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## Individual characteristics, institutional incentives and electoral abstention in Western Europe

### Abstract

This article examines the interaction between individual characteristics and institutional incentives in non-voting, with a special focus on the interaction between these two types of explanatory variables. The analysis of survey and contextual data for parliamentary elections in 15 Western European countries shows that the effect of individual resources and motivations on abstention is not constant across different countries. Conversely, the effect of institutional incentives (compulsory voting, voting facilities, electoral thresholds of representation and preference expression) on non-voting depends on the elector's level of resources and motivations. One of the four institutional incentives considered has even opposite effects for citizens with different individual characteristics. The analysis also shows that when analysing interactions it is fundamental to distinguish between magnitudes and consequences of the effects of explanatory variables. This has important implications for the interpretation of the results of logistic regression analysis.

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## **Introduction**

A review of the literature on electoral participation shows that the search for the reasons behind abstention has followed two separate paths (Lane & Ersson 1990: 462). Some scholars have enquired into what individual characteristics make some electors more likely to vote. Variables such as age, education, income, marital status, interest in politics and party identification have often been mentioned as factors that increase participation. Most of this kind of work has assumed that the effect of any individual variable on participation is constant across different settings. Other scholars have researched the features of the political context which make people more likely to turn out. According to several studies, factors like compulsory voting, a proportional electoral system or highly competitive elections increase the rate of electoral participation. All these aggregate analyses also have an underlying assumption: that the effect of these systemic factors on abstention is the same for every elector.

The main objective of this article is to bridge the gap between these two approaches by considering both levels simultaneously (the individual and the system) and looking at the way they interact, therefore challenging the previous two assumptions. Although several scholars have analysed the influence of systemic and individual variables on abstention (see, e.g., Egmond et al. 1998; Kim et al. 1975; Leighley & Nagler 1992; Pattie & Johnston 1998; Rosenstone & Hansen 1993), very few have addressed the question of their potential interaction (see Oppenhuis 1995; Franklin et al. 1996). Even among these scholars, there is a tendency to focus only on very specific types of interactions.<sup>1</sup> The initial working hypotheses of this analysis are that the effect of individual characteristics is not necessarily the same in all settings and that the effect of systemic incentives to participation is not necessarily the same for everyone. These hypotheses are tested using survey data from 15 Western European countries that include information on electoral behaviour in parliamentary elections, political attitudes and socio-demographic variables.<sup>2</sup> This individual-level information is complemented with contextual data regarding the institutional setting in which parliamentary elections are held in order to perform a cross-level analysis of the interaction between these two levels of observation.<sup>3</sup>

The first and most important conclusion that arises from the analysis is that there is an interactive relationship between the individual and systemic variables affecting electoral abstention which can be interpreted in two ways. On the one hand, individual incentives play an important role in some contexts whilst making little difference in others. On the other hand, the characteristics of the institutional setting do not have the same effect on the likelihood of abstention for all citizens. Some citizens are more sensitive to these contextual features than others and, in some cases, the effect of systemic features even changes direction for advantaged and disadvantaged electors.

The article is divided into three sections. In the first section the importance of electoral turnout as a form of political participation, influenced by both context and individual related characteristics, is discussed. The second section presents an analysis that shows how the effect of individual characteristics on abstention varies across different countries. The final section focuses on the effect of institutional incentives to participation, and reveals how their effect on abstention is different for different electors.

## **The importance of maximising (and explaining) electoral turnout**

As Rokkan (1962: 67) pointed out, voting is a unique form of political participation. Three circumstances absent from other ways of participating converge in it: universality of access, equality of influence and unaccountability. Ever since universal suffrage was introduced, the

law has guaranteed the right to vote to all men and women. This universality of access is reinforced by the fact that electoral participation is the most widespread form of political participation and, for a great number of citizens, the only one they exercise on a regular basis. Alongside this, the influence that one can have on the political environment through voting is the same for all citizens, regardless of their gender, age, education, social condition or ideological orientation. The principle of 'one person, one vote' completes the process of extending suffrage and constitutes an essential democratic ideal. In other forms of involvement, such as being active in political parties, attending demonstrations or direct contact with politicians, frequency and influence depend on the individual's will and ability. In the case of electoral participation, an element of equality imposes itself by its very nature. Moreover, citizens participating in an election are not accountable to others with regard to the content of their vote. Here, the term 'irresponsibility', as used by Rokkan, refers to the absolute freedom that the individual must have in order to choose among the different political options. This total privacy and freedom is also absent from other forms of political participation.

These particular characteristics do not imply that voting is necessarily considered the most important form of political participation. Electoral participation could be regarded as too sporadic a link between the citizen and the political system to be the essence of democracy. If participation is conceived as fundamental to democracy, other forms of involvement, which are more demanding and less sporadic than voting, are the ones that really matter, as stated by the participatory theory of democracy (Bachrach 1967; Barber 1984; Lively 1975; Pateman 1970).

From a different perspective, electoral participation is the only indispensable form of political involvement since it permits competition among different political parties. This competition is the core of democracy, and electoral participation is useful as long as it provides a means to attain it. From this perspective, which coincides with the elitist theory of democracy (Schumpeter 1979), a massive turnout, with all citizens participating, is not necessary. Low turnout rates are not viewed as a problem, but as an indicator of citizens' basic satisfaction with the operation of the political system, which means that they can concentrate on their personal matters (Berelson et al. 1954; Eckstein 1966; Ranney 1983; Sartori 1962). It has even been hinted that too high an electoral turnout may be a symptom of excessive polarisation capable of bringing about processes of political instability (Jones 1954; Lipset 1969; Milnor 1969).

Contrary to what these two positions argue, maximising the level of electoral participation is desirable for two major reasons. First, abstention cannot be regarded today as an indicator of satisfaction, but rather as a symptom of apathy, disaffection and alienation on the citizen's part. Abstention expresses a lack of interest or a distance between citizens and political institutions and parties. However, this does not imply that alienation or lack of interest cannot co-exist with high levels of electoral participation, or that high turnout rates guarantee the stability of a political system. But neither can it be assumed that high turnout brings about the risk of instability, as several empirical analyses have shown (Dittrich & Johansen 1983; Powell 1982). In general terms, a high level of electoral turnout indicates that more politically involved citizens are using one of the channels available to them to influence decision making. Moreover, participation can reinforce certain attitudes such as the feeling of political efficacy (the feeling that one's own actions affect the political system). Electoral participation may not be the only form of political involvement needed in a democracy, but it is nonetheless absolutely essential for guaranteeing the legitimacy of the political system, the representative nature of parliaments and the population's control over the composition of governments.

The second argument in defence of a high level of electoral participation is perhaps the most important one. Political participation has been understood to be one of the mechanisms that can contribute to compensating for the effect of socioeconomic inequalities (Verba & Nie 1972). Thus, a high level of abstention can imply that an important part of the population has

been excluded from the political system. The exclusion issue is more serious when the abstaining sector of the electorate remains stable, and also as social and political differences grow between those who abstain and those who participate. Traditionally, abstention has been associated with a specific sociodemographic profile. According to different studies, non-voters were over-represented in certain social sectors such as women, the underprivileged, youth or the elderly – that is, those who are far from the ‘centre’ of the political and social system (see Corbetta & Parisi 1987, 1994; Milbrath & Goel 1977; Verba & Nie 1972; Verba et al. 1978, 1993; Wolfinger & Rosenstone 1980). As these people may have specific political and ideological orientations which are perhaps different from those of the voting population, it can be argued that abstention has consequences not only in politically reinforcing a situation of social inequality, but also in the very results of the election, which would be different had the whole of the electorate voted. Supposing that all electors voted, these issues of excluded social groups would disappear, and it would not be possible to view election results as a biased indicator of the whole of the electorate’s interests (Hirczy 1992: 76; on the debate about how much would election results change if everyone voted see, e.g., Bennet & Resnick 1990; Crewe et al. 1977; Pacek & Radcliff 1995; Radcliff 1994; Teixeira 1993).

Taking these theoretical questions into account, empirical research into electoral abstention must examine factors affecting this dimension of political behaviour. These may be approached in a variety of ways.

First, there are analyses that seek to identify the extent to which abstention depends on individual variables. This points to questions such as why certain electors are more likely to participate than others or whether there are significant differences between voters and abstainers. At the individual level, the main explanatory factors for abstention are related to the political attitudes of electors. Factors such as the degree of interest in politics or the level of political involvement are the variables that contribute most to the explanation of the phenomena in statistical terms (see the classical studies by Almond & Verba 1963; Budge & Farlie 1976; Campbell et al. 1960; Dalton 1996). However, at the same time, as explanations they are scarcely satisfying from the theoretical point of view, for they just move the question one step back, as it were: Why do some electors feel a greater interest in politics than others? Why do some citizens feel close to a political party and others not?

Many studies have also analysed the theoretically more appealing connection between abstention and certain sociodemographic variables (see, e.g., Converse & Niemi 1971; Filer et al. 1993; Glaser 1958; Lancelot 1968; Lazarsfeld et al. 1944; Marroni 1989; Rosenstone & Hansen 1993; Strate et al. 1989; Topf 1995; Verba & Nie 1972; Verba et al. 1993; Wolfinger & Rosenstone 1980). People with lower individual means (education, income, experience) have fewer resources to cover the costs of participation (processing the required information, reaching a decision, finding the time to vote). They are also more likely to develop apathetic attitudes towards the political system, and thus are more difficult for parties and institutions to motivate to vote. As a result, they usually vote less. It has been shown that participation increases with age (up until a certain threshold), income and social integration. Conversely, in contemporary Western Europe, there is not always a positive connection between education and participation (Topf 1995). In some countries, people with high levels of education participate even less than those with lower educational levels (Corbetta & Parisi 1994). This is a crucial matter, since the interpretation of the problem is considerably different if both voters and non-voters have a similar sociodemographic profile (i.e., if sociodemographic variables do not help to distinguish voters from non-voters). In this case, there would be no political reinforcement of social inequalities. On the other hand, however, this situation would indicate that citizens with sufficient resources stop participating. The problem then is not so much the individual, but the failure of the political system in providing sufficient incentives for participation. We must, therefore, inquire whether the effect of individual variables

on abstention varies across different settings, since the interpretation and the consequences of abstention are very different depending upon whether they can or cannot be explained by individual characteristics.

A second approach to the question focuses directly on cross-national differences in turnout levels. Within this perspective, the task is to explain differences among countries such as Austria, Italy or Belgium where participation rates have stood at over 90 per cent of the electorate for a long time, and countries such as the United States or Switzerland (regarded by some as paradigms of democracy) where abstention levels exceed 50 per cent of the voting age population. A substantial amount of the literature on electoral participation is devoted to explaining this in terms of systemic variables. The institutional and political relevance of elections (the body being elected, the degree of competitiveness of elections), the characteristics of parties and party systems (links with society, number of parties, degree of ideological polarisation) and the characteristics of the electoral systems have been cited as explanatory factors for different turnout rates (see, e.g., Blais & Carty 1990; Blais & Dobrzyńska 1998; Cox & Munger 1989; Crepez 1990; Crewe 1981; Denver & Hands 1974, 1985; Franklin 1996; Jackman 1987; Jackman & Miller 1995; Montero 1984; Kirchgässner & Schimmelpfennig 1992; Powell 1986; Reif & Schmitt 1980). These aggregate analyses have usually been very successful in terms of the amount of variance explained but, according to some, are incomplete unless they argue how system properties can be understood in terms of individual motives (Lane & Ersson 1990: 457). Moreover, since not all electors need to have the same ties with the political system in which they live, there is no reason to believe that the impact of systemic characteristics is the same for everyone. Some electors can be sensitive to the institutional incentives to participation present in their political contexts. Others may simply be unaware of the presence of such incentives, or even react to them in a different way.

### **The effect of individual incentives in different contexts**

Three types of individual incentives to participation are considered here. First, the level of individual resources includes age, education and income. Second, the level of social integration has been operationalised through frequency of church attendance and marital status. Finally, the degree of political involvement includes measures of interest in politics and politicisation (party closeness and membership, trade union membership and ideological identification in the left-right dimension). The analysis of the relationship of each of these variables with abstention has been performed elsewhere (Anduiza 1999), and to discuss the results would require far more space than is available here. This section will use the information available in election surveys related to individual resources, social integration and political involvement to construct an index of individual incentives to participation. This index, scoring from 0 to 1, can be considered to be an indicator of the 'centrality' of an individual in society. I refer to advantaged individuals as those that score high on this index, and disadvantaged individuals as those with low scores.<sup>4</sup> Table 1 presents the mean and standard deviation of the distribution of the index for each of the countries in the analysis.

The index is clearly related to electoral abstention. If we divide it into three categories,<sup>5</sup> about 18 per cent of those individuals scoring low in the index of individual incentives (disadvantaged) abstain from voting, while 10 per cent of those with medium scores abstain and only 6 per cent of the electors with high levels of individual incentives (advantaged) refrain from voting. Table 2 shows the effect of this index of individual incentives over the abstention rate in each of the 15 countries considered. Since the dependent variable is dichotomous, these effects have been estimated through a logistic regression.<sup>6</sup> Going from the minimum to the maximum level of individual incentives (i.e., increasing one unit in the independent variable)

reduces the log odds of abstaining by 2.39 in the whole weighted sample. However, this varies significantly across countries: the effect of individual incentives on the likelihood of abstaining is strongest in Switzerland, Sweden, Italy and the Netherlands, and weakest in Portugal (where the relationship is not statistically significant), Spain, Greece and Ireland.

*Table 1.* Index of individual incentives to participation

Country	Mean	Standard deviation	Cases
Belgium	0.446	0.199	4,511
Denmark	0.420	0.224	974
Finland	0.491	0.201	2,944
France	0.464	0.200	966
West Germany	0.482	0.187	11,268
Great Britain	0.466	0.208	3,534
Greece	0.483	0.180	920
Ireland	0.502	0.191	875
Italy	0.480	0.197	984
Netherlands	0.431	0.199	1,754
Norway	0.515	0.200	2,194
Portugal	0.556	0.195	874
Spain	0.336	0.262	5,001
Sweden	0.414	0.237	3,7
Switzerland	0.488	0.184	1,002
Mean <sup>a</sup>	0.460	0.21	41,501

<sup>a</sup>The mean is calculated weighting the cases so that the sample of each country is proportional to its electorate.

Source: Own calculations from survey data (see Appendix).

Already it can be seen that, contrary to what has been suggested (see Hirczy 1992: 76), it is not necessarily where abstention is highest that the effect of individual incentives is strongest, if this effect is measured in logits free from floor effects. In fact, the relationship seems to be the opposite: the lower the level of abstention, the stronger the negative effect of individual incentives. The correlation coefficient between the percentage abstention level (measured with survey data) and the B coefficient for the effect of individual resources is -0.22. The magnitude of the effect of individual incentives can be considerable even in countries where abstention is low (as in Belgium, Denmark, Germany, Italy, the Netherlands and Sweden), where although most people turn out, those that abstain seem to be mainly from disadvantaged groups. Only the case of Greece combines a high level of turnout with a low effect of individual incentives – that is, the few non-voters are not very different from the many voters. In France, Norway, Switzerland and Great Britain, quite a few stay out of the electoral process and these are particularly from the disadvantaged groups. In these countries, the level of individual incentives determines to a large extent who votes and who does not. On the contrary, abstention rates are relatively high in Finland, Ireland, Portugal and Spain, and non-voters are from both the disadvantaged and the advantaged groups. Some disadvantaged electors do not participate (presumably because of their lack of resources and motivations), but a fair proportion of those who have such advantages also choose to abstain.

Table 2. The effect of individual incentives by country (logistic regression)

Country	B	Ct.	Chi2	Df	N	P (abs) low incentives	P (abs) high incentives
Belgium	-2.79*	-2.39*	10*	1	4,234	0.083	0.005
Denmark	-3.17*	-1.20*	24*	1	886	0.231	0.012
Finland	-2.41*	-0.72*	35*	1	2,652	0.327	0.042
France	-2.77*	-0.18*	310*	1	951	0.455	0.050
W. Germany	-2.75*	-1.02*	194*	1	10,895	0.265	0.023
Great Britain	-3.38*	-0.54*	374*	1	3,532	0.368	0.019
Greece	-1.61*	-2.54*	4*	1	914	0.073	0.016
Ireland	-1.71*	-1.03*	6*	1	831	0.263	0.061
Italy	-4.36*	-1.49*	189*	1	954	0.184	0.003
Netherlands	-4.01*	-0.96	65*	1	1,506	0.277	0.007
Norway	-2.89*	-0.44	22*	1	2,187	0.392	0.035
Portugal	-0.26	-1.63*	0.5	1	858	0.164	0.131
Spain	-0.95*	-1.52*	39*	1	4,945	0.181	0.079
Sweden	-4.70*	-0.88*	38*	1	2,578	0.293	0.004
Switzerland	-5.58*	2.04*	155*	1	996	0.885	0.028
All	-2.39*	-1.05*	1,198*	1	38,919	0.259	0.031

\* Significant at  $p < 0.05$ .

Source: Own calculations from survey data (see Appendix).

Figure 1 represents graphically the B coefficients in Table 2. In order to simplify interpretation, only four countries have been chosen according to their overall abstention levels and the magnitudes of the effect of the index of individual incentives. Norway and Portugal show a high level of abstention, but while the former presents a high effect of individual incentives, the latter displays no effect of this variable. Italy has low abstention levels and displays an important effect of individual incentives, while Greece has low abstention together with a small effect. Figure 1 shows clearly how cross-national variation in the effects (distance between the lines in the Y-axis) is larger as individual incentives increase. For low individual incentives, the log odds of abstaining vary between -0.5 and -2.5, while the variation for high incentives is between -2.5 and -6.0. This means that, apart from the fact that they vote a lot, advantaged electors are also more likely to be influenced by the context in which they live. This question will be further explored in the next section.

If we turn to the analysis of predicted probabilities, the interpretation of the results changes dramatically. If individual incentives decrease the probability of abstaining, and this reduction cannot go beyond zero, then there will not be much cross-national variation in the probability of abstaining among advantaged citizens: their abstention levels will always be close to zero. As it happens, the probability of abstaining of advantaged electors is never higher than 0.13 (see Table 2). On the contrary, the predicted probability of abstaining for disadvantaged electors shows a wider range of variation – between 0.07 in Greece and 0.89 in Switzerland. Unlike the logits, the probability of abstaining for individuals with low levels of incentives depends heavily on the average level of abstention of the country (the correlation coefficient of these two variables is 0.90).



If it was concluded from the interpretation of the B coefficients that, free from floor effects (that is to say, independently of the average level of abstention), advantaged electors are more sensitive to their contexts, the interpretation of the expected probabilities is the opposite, as Figure 2 shows. Here the expected probability of abstaining for individuals with low levels of incentives in the four countries represented varies between 0.07 (Greece) and 0.39 (Norway), while the variation is between 0.003 (Italy) and 0.13 (Portugal) in the case of advantaged electors. This is because, by definition of the logit model, the changes in the probability of abstaining produced by a unit change in the level of individual incentives are largest when the probability of abstaining is close to 0.5, and smallest when this probability approaches zero or 1. So, since disadvantaged electors abstain more often (their probability of abstaining is closer to 0.5), there is more room for contextual factors to play a role. Advantaged electors, on the contrary, vote in massive numbers and, therefore, cross-national differences do not show up so clearly.

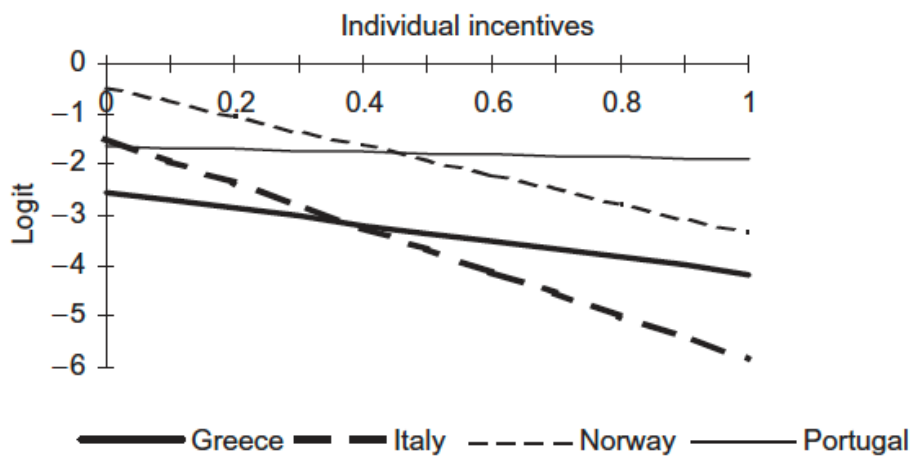


Figure 1. The effect of individual incentives on the log odds of abstaining in Greece, Italy, Norway and Portugal.

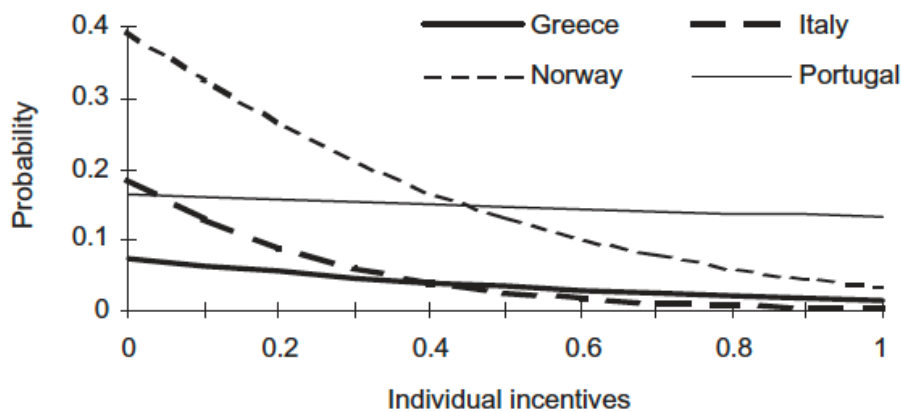


Figure 2. The effect of individual incentives on the probability of abstaining in Greece, Italy, Norway and Portugal.

## **The effect of institutional incentives for different electors**

The analysis of cross-national variations in the effect of individual incentives has shown some interesting features that make it worthwhile to pursue the examination of the interaction effects between systemic and individual variables. We shall now turn to the way in which institutional incentives for voting affect individuals with different levels of resources. Institutional factors are only one kind of the many contextual variables that may influence turnout. However, they are especially interesting in the sense that they can be modified more easily than other elements of the political system, such as the party system, the patterns of competitiveness or the political culture. Even if institutions are rarely the result of a perfectly rational design and more often the product of compromises between different and contradictory interests of political actors, institutions can be changed as a result of human will, and so institutional reform appears as a possible tool to try to solve some of the current problems of democratic political systems, including the decreasing levels of electoral participation.

Proposals for increasing turnout levels can be grouped according to two principles. First of all, there are those which seek to produce direct changes in behaviour – that is to say, whose immediate and ultimate objective is to make voters go to the polls. Second, there are initiatives aimed at increasing electoral involvement by encouraging feelings and attitudes which foster participation.

Two of the four institutional variables considered here are direct incentives for participation: compulsory voting and voting facilities. Compulsory voting is the most straightforward and effective incentive for voting. Based on the application of a coercive principle, it can be considered as a ‘symptomatic’ remedy for low levels of electoral participation. The mandatory character of voting does not add to the legitimacy of a political system, but it does mobilise a part of the electorate that would otherwise have stayed at home. Compulsory voting is a mobilisation strategy focused on non-voters: it provides a larger number of reasons for voting than are generally needed, with a view to persuading many people to participate. This kind of incentive may introduce egocentric and instrumental motivations (voting not to be punished), instead of non-egocentric motives (voting for the interest the election deserves). Whereas the first kind of motivation only ensures a conditional participation, the latter categorically guarantees it (see Pettit 1996). The ideal thing would be to introduce voter-oriented incentives – that is, to offer motives for participating by improving the quality of the political choice and debate, or by highlighting the relevance of whatever is being decided upon in the framework of elections. But, since pursuing the ideal often excludes what is good, some authors have advocated the virtues which the implementation of compulsory voting would bring about, especially with regards to the aim of guaranteeing real political equality (Lijphart 1997).

There are mandatory voting laws in Belgium, Greece and, partially, in Austria and Switzerland. In Italy, voting is constitutionalised as a civic duty and unjustified failure to vote is recorded for five years, so Italy is usually considered as a case of compulsory voting (Cordini 1988; Lombardo 1996). In the case of Portugal, although voting is not compulsory, unjustified non-voters are registered and considered ineligible for one year. In our analysis, we have considered Austria, Belgium, Greece, the Netherlands (until 1971) and Italy to be countries where voting is compulsory. This systemic incentive reduces the percentage of abstainers by approximately 9 percentage points, as shown in Table 3.

Voting facilities (much less frequently analysed) are arrangements that may facilitate the act of voting for some electors, reducing its cost. Voters who expect to be absent or unable to vote on the election day may authorize some relative to vote on their behalf (proxy voting), vote by mail following a special procedure (postal voting) or vote a few days before the election (advance voting). These facilities may be more or less restricted or may even not be present at

all. Other voting facilities available on election day are, for instance, the holding of elections on Sundays or bank holidays;<sup>7</sup> the installation of polls in hospitals, old peoples' homes and prisons; allowing people to vote in wards away from their own area of residence; offering travel facilities on election day; and such like. All these arrangements lower the amount of effort required to vote and, for some people, even render voting possible. Belgium, Norway, Sweden, France (until 1975), Italy, Finland, the Netherlands and Portugal are considered cases with high levels of such voting facilities (defined here as having at least three significant facilities available to voters. See Anduiza 1999: 140 for a detailed analysis of the effect of voting facilities on abstention). A high level of facilities reduces abstention by almost 6 percentage points.

*Table 3. Abstention rates by institutional incentives*

Incentive	Absent (% abstention)	Present (% abstention)	Difference	Ratio
Compulsory voting	20.0 (53)	11.0 (53)	9.0	1.8
Voting facilities	20.7 (116)	14.9 (105)	5.8	1.4
Low electoral threshold	24.0 (54)	15.8 (159)	8.2	1.5
Preference expression	22.5 (50)	16.6 (171)	5.9	1.4

Note: Number of cases in parenthesis.

Source: Data on abstention include parliamentary elections in Western Europe between 1945 and 1994 for Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland (taken from Mackie & Rose 1991; Mackie 1991, 1992; and the political yearbooks published by the European Journal of Political Research for 1992, 1993 and 1994). Data on institutional incentives were obtained from Cadart 1983; Clogg 1983; Crewe 1981; Herman & Mendel 1977; Katz 1986; Lijphart 1994; Mackie & Rose 1991; Sternberger & Vogel 1969; and Vegleris 1981.

In the second type of initiative to reduce abstention levels, the aim is not only to foster turnout, but also to achieve the kind of participation based on democratic norms, values and attitudes. Incentives may be considered rational when they concern what use voting is to a citizen (i.e., having a voice and helping one's favourite party to obtain representation or even win an election that really matters). For electors to follow this kind of reasoning and participate, it is essential that they perceive differences among the various political options and the importance of the different democratic institutions being elected. The remaining two institutional factors considered in this analysis can be included in this category and are related to the electoral system. Since they are considered to be indirect incentives to participation, they require a more detailed explanation of the way in which they are expected to influence abstention rates.

There seems to be agreement that majority systems offer several incentives for abstention (Crewe 1981; Blais & Carty 1990; Jackman 1987). In singlemember constituencies, representation cannot be distributed among several parties. Only the two largest parties have a chance of obtaining the only contested seat. Moreover, in a large number of constituencies, the distance separating the largest party from the second largest is so great that there are all kinds of reasons for abstaining. Sympathisers of the largest party are aware that it will win anyway; sympathisers of all other parties know their party will lose. Furthermore, political parties are themselves aware that they do not have much of chance of increasing or reducing their representation, and thus they understandably prefer to deploy the resources they have to rally support in districts where they risk losing their seats or where they have a chance of winning new ones. This kind of situation does not only occur in majority systems. Some proportional

electoral systems (such as that of Spain) have considerable majority effects, mainly due to the small average size of their districts.

I shall adopt Lijphart's index of effective threshold as an indicator of the average cost of representation for a party (Lijphart 1994). This variable depends on the electoral formula, the district magnitude and the presence of legally established thresholds.<sup>8</sup> From the perspective of electors, the effective threshold represents the incentives that the electoral system gives them to vote for any given first preference. In cases where parties need to get a relatively high percentage of the vote in order to gain seats, voters whose first preference is a small party will be pushed to vote strategically for a larger party or, eventually, to abstain. Conversely, where an effective threshold is low, voting for the first preference, whatever this is, is encouraged and thus abstention should be lower. From the point of view of political parties, the effective threshold can be considered as an indicator of what Powell calls 'nationally competitive election districts' (Powell 1986). Systems with small effective thresholds produce incentives for political parties to try to obtain votes from all over the territory. By contrast, systems with high effective thresholds would push the largest parties to concentrate their mobilising efforts in marginal constituencies and, at the same time, they would push small parties to centralise mobilisation in districts where they have a chance of securing a percentage of the vote above the threshold. Cases have been divided according to whether they present an electoral threshold above or below 10 per cent. A simple bivariate analysis shows that abstention increases by more than 8 percentage points when the electoral threshold is higher than this level (see Table 3).

Finally, another feature of the electoral system which might increase participation is the ability of electors to cast a vote qualified by a preference for a specific candidate, changing the order of the list drawn up by the party or even including candidates from different party lists. We would expect turnout to be higher in systems where electors can express preferences for individual candidates. However, a contradictory hypothesis can be developed, for some authors have argued that the shorter and simpler the ballot is, the easier voting becomes and thus the lower abstention should be (see Gosnell 1930; Rokkan 1962).

Regarding the ballot structure, this analysis distinguishes between those systems in which the voter is forced to accept the candidate(s) proposed by the party and those systems in which the voter has some kind of opportunity to express a preference for a particular candidate. The first system includes systems with closed lists (mainly Spain and Portugal) and uninominal districts (Great Britain and France<sup>9</sup>), while the second includes two-vote systems (Germany and Italy since 1994) and systems where voters can express a preference.<sup>10</sup> Abstention is almost 6 percentage points higher in countries where the electoral system does not allow voters to express a preference. However, it is likely that at least part of this effect is due to the fact that most of the systems that do not allow voters to express a preference are also systems with high effective thresholds. Table 4 presents the results of a multivariate analysis including these four institutional incentives, which allows one to estimate the effect of each variable controlling for the potential effect of the others. Compulsory voting has the strongest effect, followed by low electoral thresholds. Voting facilities and allowing voters to express a preference show smaller effects.

In the following subsections, the analysis tests whether the effect of these four institutional variables is the same for different electors. Here an important distinction has to be made between two analytical dimensions. First, there is the question of the magnitude of the effect of systemic variables for different individuals. This dimension seeks to determine what kind of electors are most sensitive to their context when deciding whether to vote or to abstain. The second question is related to the consequences of systemic variables for different individuals. Here the focus is on what systemic characteristics can do to reduce the abstention

rates of different types of citizens. These two questions are addressed in turn for each of the four systemic variables.

*Table 4.* Multivariate analysis of the influence of institutional incentives on the percentage abstention rate

Incentive	B	$\beta$	s.e.
Compulsory voting	-8.7	-0.38	1.5
High voting facilities	-1.7	-0.09	1.2
Low electoral threshold	-5.0	-0.23	1.6
Preference expression	-1.4	-0.08	1.6
Constant	20.6		1.8
R <sup>2</sup>	0.29		
N	212		

Note: All variables are treated as dummies.

Source: See Table 3.

### *Compulsory voting*

According to the first model in Table 5, both compulsory voting and the level of individual incentives have a negative and statistically significant effect on the likelihood of abstaining. Compulsory voting decreases the log odds of abstaining by 1.40, while moving from the minimum to the maximum level of individual resources decreases the log odds of abstaining by 2.28. The second model shows that there is a significant interaction effect among the two variables considered – that is, the effect of compulsory voting on the odds of abstaining depends on the level of individual incentives and, in turn, the effect of individual incentives is different depending on whether voting is compulsory or not.

The effect of compulsory voting is greater the higher the level of individual resources and, conversely, the effect of individual incentives is stronger under compulsory voting.<sup>11</sup> Individual incentives decrease the log odds of abstaining by 2.28 under voluntary voting, while individual incentives decrease the log odds of abstaining by 3.70 under compulsory voting. In the same way, the presence of compulsory voting decreases the log odds of abstaining by 0.89 when individual resources are at their lowest level, while the decrease in the log odds of abstaining due to mandatory voting is 2.30 when the level of individual incentives is maximised. This may be because electors with higher levels of resources, social integration and political involvement are probably more aware of the presence or absence of this institutional incentive to participation.

Figure 3 represents graphically the relationship between these two explanatory variables and the log odds of abstaining according to the model that includes the interaction effect. The X-axis represents the level of individual incentives (ranking from zero to 1), while the Y-axis represents the log odds (logit) of abstaining versus voting. Since compulsory voting is a dichotomous variable, the continuous line shows the effect of individual incentives under compulsory voting, while the discontinuous line shows the effect when without it.

It is important to stress that the results of the logistic regression need to be interpreted first without being transformed into probabilities. If we want to measure the magnitude of the effects of a variable such as compulsory voting for different people, we need to do it independently of the overall (and different) level of abstention that these people show. Interpreting only the probabilities, although more intuitive, may lead us to conclude that

compulsory voting has no effect on advantaged electors (who have a low probability of abstaining in any context) while this is in fact not necessarily true, as it has just been shown. The effects as shown by the expected probabilities are dependent on how close we are to the extremes of those very same probabilities: the closer to the extremes, the smaller the effect shown because of ceiling and floor effects. These floor and ceiling effects have often led to the conclusion that advantaged electors are less affected by contextual factors than disadvantaged ones.<sup>12</sup> Unlike probabilities, logits are not bounded so they allow us to appreciate the magnitude of the effects and therefore to state properly the degree to which behaviour is influenced by individual and contextual factors for all electors independent of their abstention rates.

*Table 5. Individual incentives and compulsory voting (logistic regression)*

	Model 1		Model 2	
	B	s.e.	B	s.e.
Individual incentives	-2.28	0.07	-2.18	0.07
Compulsory voting	-1.40	0.05	-0.78	0.12
Interaction <sup>a</sup>	–	–	-1.62	0.30
Constant	-0.89	0.03	-0.92	0.03
Chi-square	2,180		+31	
df	2		+1	
N	38,919		38,919	

Note: In tables 5 to 8 all coefficients are significant at level ( $p < 0.10$ ) unless otherwise stated (n.s. besides the coefficient).

<sup>a</sup> Compulsory voting (dummy) by individual incentives.

Source: Own calculations from survey data (see Appendix).

However, probabilities need to be considered as well if we are addressing the question of what systemic variables can do to reduce abstention. The problem is that a very high degree of sensitivity to environmental factors (i.e., a large effect of systemic variables over the log odds of abstaining) can only be translated into major abstention changes if there is enough ‘room’ for it. If citizens with high levels of resources, social integration and political involvement abstain very little, compulsory voting cannot do much to decrease their already low level of abstention. This can be observed in Figure 4, where the change in the probability of abstaining due to the introduction of compulsory voting is larger for the disadvantaged than for the advantaged. In the interpretation of this graph, ceiling and floor effects are taken into account; for abstention cannot be higher than 100 per cent or smaller than 0 per cent in any election. This means that, although the effect of compulsory voting is relatively larger for electors with higher levels of individual incentives, this does not result in any substantial change in turnout for these citizens, for they are already overwhelmingly likely to vote. Instead, the smaller effect found among disadvantaged citizens produces an important decrease in their probability of abstaining (in this case from 0.28 to 0.15). Thus, the analysis of the consequences of systemic variables is of particular importance for those electors with low levels of individual motivation and resources, and whose rate of abstention is high and therefore susceptible to being reduced significantly. In terms of expected changes in abstention rates, the consequences of compulsory voting are far more important for disadvantaged individuals than for advantaged ones.

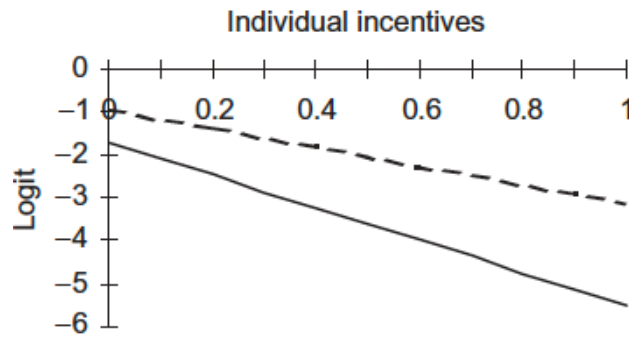


Figure 3. The effect of individual incentives and compulsory voting on the log odds of abstaining.

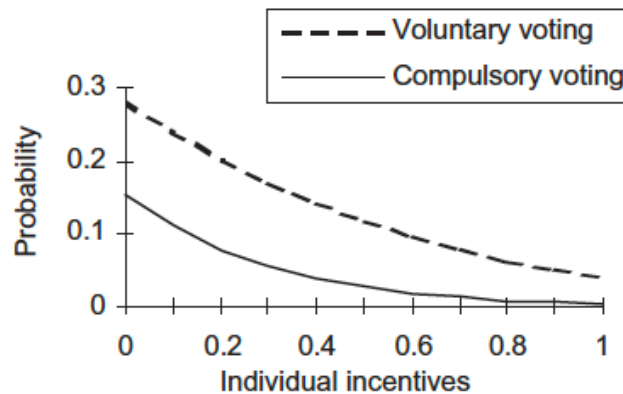


Figure 4. The probability of abstaining by individual incentives and compulsory voting.

### *Voting facilities*

This type of institutional incentive reduces slightly the log odds of abstaining (after controlling for the effect of compulsory voting) as the results of the analysis presented in model 1 show (see Table 6). If an interaction term is introduced (see model 2) this coefficient stops being significant. This means that this contextual variable has no effect over the log odds of abstaining among disadvantaged electors. However, as the level of individual incentives increases, the expected negative effect shows up, even if to a very small extent.

Figures 5 and 6 display the relationship between the three variables more clearly. When individual incentives are low, voting facilities have no effect and the two lines converge. As incentives increase, the lines separate slightly, showing the small effect of voting facilities on abstention. So this variable reduces abstention, if at all, only among electors with a certain level of individual motivation and resources.

### *Electoral thresholds of representation*

As already shown in the aggregate analysis, the presence of a high electoral threshold increases the likelihood of abstaining (see model 1 in Table 7). Introducing the interaction term between effective threshold and individual incentives brings a number of important changes.

Table 6. Individual incentives and voting facilities (logistic regression)

	Model 1		Model 2	
	B	s.e.	B	s.e.
Individual incentives	-2.26	0.07	-2.20	0.08
Compulsory voting	-1.29	0.06	-1.29	0.06
Voting facilities	-0.16	0.04	-0.02	0.09 n.s.
Interaction <sup>a</sup>	–	–	-0.35	0.19
Constant	-0.87	0.03	-0.89	0.03
Chi-square	2,195		+3	
df	3		+1	
N	38,919		38,919	

Note: Compulsory voting is introduced to control for its effects.

<sup>a</sup>Voting facilities (dummy) by individual incentives.

Source: Own calculations from survey data (see Appendix).

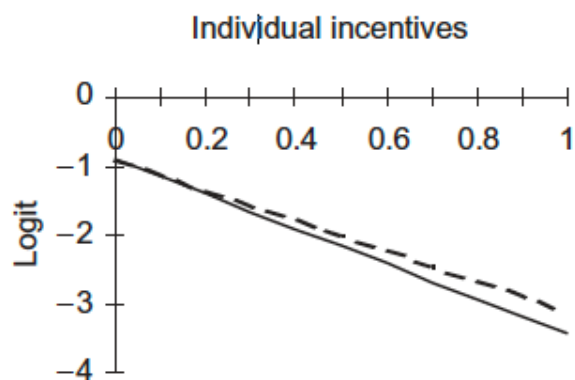


Figure 5. The effect of individual incentives and voting facilities on the logit of abstaining.

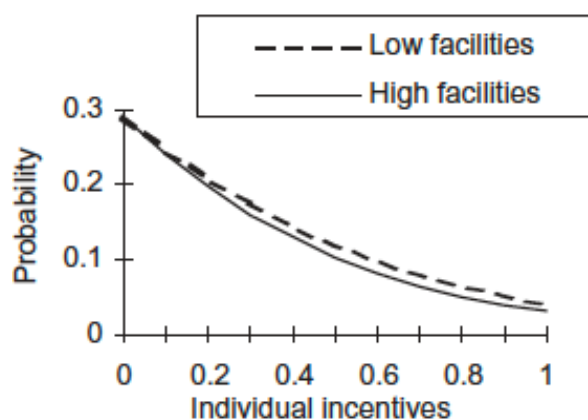


Figure 6. The probability of abstaining by individual incentives and voting facilities.



Table 7. Individual incentives and effective threshold (logistic regression)

	Model 1		Model 2	
	B	s.e.	B	s.e.
Individual incentives	-2.21	0.07	-2.70	0.12
Compulsory voting	-1.27	0.05	-1.29	0.06
High effective threshold	-0.21	0.03	-0.10	0.07 n.s.
Interaction <sup>a</sup>	–	–	-0.77	0.15
Constant	-1.04	0.04	-0.83	0.06
Chi-square	2,222		+27	
df	3		+1	
N	38,919		38,919	

Note: Compulsory voting is introduced to control for its effects.

<sup>a</sup> Effective threshold (dummy) by individual incentives.

Source: Own calculations from survey data (see Appendix).

Firstly, the coefficient for effective threshold stops being significant (see model 2), which implies that for a low level of individual incentives, there is no difference in the likelihood of abstaining between electors under a system with high electoral thresholds and electors in systems with low electoral thresholds. In other words, the intercept for both lines is the same, which means that electors with low resources and motivations are insensitive to this feature of the electoral system as far as participation in elections is concerned. As figures 7 and 8 show, the lines representing presence (continuous) and absence (discontinuous) of a high effective threshold meet at the Y-axis (minimum level of individual incentives). However, for a high level of individual resources the effect of a high electoral threshold increases the log odds of abstaining by 0.58. Again, here it seems that it is advantaged electors who are aware of the (dis)incentives produced by the system and are therefore the ones that are affected by them. This result can be interpreted as follows: advantaged electors are able to understand the consequences of the electoral system and therefore their behaviour regarding participation in elections differs according to whether they live in an electoral system with high or low representation costs.

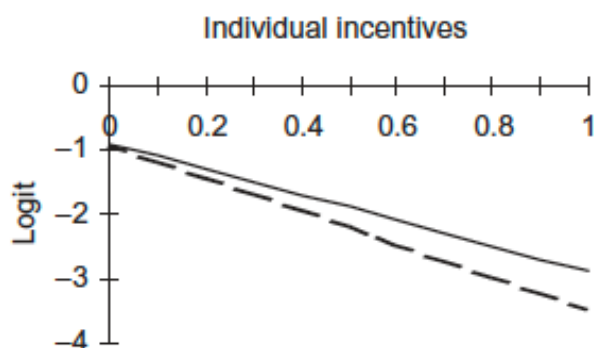


Figure 7. The effect of individual incentives and high effective threshold on the log odds of abstaining

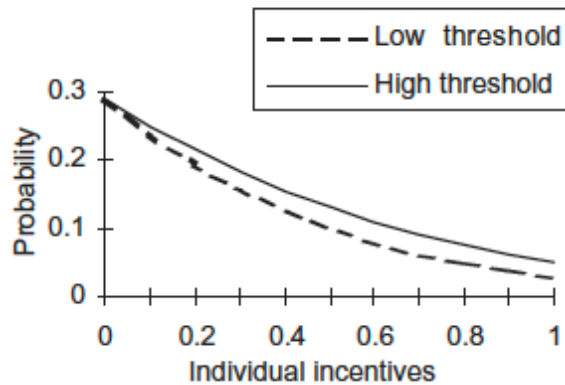


Figure 8. The probability of abstaining by effective threshold and individual incentives.

Contrary to what was found in the case of compulsory voting, the magnitude of the effect of a high electoral threshold is very similar to its consequence in terms of abstention rates. Individuals with low levels of resources have the same probability of abstaining (close to 0.3) regardless of whether they are in a system with high or low electoral thresholds. On the other hand, electors with high levels of resources have a higher probability of abstaining under an electoral system with an electoral threshold higher than 10 per cent (0.05 as compared to 0.03 in cases with low thresholds).

### *Preference expression*

The case of preference expression is particularly interesting since it shows how the same systemic variable may act as a cost for certain electors, and as an incentive for others. As was argued above, the ability to express a preference for a candidate makes the vote more meaningful and gives it a certain nuance that may provide an incentive to vote. However, it is also true that it makes the choice and the voting procedure itself more complicated. So for advantaged electors it may be an incentive to participate, but for disadvantaged electors it may appear as a cost, and thus increase abstention. This is exactly what the data show.

In the simplest model presented in Table 8 (without including the interaction term), preference expression reduces the log odds of abstaining versus voting by 0.25, controlling for the effect of compulsory voting. Overall, it therefore acts as an incentive for voting. If the interaction term is introduced, then it can be seen that for low levels of individual incentives, the possibility of expressing a preference increases the log odds of abstaining by 0.24. Thus, in this case, the contextual variable can be considered a cost that increases the chances of abstaining. For high levels of individual incentives, however, preference expression decreases the log odds of abstaining by 1.00 (from 1.24 to 0.24) and can be considered an incentive to vote.

The probability of abstaining among disadvantaged electors in systems with preference expression is 0.33, while in other systems it is 0.27. Thus, among electors with low levels of resources this institutional variable acts as a further cost that increases abstention. Conversely, for advantaged electors the probability of abstaining is higher in systems without expression of preferences (0.06 as against 0.02), so it seems that they consider this characteristic of some electoral systems as an incentive to participate. (See also figures 9 and 10).

## Conclusion

The analysis has shown that there are interesting interaction effects between the level of individual resources and motivations, and the different institutional incentives to participation considered. The implications of this cross-level interaction can be summarised in three main points. First of all, it has been shown that the effect of individual characteristics on abstention is not constant across countries. The strength of this effect seems to be larger where non-voting is rare, which indicates that the non-voting population in cases with very low abstention rates is more skewed towards disadvantaged electors in terms of individual resources and motivations than in contexts with higher abstention levels. This is compatible with the observation that there is a wide range of cross-national variation in the probability of non-voting among electors with the lowest levels of individual resources and motivations. As the level of individual incentives increases, the probability of abstaining decreases and approaches zero for advantaged electors, regardless of the country considered.

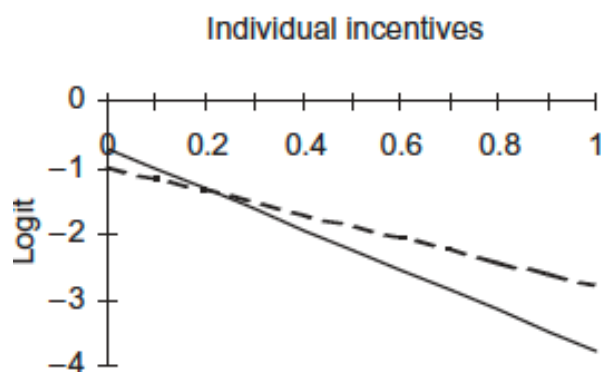
*Table 8.* Individual incentives and preference expression (logistic regression)

	Model 1		Model 2	
	B	s.e.	B	s.e.
Individual incentives	-2.21	0.07	-1.82	0.08
Compulsory voting	-1.28	0.06	-1.30	0.05
Preference expression	-0.25	0.03	0.24	0.07
Interaction <sup>a</sup>	–	–	-1.24	0.15
Constant	-0.82	0.03	-0.96	0.04
Chi-square	2,242		+66	
df	3		+1	
N	38,919		38,919	

Note: Compulsory voting is introduced to control for its effects.

<sup>a</sup> Preference expression (dummy) by individual incentives.

Source: Own calculations from survey data (see Appendix).



*Figure 9.* The effect of individual incentives and preference expression on the log odds of abstaining.

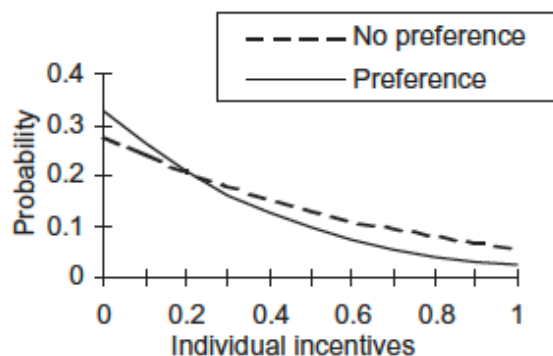


Figure 10. The probabilities of abstaining by preference expression and individual incentives.

Second, the effect of institutional incentives is different for different individuals. Advantaged electors are more sensitive than disadvantaged ones to context in general, and to the presence of compulsory voting, low electoral thresholds of representation and voting facilities (although in this last case the effect is almost negligible) in particular. The implications of these interactions are particularly important in the case of the possibility of expressing a preference: this institutional factor acts as an incentive to participation only for individuals with high levels of resources and motivations, while it increases the level of abstention for disadvantaged electors. Policies to increase the level of participation should take these interaction effects into account, and consider that the same institutional incentive affects different people to a different extent and even in different ways.

Finally, it has been shown that in the analysis of these interaction effects it is crucial to distinguish between two analytical questions: the extent to which people are sensitive to systemic incentives to participation (an academic question) and the extent to which these can reduce abstention (a political question). Logistic regression analysis is essential, not only because we are dealing with a dichotomous dependent variable, but also because we are comparing effects among groups and contexts with different abstention rates, in some cases close to zero. Thus, there is a need to estimate these effects free from the floor constraints that these low abstention rates may impose, particularly in the case of advantaged electors. Yet, a great sensitivity to institutional incentives does not necessarily produce an important change in abstention rates. Although the effect of compulsory voting is larger for advantaged electors, the change in the probability of abstaining due to this variable is larger for disadvantaged electors for the simple reason that they vote less and there is thus more scope for increasing their levels of participation. Therefore, both logits and probabilities need to be interpreted in order to answer both the academic and the political issues involved in electoral abstention.

## Acknowledgements

This research would not have been possible without the collaboration of the various data archives and researchers that kindly made the survey data available (see Table A in the Appendix). I also would like to thank Stefano Bartolini, José Ramón Montero, Yossi Shavit and two anonymous reviewers for their helpful comments and encouragement. Any errors in the analysis and interpretation of the data remain my own responsibility.

## Appendix

Table A. Survey data

Country and election date	Survey and source	Sample	
		size	Electorate
Belgium 24 November 1991	1991 General Election Study (ISPO, KU Leuven)	4,511	7,144,884
Denmark 12 December 1990	Danish Election Study 1990 (DDA 1564)	974	3,941,499
Finland 17 March 1991	Finnish Parliamentary Election Study 1991 (Research Institute for Social Sciences, University of Tampere)	1,472	4,060,778
France 21 March 1993	Eurobarometer 41.1 Postelectoral EP Elections 1994 (ICPRS 6535)	966	37,871,350
West Germany 2 December 1990	Politbarometer West (January–December 1991) – German Election Study (ICPRS 6390)	11,269	48,099,251
Great Britain 9 April 1992	British General Election Study 1992 (ESRC 33066)	2,855	43,275,316
Greece 10 October 1993	Eurobarometer 41.1 Postelectoral EP Elections 1994 (ICPRS 6535)	920	8,972,258
Ireland 25 November 1992	Eurobarometer 41.1 Postelectoral EP Elections 1994 (ICPRS 6535)	875	2,557,036
Italy 28 March 1994	Eurobarometer 41.1 Postelectoral EP Elections 1994 (ICPRS 6535)	984	47,435,689
Netherlands 6 September 1989	Dutch Parliamentary Election Study 1989 (ICPRS 9950)	1,754	11,112,189
Norway 13 September 1993	Norwegian Election Study 1993 (Norwegian Social Sciences Data Services)	2,194	3,259,967
Portugal 6 October 1991	Eurobarometer 41.1 Postelectoral EP Elections 1994 (ICPRS 6535)	874	8,322,481
Spain 6 June 1993	Postelectoral 1993 (CIS2061)	5,001	31,030,511
Sweden 15 September 1991	Swedish Election Study 1991 (SSD 0391)	3,7	6,413,172
Switzerland 20 October 1991	Analyse des Elections Fédérales 1991	1,002	4,510,784

*Table B.* Differences between official abstention rates and abstention as recorded by surveys

	Percentage of non-voters in sample (N)*	Percentage of non-voters in election	Under-representation of non-voters**	Percentage of non-response in sample***
Belgium	2.9 (123)	7.3	-4.4	6.1
Denmark	8.7 (182)	17.2	-8.5	9.0
Finland	13.7 (182)	31.6	-17.9	9.9
France	20.1 (191)	30.7	-10.6	1.6
Germany	9.6 (1,041)	21.4	-11.8	3.3
Great Britain	12.5 (356)	22.2	-9.7	0.1
Greece	3.6 (33)	21.8	-18.2	0.7
Ireland	13.5 (112)	31.5	-18.0	5.0
Italy	3.7 (35)	12.7	-9.0	3.7
Netherlands	7.4 (111)	19.7	-12.3	0.0
Norway	14.0 (306)	24.2	-10.2	0.3
Portugal	14.6 (125)	31.8	-17.2	1.8
Spain	14.0 (694)	23.6	-9.6	1.1
Sweden	6.4 (165)	13.2	-6.8	1.9
Switzerland	36.3 (362)	54.0	-17.7	0.6

\* Respondents that admitted not having voted in the country's last general election as a percentage of those that gave an answer ('yes'/'no') to the question.

\*\* Difference between real and reported percentage of non-voters.

\*\*\* Percentage of total sample not giving an answer to the question of whether they voted or not in the last general election.

Sources: For aggregate official data, Mackie & Rose 1991; Mackie 1991, 1992; and the political yearbooks published by the European Journal of Political Research for 1992, 1993 and 1994. For survey data see Table A in this Appendix.

## Notes

1. See, e.g., Rosenstone & Hansen 1993 on the interaction between race and the legal framework of elections in the United States; Wolfinger & Rosenstone 1980, Teixeira 1993 or Rose 1975 on the interaction between sociodemographic variables and registration laws – also in elections in the United States.
2. See the Appendix for information on the surveys used. Note that no adequate survey data were available for Austria at the time when the analysis was carried out.
3. Although the ideal technique to be applied in this research was clearly multilevel analysis (not only the observation, but also the analysis is carried out at two levels), the limited number of cases at the upper level (elections) and the small amount of variance in the dependent variable did not make it possible.

4. The index of individual incentives is created by adding 1 for each of the following characteristics that an individual has: middle age (between 30 and 60 years of age), higher education, high income (above the country median), married, regular church attendant, highly interested in politics and highly politicised (above the country median, calculated from the different indicators available in each survey). The total sum is then divided by 7, minus the number of missing values for each case. This way the number of cases left out of the analysis because of missing information is reduced, something particularly important in the analysis of abstention given the scarcity of non-voters.
5. The categorisation is made on a country basis in such a way that each of the three categories (high, medium, low) includes about one-third of the country's sample.
6. The model works as a normal regression ( $Y_i = a + b_k x_i$ ) but where  $Y_i = \ln(P \text{ of abstaining} / P \text{ of voting}) = a + b_k x_i$ . The dependent variable (logit) is then unbounded: the logarithm of the odds of abstaining versus voting. Although logits have no constant meaning, they need to be interpreted in order to estimate and compare effects for groups with different abstention levels without any constraints. As it will be clear from the analysis of interactions, the interpretation of logits (free from floor and ceiling effects) may differ from the interpretation of the expected probabilities (bounded by definition between zero and 1), which are to be interpreted as well.
7. However, some authors have argued that allowing voting on a Sunday may not increase turnout if electors give preference to their leisure activities (Blondel et al. 1996).
8. Lijphart's operationalisation defines the effective threshold as the average of the threshold of representation (minimum share of the vote a party needs to have guaranteed a seat under the most unfavourable circumstances) and the threshold of exclusion (minimum share of the vote a party needs to be able to win a seat under the most favourable circumstances).
9. The data on abstention for France refer to the first round. In the second round, some electors will be excluded from voting (those registered in constituencies where the winner has obtained an absolute majority of the votes). For other voters, the decision to vote may be tougher than in the first ballot: 'When French voters cannot repeat their first ballot partisan choice at the second ballot, they will vote for another party only if one is available for which they feel a certain amount of sympathy. If they regard the only parties available with disfavour, they will either spoil their ballots or abstain' (Converse & Pierce 1986: 345).
10. A further distinction between effective and ineffective preference expression can be made (see Katz 1986), but this did not show any significant effect on the levels of abstention.
11. Once the interaction term is included, the interpretation of the coefficients changes. The coefficient of individual incentives represents the effect of this variable under no compulsory voting (-2.18), while the effect of individual incentives under compulsory voting is given by the sum of the coefficients of the variable and the interaction term (-2.18 + -1.62 = -3.70), so the effect of individual incentives is larger under compulsory voting than under voluntary voting. Equally, the difference in the log odds of abstaining is -0.78 when we move from voluntary to mandatory voting for low individual incentives, but the difference is -2.30 (-0.78 + -1.62) for high individual incentives. So the effect of compulsory voting is larger for high individual incentives than for low individual incentives, independently of floor effects.
12. For instance, when Hirczy argues that 'micro-level relationships must weaken and ultimately disappear by logical necessity as aggregate turnout approaches 100%' (1992: 76), he does not consider the magnitude of the effects independently of ceiling effects, but the truly logical fact that if every one voted there would be no room for individual

differences in participation. However, if we are comparing individual level effects in settings with different levels of abstention, we need to control for these different levels of abstention.

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