

Temporary Workers and Direct Voting Systems for Workers' Representation

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In this article, the author analyses whether in direct voting systems of workers' representation the voting probability is affected by the contract type, using the Spanish union elections as a 'natural' experiment. Although temporary workers are formally covered by this electoral system, the author finds that it strongly discourages the participation of temporary workers in elections. The main consequence is that unions have fewer incentives to include temporary workers' preferences in collective bargaining, and temporary workers lose an institutional channel to pressure for improvements in their inferior working conditions. The importance of other channels to include interests of temporary workers in unions' strategies (such as membership) is discussed as well.

Keywords: fixed-term contracts, outsiders, union elections, unions, working conditions

Introduction

In this article, I analyse whether a direct voting system representation can introduce additional motivation for unions to include atypical workers in their strategies, particularly temporary workers and their respective interests. The Spanish case is used as a sort of 'natural' experiment to test this hypothesis.

The effective representation of workers with atypical contracts is one of the current challenges for unions. The question is how to transmit their preferences to collective bargaining in order to improve their usually poor working conditions. As current levels of union membership among these workers (and even union coverage; Booth and Francesconi, 2003) are relatively low, it is not usual

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for unions to include their claims in collective action or day-to-day strategy. Might a direct voting system provide a channel for temporary workers to exert more influence on unions and, therefore, improve their current poor working conditions?

Nowadays, in the European Union, direct voting systems are used to elect the members of the works councils. At first glance, temporary workers would have the means to be effectively represented, because the seniority thresholds for voting are very low (usually between one and three months). However, in Europe, works councils do not usually have the right to participate in collective bargaining, and the votes and preferences of temporary workers are not necessarily transferred to the results of collective bargaining in this way. Or at least this institution does not provide incentives for unions to represent temporary workers' preferences in collective bargaining, unless unions have fully solidaristic preferences. Fortunately, the national diversity in the EU provides us with a sort of 'natural experiment': in Spain, works councils can participate in collective bargaining at the firm level and even the results of workplace elections are used to obtain legitimacy to participate in collective bargaining above the firm level. In addition, Spain has the highest rate of temporary workers in Europe (around one-third of wage and salary workers in the 1990s) and, therefore, it is an interesting national case to analyse any topic on temporary workers. As the vast majority of atypical workers in Spain are those with a temporary contract, the possible complications for our empirical analysis relating to the heterogeneity of atypical contracts are minimized. In any case, in some parts of the empirical analysis I consider different types of temporary contracts in order to confirm the importance of the heterogeneity of temporary workers.

Seemingly, the Spanish institutional framework provides a direct channel for temporary workers to influence workers' representatives: they can vote for those unions that include the preferences of temporary workers in their strategies, potentially affecting the election results and, thus, future collective agreements. Therefore, we should not see relevant differences in voting probability by contract type. However, the empirical results show that temporary workers have a relatively lower voting probability, mainly due to their higher representation in those firms where union elections are not called. Therefore, a direct voting system is not enough for effective representation of all workers' preferences regardless of their contract type. This system should be complemented by other institu-

tions in order to give temporary workers a channel to push for improvements in their inferior working conditions.

The remainder of the article is as follows. In the next section, I discuss the problems related to the representation of temporary workers by unions. In the third section, I describe the main aspects of the Spanish legal framework on workers' representation and union elections, and the lack of voting incentives for temporary workers. In the fourth section, I empirically test that temporary workers have a significantly lower participation in union elections. Implications for policy reforms are discussed as well. I suggest some innovations so as to avert the role of outsiders played by temporary workers. The conclusions section summarizes the main results of the article.

Trade Unions and the Representation of Temporary Workers

During the 1980s and 1990s, temporary contracts (and in general, atypical contracts) were used by governments to promote employment and to decrease unemployment, especially in Europe. In some countries, such as Spain or France, there has been a huge increase of workers with temporary contracts. Apart from the debate on the true effect of temporary contracts on the level of employment and unemployment,¹ we can see that temporary workers suffer worse working conditions than other workers with the main exception of workload. In addition, the association between contract type and health is not very clear. Following, for example, Virtanen et al. (2003) and Benavides et al. (2000), part of the health-related literature has found that non-permanent workers report lower work stress, better self-rated health, fewer somatic complaints and equal psychological well-being compared to permanent workers. However, other authors (quoted extensively by Virtanen et al., 2003) have found that non-permanent employment is associated with higher role ambiguity, lower job satisfaction and higher psychological distress. Longitudinal studies by Virtanen et al. (2003, 2005) show that the transition from a temporary contract to an open-ended one increases workload as well as job satisfaction. Virtanen et al. (2003) find that health and health-related behaviours remain unchanged. A possible explanation would be that health risks of the working environment may come from rather different sources for both groups of workers affecting health in a similar

way, because while temporary workers are more affected by job insecurity, permanent workers are mainly affected by work overload. However, Virtanen et al. (2005), adjusting for health and psychological distress at baseline, find that a trajectory towards stable employment from a fixed-term contract is associated with a decreasing risk of psychological distress.

Concerning job characteristics exclusively, empirical literature usually shows a strong association between temporary contracts (and other forms of atypical contracts) with poor working conditions. For example, Letourneux (1998) provides systematic evidence for the EU showing that temporary workers suffer the most negative consequences of internal flexibility (such as atypical working hours, shift work, pay with no fixed components, etc.) or even hazards posed by working conditions. The economic sectors where working conditions are worse are also those where the proportion of atypical jobs is higher, but poor working conditions and atypical contracts go together in the labour market, no matter the economic sector or occupational group.

A possible explanation is that unions have relegated temporary work to something atypical and far from the traditional profile of a unionized worker (male, industrial, full-time, with an open-ended contract, etc.). From this perspective, atypical contracts have introduced a growing diversity in the labour force, changing the traditional profile of union members.²

This 'deterministic' approach has been questioned by some authors such as Hyman (1996), who remarks that the strategy of unions can make a difference, because trade unions are not merely passive agents, and they try to confront the new challenges of representation related to the extension of atypical contracts. In some cases, trade unions have been able to obtain the support of some workers not usually involved in union activities, such as women or part-time workers, fomenting the provision of services demanded by these groups (Waddington and Whitston, 1996; Sewel and Penn, 1996). In Italy in 1998, trade union confederations created new organizations to provide representation for workers under 'new forms of employment relationships' (Trentini, 1998). There are even innovative proposals (Greene and Kirton, 2003) for using new information and communication technologies in order to replace physical presence at meetings (usually not compatible with caregiving responsibilities and atypical working hours).

However, as Carre (1998) explains, these innovative responses are usually piece-meal and address only one problem of temporary workers at a time. Heery et al. (2002) provide survey evidence on the extent to which unions in Britain are seeking to recruit, organize and represent workers with atypical contracts. In general, this survey of unions reveals an uneven union engagement with the interests of part-time and temporary workers. In the fields of recruitment, participation, services, bargaining and legal and political action there is clearly a minority of active unions who have prioritized the representation of 'non-standard' workers, and in many cases these are specialist unions with concentrations of non-standard workers. Outside these active minorities, the interests of part-time and temporary workers have not been prominently featured on the unions' agenda.

Finally, there are national experiences regarding a relevant inclusion of 'atypical' workers in unions' strategies. A prominent example is the Swedish case. Atypical work (including part-time workers) in Sweden accounts for around 30 percent of total employment (Fahlbeck, 1999), but atypical workers are unionized slightly more than 'typical' workers. (At any rate, unionization is in general very high in Sweden compared to other countries.) Following Fahlbeck (1999), the tradition and experience of Swedish unions managing diverging interests of their affiliates is crucial to understanding that atypical workers affiliate so much, but atypical workers support unions' strategies because unions include (at least to some extent) their interests in improving their working conditions. In this vein, the Dutch and Danish cases illustrate the strength of negotiated solutions where government policy targeting negative employment aspects of part-time work is developed in consultation with, and is supported by, unions and employers (Rasmussen et al., 2004). The approach of Dutch unions towards part-time employment has been crucial in the development of the so-called 'Dutch miracle'. Generally, unions have shifted to strategies that facilitate paid employment and diminish the gap in employment conditions between part-time and full-time jobs. However, Rasmussen et al. (2004) point out that even in this successful case some core issues remain, such as career aspirations, training and education, pension rights, sickness benefits and, sometimes, job security as well.

Then, what makes the difference between national cases? Cerviño (2000) remarks that institutional factors have hardly been considered when analysing the unions' capacity to represent workers

with atypical contracts. The institutional context is critically linked to the incentives for unions to effectively represent or not atypical workers. However, it is important to stress that not only the institutional framework is relevant to understanding the representation of the interests of temporary workers, but whether temporary workers have mechanisms to change their system of representation or not. Therefore, the analysis of any institutional framework linked to the representation of temporary workers should reveal whether the representation system is self-reproducing or if it allows other ways to transmit temporary workers' preferences to unions or allows unions to develop strategies for enrolling temporary workers.

The further analysis of the Spanish case attempts to show how an institutional framework, apparently prepared to include the interests of all workers in collective bargaining, gives incentives to unions to 'forget' temporary contract workers. In addition, we see that it gives incentives to workers to not participate in the main institution for workers' representation: direct voting in union elections.

Direct Voting Systems for Workers' Representation

In the EU, the representation of workers at the workplace presents different combinations of union representation and works council. While the unions' representation is obtained through membership, the representation of the latter is obtained through direct voting of the workforce.³ Nevertheless, the different national cases provide a variety of combinations and mutual dependence between both institutions for workplace representation. The unions' representatives can represent only their members or sometimes they are a link between workers and external unions. The works council as an elected body represents the workforce as a whole, but sometimes union representatives have a preferential right to be members of works councils.

Considering this European context, it is pertinent to question whether temporary workers would transfer their preferences to collective bargaining under an eventual system where collective bargaining at firm level would be conducted by works councils. It is possible to answer this question analysing the Spanish case.

In Spain, there is an electoral system that provides a direct way for workers to elect their representatives in works councils. These works councils have the right to participate in collective bargaining with

employers at the firm level. As unions present their lists to these elections they are called 'union elections' (although independent lists exist). In addition, the results of union elections are used to elect representatives in collective agreements above the firm level.

The Case of Union Elections in Spain

The current Spanish system of workers' representation and collective bargaining was introduced with the democratic system at the end of the 1970s. For a survey of the Spanish industrial relations system and the role of trade unions, see, among others, Jimeno and Toharia (1993a), Jordana (1996) or Martínez-Lucio (1998). Two nationwide unions dominate labour relations in Spain, UGT (Unión General de Trabajadores) and CCOO (Comisiones Obreras). UGT was founded at the end of the 19th century and has been traditionally closely linked to the Socialist Party, although in the last 20 years this relation has been much less intense. CCOO was created in a more or less spontaneous process in the 1960s during the Francoist dictatorship (when free unions were prohibited by law) and it was closer to the Communist Party. However, nowadays this political link hardly exists. The other unions, such as USO (Unión Sindical Obrera; initially Catholic influenced and very relevant during the first decade of the democratic system in Spain) or CGT (Confederación General del Trabajo; related to anarcho-syndicalism), which has had some successes in relevant sectors and firms, are much smaller. At the regional level, some unions (such as ELA/STV [Eusko Langileen Alkartasuna/Solidaridad de Trabajadores Vascos] in the Basque Country and CIG [Confederación Intersindical Gallega] in Galicia – both closer to nationalistic parties) play a key role in labour relations in their regions, disputing the predominance of UGT and CCOO.

The crucial concept of the legal framework on unions in Spain is the representativeness (*representatividad*). The representativeness criteria are obtained from worker representatives' elections that were established in the Spanish Workers' Charter (Estatuto de los Trabajadores) in 1980 and confirmed in the Union Rights Act in 1985 (Ley Orgánica de Libertad Sindical). The representativeness criteria are very important to bargaining collective agreements.⁴

A union is 'most representative'⁵ when it includes (at least) 10 per cent of workers' representatives. This percentage is measured with

respect to the country and to all industries (including public administration). The legitimacy to bargain collective agreements arises from elections, which can only be called in firms with six or more workers. Those workers with at least one-month seniority (regardless of their labour contract) can vote for the different lists (usually one per union, but occasionally 'independent' lists also turn up) that must contain as many persons as delegates to be elected. The finally elected delegates are then picked from the different lists using a proportional system. This means that winning the election in one firm – or industry – does not mean becoming the representing union in that firm – or industry – but rather obtaining the largest number of delegates (therefore, usually no single union has a monopoly right of representation).

To participate in collective bargaining above the firm level (for example, at the industry or regional level) the bargaining parties have to fulfil the basic criterion of representativeness. The threshold of 10 percent excludes *de facto* the independent representatives and it is only easily obtained by the national trade unions (CCOO and UGT) and at the regional level by some unions such as ELA/STV in the Basque Country and CIG in Galicia. Therefore, UGT and CCOO dominate the industry-level agreements in Spain, although some regional unions participate actively in their respective regions. At the firm level, electoral representatives can bargain the collective agreement. At this level, the minimum threshold of 10 percent is not applied, and the result is that the representation of workers includes a variety of unions and independent representatives. At any rate, UGT and CCOO also have very high representation at the firm level.

The responsibility for calling for union elections rests on the unions themselves. As the process is very difficult to control in small firms, in many small firms union elections are never called. Therefore, the percentages of representativeness for collective agreements above the firm level mainly show the results for medium and large firms. The labour market reform of 1994 has exacerbated this problem. Before the reform of 1994, elections took place every four years during three-month periods, and there was a national public declaration of the election winner. Since the 1994 reform, the elections are not concentrated and there is no official declaration of results. As the number of representatives to be elected depends on the firm size, unions have less incentive to call for elections in small firms, because the incentive of the national declaration of the official winner of union elections no longer exists.

TABLE 1
Number of Elected Representatives of the Trade Unions with the Greatest Representation in Union Elections (National Results), 1978–98

Union	1978	1980	1982	1986	1990	1994	1998
CCOO	66,540	50,817	47,016	56,965	87,738	77,040	81,314
UGT	41,897	48,194	51,672	66,441	99,737	70,746	76,382
ELA/STV ^a	1931	4024	4642	5372	7488	7146	7267

^a ELA/STV: Eusko Langileen Alkartasuna/Solidaridad de Trabajadores Vascos (Basque Workers' Solidarity)

Source: Jódar and Jordana (1999).

The historical evolution of the elections is shown in Table 1 (taken from Jódar and Jordana, 1999). UGT was the most voted for union in the 1980s, being clearly predominant together with CCOO. Both unions control the industry, province, regional and national collective agreements. In 1998, CCOO had around 38 percent of all representatives and UGT 35 percent, including independent representatives (Jódar and Jordana, 1999; Miguélez, 1999).

For the employers' organizations, there is a similar representativeness criterion, but there is a legal caveat on the means adequate to measure the representativeness threshold (10 percent as with unions) because there are no 'employers' elections'. The usual means to indicate the level of representativeness include the following (Rivero, 1993): tax census, inscription in the social security system, industrial statistics, official communications of employer organizations in their own affiliation. Therefore, the definition of most representative employers' organizations is poor and ambiguous. Moreover, in the bargaining practice the 'social renown' of the employer organization is used as the measure of representativeness.

To sum up, union elections extend the power of unions beyond affiliation, but at the same time they convey a competition among unions in order to be elected and to participate in collective agreements above the firm level. As workers with at least one month of seniority can vote, from a legal point of view, temporary workers are not excluded from this electoral process. However, as is discussed in the next section this institution might not provide the right incentives for unions to include the problems of temporary workers among their claims in collective bargaining.

Do Temporary Workers Have Incentives to Vote in Union Elections?

In the 1990s, temporary workers comprised approximately one-third of the Spanish wage and salary workers (see, for example, Toharia and Malo, 2000; Dolado et al., 2002). Considering that seniority requirements to vote in the union elections are very low, they effectively make up almost one-third of the potential electorate, and it is obvious that a union that is elected through union elections cannot ignore such a huge part of the potential voters. However, some authors (mainly Bentolila and Dolado [1994] and Jimeno and Toharia [1993b]) have assumed in their macroeconomic models that temporary workers are outsiders in the Spanish labour market.

Temporary workers are not the median voter,⁶ but, in addition, temporary workers are members of the electorate with a probability much lower than 1 because of two reasons. First, some temporary workers can be unemployed on the exact date of the election and, therefore, their preferences cannot be transferred to the unions through elections. Second, as temporary workers move to different jobs in different firms and even industries, they can be discouraged from voting. For example, consider a temporary worker who is working for an insurance firm and he or she votes for union i and when this union bargains for the industry collective agreement he or she does not like the results. Assuming rational voting, in the next union election he or she will change their vote to union j . However, in the next union election this worker has moved to a chemical firm where unions i and j are not relevant or have different electoral programmes with respect to those presented in the insurance industry. A forward-looking voter will anticipate this effect and it will affect his or her voting probability. The result will be that abstention should be relatively high for temporary workers. The performance of union elections would be an institutional explanation of the role of outsiders played by temporary workers in the Spanish labour market.

Descriptive and Econometric Analyses

The empirical analysis is based on two databases: the ECBC-1991 and the CIS-1994.⁷ They are surveys of individuals. Both include questions about voting in union elections and are representative at

national level. They are the only available surveys with information on voting in union elections.

The CIS database was launched in 1994 by the Spanish Centre for Sociological Research (Centro de Investigaciones Sociológicas, CIS).⁸ The total sample consists of 5965 cases. As before, those individuals answering the questions related to union elections (1462 individuals⁹) have been selected. One of the objectives of this survey was to provide reliable information about unions' representation in Spain.

The ECBC was launched in 1991. The total sample consists of 6636 cases. The sample selected for the empirical analysis includes those who answered the questions related to union elections (617 cases). In the Appendix Table A1 presents the descriptive statistics of both samples.¹⁰

In Table 2, I present some descriptive results on the voting probability by contract type using the CIS-1994.¹¹ First, the percentage of non-participation because workers were not called to union elections is much higher for temporary workers (83.4 percent) than for permanent workers (39.9 percent). In any case, 60 percent of workers did not vote because union elections were not called in their firms. Second, only 10 percent of temporary workers voted in union elections while 47.8 percent of permanent workers voted.

TABLE 2
Vote in the Last Union Elections, CIS-1994

	No Elections^a	Did not Vote	Voted	Total
<i>Row percentages</i>				
Type of contract				
Permanent	39.9	12.4	47.8	100.0
Temporary	83.4	6.3	10.4	100.0
Total	60.0	9.5	30.4	100.0
<i>Column percentages</i>				
Permanent	35.6	69.5	84.2	53.7
Temporary	64.4	30.5	15.8	46.3
Total	100.0	100.0	100.0	100.0

^a 'No elections' means that workers were not called to union elections when the interviewee was working in his or her firm.

TABLE 3a
Probit Model on the Probability of Voting in Union Elections, CIS-1994

Variables	Coef.	SE	<i>t</i>	Marginal Effect
Temporary contract	-0.717	0.104	-6.92	-0.2058
Union membership	0.939	0.089	10.57	0.2996
Gender (1 = male)	-0.079	0.100	-0.80	-0.0237
Age	0.101	0.027	3.68	0.0297
Age squared	-0.001	0.000	-3.43	-0.0003
<i>Educational level</i>				
Illiterate or no studies	-0.145	0.204	-0.71	-0.0405
Secondary level	0.101	0.115	0.88	0.0304
University	0.089	0.153	0.58	0.0268
<i>Industry</i>				
Manufacturing	0.367	0.187	1.96	0.1153
Services	0.162	0.187	0.87	0.0473
<i>Type of employer</i>				
Public administration	-0.015	0.174	-0.09	-0.0044
Public firm	-0.174	0.179	-0.97	-0.0484
Priv. firm over 1000 empl.	0.023	0.182	0.13	0.0070
Priv. firm 10-99 empl.	-0.471	0.153	-3.07	-0.1239
Priv. firm fewer than 10	-1.146	0.156	-7.33	-0.3002
<i>N</i>		1461		
Pseudo- R^2		0.3586		
χ^2	652.21		Sig.:0.000	d.f.:26

Reference: Worker with a permanent contract, not affiliated with a union, with a primary educational level, working in construction or in the primary sector, and in a private firm with 100-999 workers.

The regression includes five regional dummies and nine occupational dummies.

Third, considering those who voted in the last union election, 16 percent were temporary workers, which is around 30 points below the percentage of temporary workers in the sample. Fourth, considering workers of firms where union elections have not been called, around one-third have a permanent contract and the rest a temporary one.

Therefore, the descriptive analysis shows that temporary workers are more present in those firms where union elections are not called, and they have a lower participation with respect to permanent workers.

To confirm these results, I have estimated some econometric models on the probability of voting in union elections. Tables 3a and 3b present the estimation of two probit models (the first one with CIS-1994 and the second with ECBC-1991). To better understand the results, these tables include the marginal effects.

Table 3a shows that workers with temporary contracts have a significantly lower voting probability: being a temporary worker

TABLE 3b
Probit Model on the Probability of Voting in Union Elections, ECBC-1991

Variables	Coef.	SE	<i>t</i>	Marginal Effect
Temporary contract	-0.561	0.159	-3.54	-0.1673
Membership	1.778	0.265	6.71	0.6259
Gender (1 = male)	0.464	0.150	3.10	0.1355
Civil status (1 = married)	0.046	0.168	0.27	0.0136
Experience	0.045	0.023	1.94	0.0134
Experience squared	-0.001	0.000	-2.62	-0.0003
<i>Educational level</i>				
Illiterate or no studies	0.523	0.235	2.22	0.1652
Secondary level	0.045	0.345	0.13	0.0137
University	-0.721	0.429	-1.68	-0.1598
<i>Industry</i>				
Primary sector	0.179	0.447	0.40	0.0562
Manufacturing	0.824	0.288	2.86	0.2734
Services	0.276	0.295	0.94	0.0836
<i>Type of employer</i>				
Public administration	0.102	0.305	0.33	0.0315
Public firm	0.352	0.306	1.15	0.1166
Priv. firm over 1000 empl.	0.282	0.284	0.99	0.0918
Priv. firm 10-99 empl.	-0.159	0.224	-0.71	-0.0464
Priv. firm fewer than 10	-0.492	0.238	-2.07	-0.1407
<i>N</i>		617		
Pseudo- <i>R</i> ²		0.2986		
χ^2	219.00		Sig.:0.000	d.f.:29

Reference: Worker with a permanent contract, not affiliated with a union, with a primary educational level, working in construction or in the primary sector, and in a private firm with 100-999 workers.

The regression includes five regional dummies and nine occupational dummies.

TABLE 4
Marginal Effects on the Voting Probability Using the Probit Model with Selectivity, CIS-1994

Variable	Marginal Effect	SE	z	p > z	Interval Conf. at 95 %		Mean
					Min.	Max.	
Temp (1 = yes)	-0.0579	0.024	-2.41	0.02	-0.105	-0.011	0.47
Union membership (1 = yes)	0.0928	0.021	4.50	0.00	0.052	0.133	0.35
Gender (1 = male)	-0.0426	0.018	-2.36	0.02	-0.078	-0.007	0.67
Illiterate or no studies	-0.0113	0.043	-0.26	0.80	-0.096	0.074	0.05
Secondary level	-0.0239	0.020	-1.17	0.24	-0.064	0.016	0.28
University	-0.0496	0.028	-1.81	0.07	-0.103	0.004	0.18
Age	0.0085	0.006	1.50	0.13	-0.003	0.020	37.7238
Age squared	-0.0001	0.000	-1.39	0.17	0.000	0.000	1574.60
Manufacturing	-0.1089	0.053	-2.07	0.04	-0.212	-0.006	0.25
Services	-0.0623	0.034	-1.85	0.07	-0.128	0.004	0.59
Public administration	-0.0080	0.035	-0.23	0.82	-0.076	0.060	0.13
Public firm	-0.0344	0.040	-0.85	0.39	-0.113	0.045	0.10
Priv. firm over 1000 empl.	-0.0073	0.035	-0.21	0.84	-0.076	0.062	0.08
Priv. firm 10-99 empl.	0.0398	0.024	1.65	0.10	-0.007	0.087	0.22
Priv. firm fewer than 10 empl.	0.1144	0.026	4.39	0.00	0.063	0.166	0.39

decreases the voting probability by 21 percent. Polavieja (2001) offers a similar result estimating a logit model (Polavieja, 2001: 210, Table 6.1). His results show that the voting probability for temporary workers was 2.38 times lower than for permanent workers. I have estimated a logit model with the same specification of Table 3a and the results almost coincide: the voting probability for temporary workers is 2.5 times lower than for permanent workers.¹² Therefore, the results are robust to specification changes.

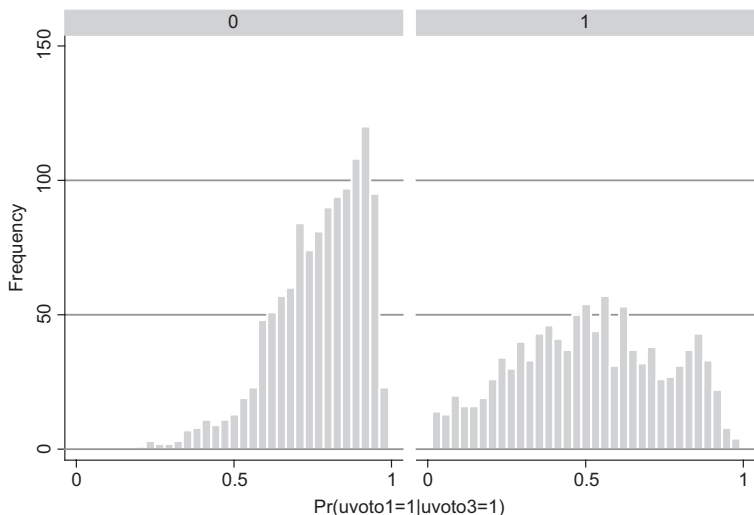
Table 3a also shows that membership greatly increases the voting probability (30 percent). It is by far the most effective variable to increase voting probability. Age is another factor that increases the voting probability, although this positive effect decreases slowly as the negative coefficient of the squared term of age shows. Finally, workers in private small firms have a lower voting probability, especially those in firms with fewer than 10 workers. In this case, the marginal effect is 30 percent.

Table 3b presents the same analysis but using ECBC-1991. The results are very similar. The marginal effect of a temporary contract is 17 percent. As before, membership is the most important variable for increasing voting probability: the marginal effect is an increase of 63 percent. Finally, those workers in firms with fewer than 10 employees have a decrease in voting probability of 14 percent.

However, there is a possibility that the results for temporary workers will be biased if they are usually in firms where union elections are never called. In other words, only workers of firms where union elections are called can vote. A probit model with selectivity with each database¹³ (see Appendix, Table A2, to see the coefficients) has been estimated. Using only CIS-1994, the variable denoting the selectivity is significant.¹⁴ The main results remain: temporary workers have a lower probability of voting and membership greatly increases this probability. It is, however, very useful to discuss the change in the size of the effects of these variables.

In order to have a better understanding of the results, the marginal effects (Table 4) and the predicted voting probability (Table 5 and Figure 1) have been estimated for the probit model with selectivity using the CIS-1994 database.

Table 4 shows that, correcting for being in a firm where union elections have been called, temporary contracts decrease the voting probability by 6 percent. In Table 3a the marginal effect without selectivity control was 21 percent. Therefore, calling, or not calling union elections explains 15 percentage points of the decrease in



Graphs by temp

Vertical axis: frequency
 Horizontal axis: predicted voting probability
 Left: workers with a permanent contract
 Right: workers with a temporary contract

FIGURE 1
Histograms of the Predicted Voting Probability using the Probit Model with Selectivity, CIS-1994, by Contract Type

TABLE 5
Mean Predicted Voting Probability Using the Probit Model with Selectivity, CIS-1994

	Temporary Workers	Permanent Workers
Mean	0.5154	0.7688
	Non-Union Members	Union Members
Mean	0.5436	0.8597
	Temps with a Casual Contract	Temps with Another Contract than Casual or Interim
Mean	0.5337	0.3824

Note: Interim contracts are not included in the last row because their coefficient was not statistically significant in estimations.

voting probability, most of the original marginal effect, while the type of contract explains 6 points.

As the Spanish legal system (and many others) allows for various forms of temporary contracts with different levels of attachment to the workplace, the different categories of temporary contracts included in the CIS-1994 database have been used. The following three groups are considered:

- Casual contracts, designed to help firms confront unexpected or seasonal fluctuations in their product demand. The maximum duration is six months, but collective agreements can include special cases with longer periods.
- Interim contracts, to cover vacancies at the firm until the job is filled by a worker with an open-ended contract.
- Other temporary contracts, such as contracts for specific services of a temporary duration (known as ‘per task’), work-experience contract or training contracts.

The probit model with selectivity including dummies for these three groups of temporary workers has been estimated again. The results (available upon request¹⁵) show that they have different voting probabilities. Those with interim contracts do not have a significant difference in voting probability with respect to permanent workers. Probably, they see themselves as filling a permanent position although their contract is temporary and/or they expect to be hired on a permanent basis for the same job in the near future. The other two groups have lower probabilities of voting with respect to open-ended contracts, although it is much lower for the ‘others’ group.

Considering membership, we can see that controlling by selectivity decreases the marginal effect by up to 9 percent. Therefore, most of the original 30-point increase was due to the effect of calling elections.

Finally, in Table 5 we see that the mean predicted voting probability for permanent workers is 77 percent, but for temporary workers it is 51 percent. Therefore, whereas temporary workers make up around 30 percent of the total workforce (Toharia and Malo, 2000) they actually represent only 15 percent of the votes. The histograms of predicted voting probabilities by contract type (Figure 1) show that almost all permanent workers have a predicted voting probability above 50 percent, while temporary workers are almost

equally dispersed around 50 percent. As for the influence of membership, Table 5 shows that union members have a mean predicted voting probability of 86 percent and non-members only 54 percent. The last row of Table 5 shows the same prediction considering the estimation with different types of temporary contracts. While workers with a casual contract have a mean predicted probability of 53 percent, the 'other temporary contract' group has only 38 percent. Therefore, there are very relevant differences not only with respect to workers with an open-ended contract but among different temporary contracts as well.

Discussion

A plausible interpretation of the preceding results is that, from the unions' perspective, there are no clear electoral incentives to consider the preferences of temporary workers, as they do for permanent workers when they are preparing the electoral programmes and negotiating the collective agreements. Bentolila and Dolado (1994) and Jimeno and Toharia (1993b) considered that the Spanish unions did not include the preferences of temporary workers mainly because the profile of a typical union member was a permanent and mature worker (profile supported by the empirical analyses of Rodríguez [1996] and Simón [2003]). Here, it is argued that the exclusion of the preferences of temporary workers is related to how union elections work; in other words, there is an institutional explanation not strictly linked to the profile of union members.

This direct voting system for workers' representation tends to exclude those workers of firms where union elections are not called (which, as we have seen, greatly affects temporary workers), those who are unemployed at the time of union elections (which mainly affects those with temporary contracts because of their higher probability of becoming unemployed) and those workers who move from one sector to another (which is a more common situation for temporary workers than for workers with other types of contracts). Therefore, temporary workers will have a much lower participation in union elections, which is confirmed by the empirical analysis. In this sense, temporary workers are not members of the electoral census in the same way permanent workers are. In fact, as we saw earlier, their votes comprise on average only half of their participation in the total workforce. Thus, unions do not

have an incentive to give the same weight to the prospective votes of temporary workers as to permanent workers, and instead, focus their strategies on the latter group. Perhaps it can be argued that it is problematic to assume that unions' strategies are mainly based on rational considerations derived from the structure of the direct voting system. Although ideological considerations are relevant to understanding unions' behaviour (see Malo [2005] for an empirical analysis of this), it is important to remark that even a fully solidaristic union would be affected by these electoral incentives under a union elections system.

The rationale is that only those unions obtaining a majority of representatives can significantly affect the collective bargaining results, and therefore any union would give priority to the votes of permanent workers. Unions can only develop their strategies (likewise based on their correspondent ideologies) in collective bargaining if they obtain enough votes in union elections, and they will only have enough votes by proposing electoral programmes that represent the interests of the majority of effective voters (and they are generally not temporary workers). As a sort of 'dark side' of union elections, temporary workers become outsiders because of the incentives structure provided by the union elections system, which paradoxically was introduced at the beginning of the democratic system in Spain as a democratic way to give representation to *all workers*. Since temporary workers are de facto excluded from collective bargaining (because of the design of the legal system of representation), the working conditions of temporary workers would continue to be worse in comparison to workers on open-ended contracts.

Beyond the Spanish case, the results of this article are of interest in discussions of how the institutional framework might promote the inclusion of temporary workers in unions' strategies, and even more so considering the general trend towards more flexibility in the labour market in all Europe (including an increase in temporary employment). We have seen that even when a direct voting system exists, it is possible that temporary workers will be outsiders. The main problem is related to the 'electoral census'. In this context, only those people with a contract at the election date in a firm where elections are called can vote. Therefore, unemployed workers and those in firms (mainly small) where elections are not called are formally excluded. For those groups of workers with a relatively higher probability of becoming unemployed (such as temporary

workers) and those working in small firms (mainly with a temporary contract), the voting system does not provide a good channel to transfer their preferences to the elected workers' representatives. However, under these circumstances, becoming a union member could be a good way to influence unions' strategies, because even when they become unemployed they are still union members. If unions have democratic rules to determine their strategies, membership is then a more direct way to influence unions' strategies in collective bargaining. The existence of national and/or inter-industry unions would enhance the importance of membership for temporary workers.

Finally, the results have some policy implications regarding how to improve the participation of temporary workers in elections and, therefore, give incentives to unions to 'aggregate' the interests of these workers. The key for a direct voting system should be to include mechanisms that promote the vote of workers in small firms and, in general, in all firms where elections are not called, in order to increase their representation in collective agreements above the firm level. The most direct way would be to create a direct system of voting outside firms for workers of small firms. It would be a complement to the general system, exclusively to obtain representation for collective bargaining above the firm or plant level. A less radical change would be a simplified electoral system for small firms in order to give an incentive to unions to call elections in smaller firms (where temporary workers represent the majority of the workforce).

Another possibility would be to increase membership among temporary workers. This would even be feasible under a direct voting system, such as the Spanish one, because the empirical analysis has shown that it is the most determinant variable to participate in union elections. However, we know that unions have not included the interests of temporary workers in their strategies (Heery et al, 2002), and thus it is not clear why a union would start a new strategy promoting membership among temporary workers. Therefore, the promotion of membership of temporary workers should be implemented through public policy. As Fernández-Macías (2003) has found for the Spanish case, temporary contracts do not affect the wisdom of unions as defenders of all workers' interests (including those with atypical contracts). This result is coherent with the international evidence (see, for example, Goslinga and Sverke, 2003; Witte and Näswall, 2003), which shows that job insecurity¹⁶ affects

both unionized and non-unionized workers, with negative effects on organizational loyalty and employees' propensity to job turnover, but temporary work itself is not associated with a reduction in organizational commitment.¹⁷ Considering that temporary workers have not developed anti-union feelings, the key issue then is that temporary workers have to deal with special problems to articulate their interest collectively because of job instability (Fernández-Macías, 2003). Membership could circumvent this limitation only if unions provided a general arena in which to discuss problems related to temporary workers, not limiting their actions to the strict confines of the correspondent industry or firm. The Swedish case shows that union density can be equivalent in temporary and permanent workers (Fahlbeck, 1999), and there is a real possibility of giving priority in collective bargaining to the improvement of working conditions, job security, fringe benefits, etc., for temporary workers instead of merely pressuring for reduction of temporary contracts (Delsen [1998] noted that that was the usual strategy of unions at international level). As a conjecture, the success of the Swedish unions including temporary workers' interests in their strategies might be linked to the existence of this 'general arena' provided by the relatively more centralized collective bargaining system. Therefore, the challenge of including interests of temporary workers goes beyond the implementation of direct voting systems (which are affected by the bias of the composition of the electoral census against temporary workers) and lies as well in promoting membership of temporary workers in order to defend their practical interests and, maybe, in the creation of new and wider bargaining rooms above the firm and sector levels, which is the real economic area of temporary workers.

Conclusions

In this article, we have analysed whether under a direct voting system of workers' representation all workers participate in elections irrespective of their contract type. Using the Spanish case as a 'natural experiment', we have seen that temporary workers will systematically have a much lower voting probability. A side effect of this institutional context is that unions will have fewer incentives to represent temporary workers' interests than those of permanent workers. Therefore, temporary workers are deprived of a channel

that would allow them to pressure for improvements in their relatively poorer working conditions.

There are three factors supporting this statement. First, there are firms where unions do not call for union elections, and as temporary workers are more present in these firms, their participation is lower because they cannot vote. Second, some temporary workers might be unemployed on the exact date of the elections and, therefore, their preferences cannot be transferred to the unions through elections. Third, as temporary workers move to different jobs in different firms and even sectors, they can be discouraged from voting, due to different sectors' union strategies or even different unions. The empirical analysis with two databases supports the lower participation of temporary workers and this result is obtained even when controlling for the selectivity bias created by firms where union elections are not called. The selectivity control shows that being in a firm where union elections are not called is the main reason for the lower voting probability of temporary workers, although a relevant negative impact of the contract type remains. Moreover, considering different types of temporary contracts, some of them have extremely low voting probabilities, stressing the relevance of the heterogeneity within temporary employment.

In sum, the main lesson to be learned from the Spanish case is that, even under a direct voting system to elect workers' representatives for collective bargaining, temporary workers can become outsiders. The main reason is that not all workers have the same probability of being members of the electoral census. Therefore, a direct voting system should be based on institutional mechanisms, creating an electoral census where all workers are present. On the other hand, the results show that even under a direct voting system to elect workers' representatives, membership is very important. In addition, it is a more direct way of affecting unions' strategies, because union members can influence the elaboration of the electoral programmes of unions. Therefore, promoting membership among temporary workers should be explicitly considered as a public policy to mitigate the role of outsiders potentially played by these workers and to create a way of improving their inferior working conditions through their unions' representation in collective bargaining. Empirical evidence shows that temporary workers are not necessarily against unions and they do not see workers with open-ended contracts as their 'enemies'. However, they do have specific problems articulating their interests collectively due to the

temporary nature of their labour relationships in specific firms or sectors. Promoting more centralized levels of bargaining could create new incentives for temporary workers to become union members and to pressure for their interests through unions.

Notes

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1. The introduction of temporary contracts can be considered as a decrease in firing costs. Following, for example, Nickell (1986), a decrease in firing costs will increase the ups and downs of the employment level but not the average aggregate level of employment. Other authors, such as Bentolila and Saint-Paul (1992), present formal models where the introduction of temporary workers increases employment level, but this increase is not 'large'. An estimation of the impact of temporary contracts on the employment level offered by Segura et al. (1992) shows that these contracts increased employment level, but this increase was not 'large'. For a survey of the pros and cons of temporary contracts in Spain, see Toharia and Malo (2000).

2. Some authors introduce a subtle distinction arguing that the working class has always been divided (Crouch and Pizzorno, 1978; Hyman, 1994; Offe and Wiesenthal, 1980) and making different interests of different groups of workers compatible has been a traditional challenge for unions. In this vein, the shift in the composition of the labour force has made the old problem of representation more difficult to resolve.

3. Maybe the most important exception to this general rule is the case of the UK, where the representation corresponds to unions and the legitimacy for this representation comes from membership. In the UK, the link between the union and the workers inside firms is the shop steward. He or she is a trade union representative elected by the union members at the place of work. The historical importance of this institution is strong, although non-union representation has been legally introduced in the UK by the EU directives. For more on the related topic of union certification elections in the US, see, for example, Sandver and Ready (1998).

4. And to participate in some public institutions, but this is beyond the scope of this article.

5. The concept of most representative union is also used in France, Italy and Spain. Although legal definitions differ, the social and economic meaning is very similar: a union which represents a 'high' or 'significant' share of the workforce.

6. As is widely known the median voter theorem requires opportunistic parties, in other words, no costs of changing their ideology when they prepare their political programmes. However, in the case of union elections there is evidence that ideological motivations are relevant to understanding the behaviour of unions (see the empirical analysis provided by Malo, 2005).

7. Fernández-Macías (2003) has used the same databases to analyse temporary workers in Spain, but focusing on their political attitudes. Polavieja (2001) used the CIS database to estimate some models very similar to those included in this article. However, his estimations on the probability of voting in union elections were embedded in a wider empirical analysis on collective action. I comment on his results later.

8. For reference purposes of the Spanish Centre for Sociological Research this database is called the CIS Study number 2088 about attitudes towards unions.

9. There is a drop in the number of cases because the initial sample was designed to be representative of the total Spanish population (active and non-active population), but the empirical analysis is restricted to the currently active population without missing information on the variables used in estimations. The same reasoning applies to the drop in the number of cases of the other database.

10. Both datasets are rather 'old' but, to my knowledge, there is not a more recent database including information on voting in union elections.

11. I have checked that the results with the ECBC-1991 are very similar. However, I give more confidence to the table elaborated with CIS-1994 because of the bigger sample size.

12. This estimation is available upon request [email: malo@usal.es].

13. I estimate by maximum likelihood a bivariate probit using Heckman's (1979) specification for taking into account the sample selection bias due to the existence of a censored variable (the so-called 'heckprobit' model). In the heckprobit model, equations of voting probability and having called for union elections in the firm are jointly estimated by maximum likelihood to get unbiased estimates taking into account the selection bias. Univariate probit estimates will give unbiased estimates only when the errors of both equations are uncorrelated. Therefore, a test for the significance of the correlation between both error terms is a test for the need of a bivariate estimation. This test is provided by the estimation of the variable denoted as ρ in Table A2.

14. Maybe, the lack of significance with ECBC-1991 related to the fact that the number of cases where union elections are not called is too small to detect this effect. Anyway, as CIS-1994 was designed to provide information about unions in Spain, I give more confidence to the results obtained with this database. Therefore, the predicted voting probabilities included in Table 4 and Figure 1 have only been computed with the heckprobit estimated using the CIS-1994 database.

15. Contact author at email: malo@usal.es

16. Job insecurity is defined as a subjectively experienced threat of having to give up one's job sooner than one would like.

17. These empirical results are contrary to the Rubery (1988) proposal that workers with atypical contracts have been regarded as a threat to the working conditions of the secure and stable workers, and unions have defended their primary constituency (stable workers) through strategies of social closure. It seems to follow that workers with atypical contracts would not feel represented by the unions and would display negative attitudes towards them.

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Appendix

TABLE A1
Sample Statistics

	ECBC-1991					CIS-1994				
	<i>N</i>	Min.	Max.	Mean	SD	<i>N</i>	Min.	Max.	Mean	SD
Vote (1 = yes)	632	0	1	0.28	0.45	1584	0	1	0.30	0.46
Temp (1 = yes)	865	0	1	0.53	0.5	2423	0	1	0.47	0.50
Union membership (1 = yes)	812	0	1	0.07	0.25	2401	0	1	0.17	0.37
Gender (1 = male)	865	0	1	0.53	0.5	2423	0	1	0.66	0.47
Civil status (1 = married)	865	0	1	0.66	0.47					
Experience	865	1	58	28.5	16.28					
Experience squared	865	1	3364	1076.67	1012.31					
Age						2423	16	64	38.07	12.72
Age squared						2423	256	4096	1611.18	1038.18
Illiterate or no studies	865	0	1	0.37	0.48	2421	0	1	0.05	0.21
Secondary level	865	0	1	0.04	0.2	2421	0	1	0.28	0.45
University	865	0	1	0.03	0.18	2421	0	1	0.18	0.38
Primary sector	863	0	1	0.17	0.38	2363	0	1	0.05	0.22
Manufacturing	863	0	1	0.26	0.44	2363	0	1	0.26	0.44

Services	863	0	1	0.46	0.5	2363	0	1	0.59	0.49
Public administration	842	0	1	0.09	0.28	2336	0	1	0.14	0.35
Public firm	842	0	1	0.06	0.24	2336	0	1	0.10	0.30
Priv. firm over 1000 empl.	842	0	1	0.07	0.25	2336	0	1	0.09	0.28
Priv. firm 10–99 empl.	842	0	1	0.27	0.44	2336	0	1	0.22	0.41
Priv. firm fewer than 10 empl.	842	0	1	0.43	0.5	2336	0	1	0.36	0.48
Region 1 (North)	865	0	1	0.25	0.43	2423	0	1	0.17	0.38
Region 2 (Ebro river)	865	0	1	0.06	0.23	2423	0	1	0.05	0.21
Region 4 (Mediterranean)	865	0	1	0.03	0.16	2423	0	1	0.46	0.50
Region 5 (Islands)	865	0	1	0.05	0.21	2423	0	1	0.07	0.25
Occupational group 0–1	865	0	1	0.06	0.24	2397	0	1	0.15	0.36
Occupational group 2	865	0	1	0	0.05	2397	0	1	0.00	0.06
Occupational group 4	865	0	1	0.07	0.26	2397	0	1	0.07	0.25
Occupational group 5	865	0	1	0.21	0.4	2397	0	1	0.17	0.38
Occupational group 6	865	0	1	0.11	0.32	2397	0	1	0.05	0.22
Occupational group 7	865	0	1	0.08	0.27	2397	0	1	0.10	0.30
Occupational group 8	865	0	1	0.09	0.29	2397	0	1	0.09	0.29
Occupational group 9	865	0	1	0.27	0.44	2397	0	1	0.21	0.40
<i>N</i> (Listwise)	617					1461				

Occupational groups have been defined using CNO-79.

Experience = age – education (in years) – 6.

TABLE A2
Voting Probability: Probit Model with Sample Selection

Voting Probability with Sample Selection					Selection Probit (Were Elections Called in Your Firm? Yes = 1)				
Variable	ECBC-1991		CIS-1994		Variable	ECBC-1991		CIS-1994	
	Coef.	SE	Coef.	SE		Coef.	SE	Coef.	SE
Civil status (1 = married)	-0.030	0.176			Primary sector	-0.352	0.372	0.307	0.533
Temp (1 = yes)	-0.550	0.165	-0.355	0.130	Manufacturing	-0.040	0.360	0.729	0.160
Union membership (1 = yes)	1.766	0.282	0.581	0.104	Services	0.056	0.359	0.392	0.160
Gender (1 = male)	0.480	0.152	-0.284	0.122	Public administration	-0.302	0.468	0.110	0.165
Illiterate or no studies	0.581	0.241	-0.071	0.271	Public firm	-0.297	0.485	0.063	0.171
Secondary level	0.025	0.352	-0.150	0.130	Priv. firm over 1000 empl.	-0.349	0.436	0.129	0.178
University	-0.732	0.438	-0.310	0.175	Priv. firm 10-99 empl.	-0.537	0.368	-0.760	0.144
Experience	0.040	0.023	0.053	0.034	Priv. firm less than 10 empl.	-0.909	0.359	-1.570	0.144
Experience squared	-0.001	0.000	-0.001	0.000	Region 1 (North)	0.428	0.214	0.107	0.119
Primary sector	0.124	0.449			Region 2 (Ebro river)	0.429	0.399	0.368	0.169
Manufacturing	0.961	0.299	-0.566	0.229	Region 4 (Mediterranean)	35.046		-0.108	0.095

Services	0.249	0.302	-0.408	0.230	Region 5 (Islands)	-0.144	0.338	0.048	0.166
Public administration	0.204	0.311	-0.049	0.206	Occupational group 0-1	1.417	0.731	-0.189	0.132
Public firm	0.389	0.313	-0.194	0.205	Occupational group 2	64.666		-0.734	0.585
Priv. firm over 1000 empl.	0.399	0.302	-0.045	0.210	Occupational group 4	1.485	0.550	-0.377	0.182
Priv. firm 10-99 empl.	-0.113	0.234	0.277	0.185	Occupational group 5	0.244	0.257	-0.599	0.137
Priv. firm fewer than 10 empl.	-0.459	0.264	0.790	0.208	Occupational group 6	1.003	0.479	-1.053	0.502
Region 1 (North)	-0.412	0.196	-0.029	0.149	Occupational group 7	0.741	0.403	0.021	0.165
Region 2 (Ebro river)	0.351	0.304	-0.051	0.221	Occupational group 8	0.347	0.340	0.093	0.164
Region 4 (Mediterranean)	-0.446	0.548	0.284	0.130	Occupational group 9	0.631	0.306	-0.229	0.136
Region 5 (Islands)	-1.078	0.575	0.384	0.249	Constant	1.343	0.496	0.211	0.222
Occupational group 0-1	0.441	0.390	0.078	0.178	ρ	0.291	0.728	-0.936	0.101
Occupational group 2	0.491	0.915			N	535		1470	
Occupational group 4	-0.200	0.405	-0.044	0.254	Censored obs.	60		875	
Occupational group 5	0.024	0.272	0.122	0.209	Uncensored obs.	475		595	
Occupational group 6	-0.049	0.540	0.535	0.579	Wald χ^2	136.42		117.37	
Occupational group 7	-0.604	0.371	-0.007	0.222	Prob > χ^2	0.000		0.000	
Occupational group 8	-0.780	0.352	-0.005	0.228					
Occupational group 9	-0.266	0.313	0.013	0.185					
Constant	-1.213	0.514	0.341	0.760					