dec.24: Maximum working hours were reduced from 54 to 50 hours per week
- 1972 Feb.: Agreement between employers and unions on a guaranteed income for laid off employees over sixty years old
- June 26: For the first time the Communists and the Socialists came to an agreement on a common government program
- 1973 March: Parliamentary elections. National agreement between the Socialists and the Communists
- July 13: The legislation on dismissal procedures was revised
- Dec.27: Act providing for the improvement of working conditions within firms
- 1974 May: Presidential elections. Agreement between the Socialists and the Communists on a unique candidate. The center-right candidate won by a narrow margin
- June 26: Third summit agreement on unity of action between the CGT and the CFDT
- Oct.14: Agreement between employers and unions on granting 90% of their salary to laid off employees
- Economic crisis resulting from the doubling in oil prices
- 1975 Dec.: Act on early retirement for manual workers
- 1976 March: Cantonal elections
- May: Opening of the negotiations between the Socialists and the Communists in order to present common lists of candidates in every city on the first ballot of the 1977 municipal elections
- July 16: Act granting a paid rest to compensate employees who work overtime
- July: Act creating an individual right for employees to take training leaves
- 1977 March: Municipal elections
- June 13: Agreement between employers and unions on a guaranteed income for employees over sixty
- July: Act on retirement at sixty for women
- July: Act on parental leaves
- Sept.14: The Communist Party broke off the negotiations with

the Socialist Party about the update of their 1972 government program

Between 1977 and 1980, the government tried to control wage increases in order to achieve a strict maintaining of employees' purchasing power. However, higher increases were allowed for the lowest salaries. The government also implemented job contracts mainly for young people

1978 March: Parliamentary elections. Withdrawal agreement between the Socialists and the Communists before the runoff

1979 June: European elections

1980 June 16: The CGT broke off the agreement on unity of action with the CFTD

July 11: A decree extended social security to all French people

1981 May 10: Presidential elections. No agreement between the Communists and the Socialists before the elections. The CGT and the Communist Party called on to vote for the socialist candidate F. Mitterrand before the runoff

June: Parliamentary elections

June 23: The Socialist Party and the Communist Party agreed on a government program

Sept.: Act abolishing the death penalty

1982 Jan.16: Governmental ordinances on reducing working hours and extending paid vacation (39 hours per week instead of 40h; five-week paid vacation; overtime was restricted and compensated by additional breaks). As a result, the average working hours decreased from 48h to 42h per week

Feb.11: Act on nationalizations adding a significant number of firms to the existing nationalized sector

March 26: Governmental ordinances on vocational training for 16 to 18 year old people, part-time jobs and retirement at sixty

May 28: Decree on union rights for employees working in public service agencies

June 22: Devaluation of the French currency and freezing of prices and incomes

August 4: Act on workers' freedoms within firms. The act guaranteed freedom of speech for all employees within firms and strengthened union rights

Nov.23: Act creating union training leaves for employees in public service agencies

Dec.16: Decree on financial aid to help firms reduce working hours

Dec.23: Summit agreement between the Socialists and the Communists relating to the 1983 municipal elections

1983 Feb.4: Agreement between employers and unions on early retirement

March: Municipal elections

March 21: Devaluation of the French currency

April 28: Act aimed at introducing more "democracy" in the nationalized sector. The act required the election of employees' representatives on boards of directors,

strengthened union rights and allowed the creation of works councils

May 5: A decree made it a legal obligation for firms to negotiate at least once a year

July 13: Act requiring professional equality between men and women

1984 Feb.24: Agreement between employers and unions on unemployment insurance

March: A series of measures aimed at restructuring the French industrial sector resulted in significant cutbacks in workforce

June: European elections

July 19: Breakdown in the socialist-communist coalition that ran the country since 1981. The four communist secretaries resigned

1985 March: Cantonal elections