

Political Knowledge and the logic of voting: a comparative study

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1. Introduction

The topic of this paper is the decision making process by which individual voters cast their ballots. In particular, it will focus on two traditional explanations of electoral behaviour: *ideological voting and performance voting*. These explanations of voting share a common assumption: electors' decisions are based on what they expect to get from their choice. Each potential outcome has a benefit or a cost, and citizens might choose the one benefiting them most or costing them least. That is, voters will maximize the utility of their electoral decision. Nevertheless to maximize the utility of a given decision, an individual need to have a certain amount of information to hand.

Previous research has explained the simple and straightforward underlying decision rule at work in both ideological and performance voting. In the case of ideological voting, citizens vote for the party that is perceived closer to their ideal position on the left-right dimension. Given the lack of perfect information for the electorate, Downs conceived ideology as an information saving device. That is, a perceptual cue that helps ordinary citizens to have a general idea about the policy positions of the main parties of their political system. In the case of performance voting, citizens decide on a standard of what they consider good performance, and reward the incumbent if this standard has been achieved, punishing the incumbent otherwise. Again, governments' performance is often considered a particular low-cost indicator that any given citizen can use as a heuristic tool to decide her vote in place of more costly and less salient information (such as party manifestos, concrete policy proposals, or policy outcomes, etc).

Yet in order to be able to judge incumbent governments by their performance or by their ideologies, voters must have a certain degree of information and factual knowledge such as the state of the economy, international politics, or the ideological positions of each of the policies included in parties' manifestos. However, research on public opinion and voting behaviour from Converse (1964, 1970) onwards often indicates that the overall level of information, knowledge and comprehension of politics amongst the average citizen is relatively poor. This suggests the need to systematically consider the degree of information and factual political knowledge citizens have at their disposal in order to form their perceptions about the government's performance, the policy position of each party,

and their electoral choices accordingly. Put it another way: *Does factual political knowledge mediate the logic of ideological or performance voting?*¹

While models of voting generally assume that all citizens are similarly informed and equally guided by the same considerations or motives, in this paper I analyze the extent to which the electors' degree of factual political knowledge influence their decision-rules when casting their ballot. Previous literature has provided contradictory answers to this question. For instance, Krause (1997) finds that uninformed citizens are less likely to vote on the basis of government's performance, but Zaller (1992, and 2004) argues the opposite. According to Zaller, poorly informed citizens are more likely to vote on the basis of performance or other currently salient issues, whereas informed electors make high use of the ideological logic when deciding their vote.

To answer these questions, I provide empirical evidence by analysing post-electoral survey data for European parliamentary elections held in quite different polities, where the level of citizens' factual political knowledge vary both at the individual and aggregated level. These polities are: two traditional and advanced democracies such as Sweden and Norway, two consolidated democracies from the 70's wave: Portugal and Spain, and two recent democracies from the 90's wave of former communist countries: Poland and Hungary. The data come from the CSES Module 2 Advance Release Dataset - December 15, 2004 where comparable information about citizens' degree of political knowledge is available across countries.

2. The argument: Why political information?

The ideological logic of voting was initially proposed by Downs (1957). His departure point was that voting decision can be thought of and explained as a rational behaviour. When faced with a decision which affects her interests, the individual will choose the most cost-effective means of maximizing her gains. This behaviour of utility maximization is argued to be rational. For a given citizen to take a rational decision, however, she needs to be able to: make a decision; rank her preferences in order (being this ranking transitive); and choose her first best (most preferred) alternative according to her ranking. Any given citizen, then, might always make the same decision if presented with

¹ In this paper I use the concept of political knowledge referring to factual political knowledge of citizens (Delli Carpini and Keeter, 1996). Other scholars use similar terms to refer to the same topic as, for instance, political awareness (Zaller, 1992) or political sophistication (Luskin, 1990).

the same set of alternatives in different points in time (Downs, 1957: 6). These criteria assume that citizens have information to hand which allows them to make their choices.

Given that individuals do not always have a clear notion of what they want as an outcome, of how the alternatives relate to such outcome, or how the different outcomes relate to their own interests, Downs assumed that citizens do not take their political decisions under conditions of perfect information. Rather, they live in a world of uncertainty where they need to search for information before coming to a decision. Information gathering, however, is a costly action (not only to obtain information but also to process it). Hence, some electors might be able and motivated to invest time and resources to collect information whereas others might not. The problem of imperfect information then implies that often citizens are uncertain about their political decisions. Under these conditions, parties' ideologies appear as information short-cuts for voters who cannot judge politics expertly. The ideological labels of parties then orient average (non expert) citizens about the general views the parties defend for societies. More specifically, ideologies are conceived as a single policy dimension based on the economic perspective of political parties, going from complete intervention of the state in all economic topics to a complete non interventionist (free market) economy. The main assumption of Downs is that the majority of the important policy issues are related and can be included in this single political dimension.

Nevertheless some electors might encounter difficulties both in defining their own preferences in the ideological dimension and in placing the political parties' position according to their policies (implemented if the party is in government or proposed in its manifesto when it is an opposition party). In fact, research on citizens' attitudes measured through surveys has shown that the public in general present low levels of factual political knowledge. Moreover the public competences to form and express consistent and sound opinions are said to be limited in the US. (Althaus, 2003, Converse, 1970; Bennet, 1988 and 1989; Delli Carpini and Keeter, 1996). An implication of the political ignorance of citizens can be that their opinions are not consistently organized by their ideology. This suggests that may be the ideological labels of parties do not work as a shortcut for ignorant citizens to decide their vote as if they were fully informed. In fact, previous research has convincingly shown that there are significant differences in the structure, consistency and stability of political attitudes and ideology among the knowledgeable and ignorant citizens (Bartle, 1997; Delli Carpini and Keeter, 1996; Sinnott, 2000) having the former more consistent political ideology, opinions and attitudes. All of this leads to an apparent

paradox: in order to use ideology as an information short-cut electors need some amount of information to hand. From here it follows that those voters presenting little information about the positions of candidates on important issues, will use ideology as a shortcut to cast their votes to a lesser extent than knowledgeable citizens.

There is, however, another possible expectation about the mediating role of factual political knowledge on the logic of ideological voting. For ideology to work as an information saving device, it might be possible that citizens should know something about politics but not to the extent to be highly informed. This suggests the possibility that the effect of political knowledge on the logic of ideological voting might be non linear. Under this perspective, moderately knowledgeable citizens might rely on the ideological logic of voting to a greater extent than ill informed citizens or perfectly well informed citizens. I have derived this hypothesis from the literature focusing on the study of the role of existing political knowledge in information diffusion and opinion change. In fact, Zaller (1992) proposes non monotonic relationships among political knowledge and opinion change in response to persuasive messages in the mass media. Well informed citizens then are more likely than poorly informed citizens to attend to and to understand such messages but, at the same time, they are less likely to be influenced (that is, change their own opinions) by them (given their pre-existing knowledge). As a consequence, moderately well informed citizens will show the greatest levels of media-induced opinion change in comparison with both ill informed and well informed citizens. This second alternative hypothesis might be difficult to test empirically, since one might encounter problems of statistical efficiency. I shall come back to this problem when commenting the results of the empirical analysis.

Summarizing, empirical evidence suggest that some kind of people tend to be more informed than others. That is, there is an important amount of variance in the level of factual political knowledge among citizens, and this variance is said to be unevenly distributed, since the highest degree of political knowledge tend to be concentrated among those who are politically and socially advantaged. In fact, according to the literature much of the empirical variation in the propensity to know about politics is explained by individual differences in motivation, ability, and opportunity (Althaus, 2003; Bennet, 1995; Delli Carpini and Keeter, 1996).² At this point, then, the general assumption of the theories

² The discussion about the sources of differences in the levels of citizens' political factual knowledge is beyond the scope of this paper, but according to Althaus (2003), motivation to become informed seems to depends on interest in politics, and sense of civic duty; the ability to process political information is enhanced by education and by routine exposure to daily news whereas opportunities to become informed depends on the content of available news coverage, geographical location of the citizen, and some other contextual

of voting behaviour that all citizens are similarly informed need to be tested. In this paper I analyze the extent to which the electors' degree of factual political knowledge influences their propensity to use the ideological logic when casting their ballots. At this point the theoretical expectation derived from this brief discussion with regards to ideological voting is the following: the likelihood of using ideology as an information saving device in order to decide which party to vote might be higher among the group of voters presenting medium or high levels of political information than among those presenting the lowest level of political information.

With regards to the logic of performance voting, it is apparently very simple. When deciding how to vote electors also seek to maximize their utility but this time by means of the benefits derived from the outcomes of the policies implemented by the incumbent. Hence, in the logic of performance voting citizens are guided by outcomes rather than policies. They calculate a minimum standard of general welfare and, if they consider that the incumbent has achieved this, they re-elect it. For the logic of performance voting to work, however, electors need to have certain level of political information to hand. First, if they are guided by outcomes, they need to know which party is (or are in the case of coalition governments) in government. Second, in order to make their calculus about the minimum standard to decide whether to reward or punish the incumbent, citizens need to have a general and coherent idea of how things have gone during the mandate. For instance, about the living conditions, international politics, the state of the economy, or whatever political outcomes they consider to be most relevant in order to evaluate the incumbent's performance. Third, voters need to hold the incumbent government responsible for its policies' outcomes. Hence, they need to have a general idea about how to connect the general interest of the country with their own self-interest.

When voters are poorly informed about politics, these three conditions might be difficult to achieve simultaneously. In this case, they cannot effectively decide their vote on the basis of government's performance. Again, the degree of factual political knowledge of citizens can influence their propensity to use the performance heuristic to cast their ballots. Factual political knowledge helps people to better understand and define their interest as individuals and as members of groups. Hence, the more knowledgeable the citizens are, the better they can understand the impact of public policies on their own interest. In sum, factual political knowledge is often considered as a key determinant of

characteristics of the place where the individual lives. (see also Bennet, 1995; Delli Carpini and Keeter, 1996)

instrumental rationality. (Delli Carpini and Keeter, 1996; Zaller, 1992). Therefore, as citizens become more informed or knowledgeable about politics they are expected to increase their propensity to vote on the basis of performance.

To recapitulate, ideological and performance voting have a commonality: they both explain individual voting as the product of a rational decision. Moreover for a decision to be rational, a certain amount of information is needed. Therefore I expect the likelihood of the use of the logic of both ideological and performance voting by electors to increase as their level of factual political knowledge grow. Up to date studies which explore the potential mediating role of political knowledge in the voting decision rules are scarce in the literature. (but see Andersen *et. al.*, 2001; Bartels, 1996; Krause, 1997; Zaller, 2002 and 2004). In contrast, we know relatively more about the effect of political knowledge on political participation (not only electoral but also political engagement in association, parties, social movements etc.) or on political attitudes (such as support for democracy, or tolerance). This paper seeks to cast some light on the effect of political knowledge on voting decision by systematically analysing post-electoral survey data from six different polities. Let me now explain which are they and why did I choose them.

3. The cases under study

In order to test the influence of political knowledge in the individual decision voting rules from a comparative perspective one needs to rely on comparable data containing information about individuals' declared vote, their evaluations on the government' performance, their ideology, the attribution of the ideology to the main competing parties, and sufficient socio-demographic characteristics as to test reasonable models of voting behaviour. Additionally, this data has to include information on the level of factual political knowledge of citizens.

My objective here is to test the effect of political information on the logic of ideological and performance voting in the European multiparty context which has been scarcely studied (for an exception see Andersen *et. al.* 2001). The multiparty parliamentary context offers an excellent opportunity to test the potential mediating effect of factual political knowledge on the logic of ideological and performance voting, since this context makes the task of selecting the party that minimizes the ideological distance more difficult than in two party systems such as in the US. In addition, the multiparty context offers the potential scenario of coalition incumbent governments where the logic of performance

voting might require a higher level of factual political knowledge from citizens in order to hold the government responsible for its policies' outcomes.

Fortunately, the CSES project provides comparable post-electoral survey data on these questions for countries coming from various contexts, among which Europe. In each country covered by the study, national probability samples of the adult population were interviewed shortly after a national election. The only problematic thing with regards to the topic under analysis here is that the levels of political knowledge might be overestimated by post-electoral surveys. The reason being that electoral campaigns are the moments in which the average elector has the highest degree of available political information (for instance, through the mass media) of the whole legislature. Therefore, acquiring information at those times might be less costly than in the middle of the mandate. For this reason, the general level of political knowledge can be potentially overestimated when measured by post-electoral surveys (carried out shortly after the electoral campaign has taken place), and this might be specially true in electoral campaigns where the level of competitiveness and political tension is high, as was the case in Poland (2001).³

Nevertheless, this should not invalidate the comparative results of the empirical analysis presented here, since the potential bias of the level of political knowledge goes in the same direction across countries. Moreover one might argue that the overestimation of citizens' political knowledge goes against the main hypothesis explored in this paper (namely, that the logic of both ideological and performance voting is influenced by electors' degree of factual political knowledge). As previously stated, the main reason to study the influence of voters' political knowledge on their electoral decisions is that there is an important uneven variance in the level of political knowledge among citizens. I have also argued that political knowledge measured by surveys carried out some weeks after the election might be more uniformly distributed than in the middle of the mandate. Thus the empirical test of this hypothesis can be considered a conservative one. If the results provided in this paper shows evidence of a mediating role of factual political knowledge in the logic of both ideological and performance voting, even with a high level of political knowledge *after* the election, one might argue that *at the time of elections* the importance of the mediating role of factual political knowledge is of larger magnitude.

³ In fact the levels of political knowledge as estimated by the post-electoral surveys used here are specially high for Poland in comparison with the rest of countries included in the analysis (see descriptive statistics in the Appendix: Tables A.1 and A.2)

In the available version of the CSES Module 2, there are up to 13 countries. In what follows I explain why I chose to analyse the logic of voting in only five of them (plus Spain for which I have used the post-electoral survey for the 2000 general elections of the CSES Module 1).⁴ First, I decided to limit my analysis to parliamentary elections rather than presidential. Second, I wanted to have democratic systems of different ages. The six cases under analysis then are Norway, Sweden, Spain, Portugal, Hungary and Poland.⁵ This sample of countries also offers an interesting variability in terms of the main independent variable of this paper, namely: factual political knowledge. These six countries constitute democratic systems of quite different age (that is, the number of democratic elections held in each country).⁶ There are two traditional and advanced democracies, two consolidated democracies from the 70's wave, and two recent democracies from the 90's wave of former communist countries. The potential influence of factual political knowledge on the logic of ideological and performance voting might be different depending on the type of democratic system. One might expect the distribution of political knowledge to be more evenly distributed and have less effect on the logic of voting in old democracies than in recent ones. An informed democratic citizenry is said to be a critical part of the democratization process. With the functioning of the democratic process, citizens learn to gather and process information and therefore one should expect political knowledge levels to be less developed in new democracies than is the case with more mature democracies. Of course, and given that this paper deals with post-electoral surveys, this might also depend on the characteristics of the context in which each election is embedded. For instance, when elections are highly competitive and the electoral climate is especially tense, as happened in the Polish 2001 elections, one might expect citizens to become exceptionally informed about politics and to be able to correctly answer survey questions on their political system.

Table 1 summarizes a number of relevant contextual characteristics that might help to explain the extent to which factual political knowledge mediates the logic of voting across polities. As the reader might notice, the countries under consideration vary across them with respect to all the characteristics. First, Table 1 classifies each election according to the degree of competitiveness (high or low) and also gives the level of turnout, being the

⁴ The results are comparable, with the particular detail that the survey question on performance is devoted exclusively to the economic situation of the country.

⁵ For the Spanish case, I used another post-electoral survey containing enough information as to replicate the same analysis.

⁶ These are: *** for Norway and Sweden; eight in Spain, nine in Portugal, four in Hungary and Poland.

cases of Portugal, and Hungary the most competitive. Second, Table 1 provides some basic characteristics of the political systems under consideration: the incumbent party at the election time (being the colour of the incumbent governments either conservatives or social-democrats across countries), and whether there was a change in government. In fact, all the elections but two (Spain and Sweden) resulted in a governmental change. This changes go together with a general trend of bad objective performance as was the case in Poland and Portugal where there was an intense economic crisis, including crisis of public finance. Additionally, in Poland the incumbent government was accused of corruption. In contrast, the economic performance in Hungary and Spain was wealthy; specially in the later. In addition, the incumbent government was accused of corruption in Hungary. The exception, however, is Norway where the incumbent performance was good but it was defeated.⁷ Finally, in the case of Sweden the performance was good and the Labour Party remained in government.

Third, Table 1 also classifies the type of political campaign carried out in each election as ideological or performance campaigns depending on the dominant topic in each of them. Based on reports about each election in the journal *Electoral Studies* (2002-2004) as well as in the documentation provided by the CSES project, I argue that there are two clear ideological campaigns: Norway and Sweden. More specifically, the electoral campaign in Norway focused on two main subjects: taxation and the state of public services. The socialdemocratic and conservatives party were alienated in favour and against taxation respectively. Moreover, the opposition was in favour of using the country's oil wealth to cut taxes and improve social services (CSES, 2004 election summaries) In Sweden the electoral campaign was dominated by the future of the large public sector, being the incumbent favourable to maintain it by the existent taxation system whereas the conservative opposition favoured tax cuts, privatizations and deregulation. (CSES; 2004 election summaries). My suggestion here is that ideological voting might prevail over performance voting when the electoral campaign is dominated by ideological issues. If the political information raised by leaders point to ideological issues, the difficulties to use ideological labels as heuristics in deciding how to vote might decrease in comparison with other campaigns where the political discourses are less incisive on ideological issues. Hence the potential mediating role of factual political knowledge on the logic of ideological voting might also be less likely.

⁷ The case of Norway is specially interesting since the incumbent government (the labour party in minority) was there as a product of a previous governmental crisis of another coalition *****

In contrast, the electoral campaign was clearly dominated by performance issues in the cases of Hungary, Poland, Portugal, and Spain. In the case of Hungary this topic was mixed up with the nationalist agenda proposed by the conservatives whereas in Poland the dominant topic was the rise of unemployment, the government budget deficit and the increasing disadvantage in terms of living conditions among rural and urban zones. (CSES; 2004 election summaries). Finally, the deep economic crisis as well as the crisis in the state budget in Portugal was at the top of the electoral campaign agenda (Maghallaes, 2002**). The Spanish case can be considered as an “economic performance” campaign, since the conservatives insisted in highlighting the achievements of the economy, after a period of impressive economic performance with an unprecedented decrease in unemployment rate in Spain.⁸

Table 1 provides two other interesting aggregated characteristics of the countries under analysis here that I consider to be relevant for the logic of performance and ideological voting. First, it indicates if the incumbent parties in each country were a single party (either in minority or majority) or a coalition. The logic of performance voting might require a higher level of information from electors when the incumbent government is in coalition than when it is a single party. The process of attribution of responsibilities to the incumbent for its performance might be more complicated in the case of coalition incumbent governments (in our sample, Poland and Hungary). Finally, Table 1 also indicates which are the main parties competing in elections. This might be relevant for the logic of ideological voting and one of the main reason to choose multiparty political systems: in contexts where there are only two main parties with real possibilities to win, selecting the party that minimizes the ideological distance is easier than in context where the opposition is divided. In the later countries, the logic of ideological voting might require a higher degree of political knowledge.

In sum, this comparative analysis contains sufficient variation in the political context of elections as to assure the consistency of the results presented in what follows.

⁸ Moreover the key slogan of the Conservative Party during its whole mandate, and especially in the electoral campaign of the 2000 election was “Spain is doing well” (*España va bien*) alluding to economic performance.

Table 1. Characteristics of the political context of the elections held in each of the countries under analysis

	Spain	Portugal	Norway	Sweden	Poland	Hungary
Incumbent	PP (conservatives)	PS (socialdemocratic)	Labour Party (socialdemocratic)	SAP (socialdemocratic)	AWSP (conservatives)	Fidesz-MPP (conservative)
The incumbent government is in coalition or majority mandate	Single party (minority)	Single party (minority)	Single party (minority)	Single party (minority)	Coalition	Coalition
Change of party in government	No (the PP gained support)	Yes (PSD, center-right)	Yes (coalition of conservatives: H + KrF + V)	No (the SAP gained more support)	Yes (socialdemocratic coalition: SLD+UP)	Yes (socialdemocratic coalition: MSZP+SZDSZ)
General Performance previous to elections	Good (economic performance)	Bad	Good	Good	Bad (corruption)	Regular (corruption)
Degree of competitiveness	Low	High	High	Low (divided opposition)	Low (divided opposition)	High
Main competitive parties	PP-PSOE	PS-PSD	Dispersed (small parties)	Dispersed (small parties)	Dispersed	Dispersed (MSZP and Fidesz)
Dominant topic in the electoral campaign	Performance campaign	Performance campaign	Ideological campaign	Ideological campaign	Performance campaign	Performance campaign
Turnout	69%	62,3%	74,5%	80,1%	43,6%	70,5%
Date of election	March, 2000	March, 2002	September, 2001	September, 2002	September, 2001	April, 2002

Source: my own elaboration based on www.parties-and-elections.de and on reports of Electoral studies

4. The data

As previously indicated, I employ data from the CSES Module 2. To test the hypothesis about the influence of political knowledge on the logic of both ideological and performance voting I fit a multinomial logit equation with declared vote as the dependent variable. My concern in this paper is with the contrast in vote among the incumbent and the main opposition party across countries. Hence, for the sake of simplicity I provide results coming from the multinomial logit equations corresponding to only this dichotomous contrast. The two variables concerning performance and ideological voting are specified as follows. First, electors' retrospective judgements of the government performance is a dichotomous variable taking the value 0 when they expressed a bad opinion (bad or very bad job) and 1 when giving a good opinion (good and very good job).⁹ Second, ideological voting is tested through two variables measuring the quadratic distance of each elector' ideological position with respect to the ideological position attributed by her to both the incumbent party and the main opposition party.

I have also specified other independent variables in the voting equations across countries which, according to the literature on electoral behaviour, impinge on voting. Age represents individuals' age, and varies from 18 to 99 years old. Gender is a dummy variable, taking the value 1 for female and 0 for male. Education reflects the maximum qualification obtained by the interviewee and takes the values 1 (low education), 2 (medium education) and 3 (maximum education) for Hungary, Norway, and Sweden whereas the variable contains a more detailed information in Poland, Portugal and Spain, ranging from no education at all to university education.¹⁰ Finally, I have also included a variable indicating the labour market position of the individuals.¹¹ I have also operationalised individual or familiar class position following the class schema by Erikson y Goldthorpe (1993). More specifically, I have used a collapsed version of the original schema so that the variable distinguishes among six different classes: 1 (service class), 2

⁹ The interviewed were asked the following question: "Now thinking about the performance of the government in general, how good or bad a job do you think the government the past [number of years between the previous and the present election or change in government] years. Has it/ he/ she done a very good job? A good job? A bad job? A very bad job?". The exception is the case of Spain where this question is centred on the economic performance of the country. For this case, the variable has been specified in the equation as an ordinal one (going from 1 very bad economic performance to 5 very good economic performance).

¹⁰ For Hungary, Norway, and Sweden education has been specified in the correspondent equations as a categorical variable taking the medium as the reference category whereas for Poland, Portugal and Spain the variable has been specified in the correspondent voting equations as an ordinal variable.

(middle class), 3 (urban bourgeoisie), 4 (rural bourgeoisie), 5 (skilled and semi-skilled workers), and 6 (non skilled workers). None of these categories turned out to be statistically significant in the voting equations except for the case of Sweden where non skilled workers present a higher propensity to vote for the socialdemocratic party than both the service class and the urban bourgeoisie. For the rest of countries, the class effect seems to be negligible. For this reason, I have decided to exclude the class variable from the final equation results presented in this paper.¹² Descriptive statistics of all these variables are given in the Appendix (Tables A.1 and A.2).

Finally, the respondents' factual political knowledge level consists on a variable based on three questions in the CSES questionnaire which record responses to three neutral, factual, and unequally demanding country-specific political knowledge questions. To create the variable, the number of each respondent's correct responses were counted (taking the values from 0-all responses incorrect to 3- all responses correct). The resulting score was recoded from 0 to 1.¹³ Of course, this is not the ideal way to measure citizens' level of political knowledge, but yet it is the only suitable comparable data and it is widely used by the literature (for instance, Millner, 2002; Toka, 2003). Again, descriptive statistics of this variable across countries are given in the Appendix. Tables A.1 and A.2. In what follows, I present the main results of the analysis.

5. Empirical results

This paper test a very simple hypothesis: the extent to which electors rely on the logic of ideological or performance voting is influenced by their degree of factual political knowledge, being those presenting the highest level of factual political knowledge the most likely to vote on the performance or the ideology logic. This assumes that both ideological and performance voting do exits across countries. Before commenting the results of the multivariate equations, let me introduce two simple tables providing empirical evidence

¹¹ The categories of this variable are the following: 1 employed, 2 home duties, 3 unemployed, 4 students, and 5 retired. I have specified this variable in the correspondent voting equations as categorical, taking the retired as the category of reference.

¹² The results with the effect of the six categories' class variable are available to the interested reader. Additionally, recall that the occupational codes included in the CSES module employ only the first two digits of 1988 ISCO / ILO International Standard Classification of Occupations. As it is widely known, this constitutes an scarce information to properly operationalise the individuals' class position. Hence, I do not discard the possibility that this variable did not turn out to be significant across the equations (except in the Swedish case) given this lack of detailed information.

¹³ Through the following metric transformation of the variable:
$$K = \frac{X - X_{\min}}{X_{\max} - X_{\min}}$$

about the potential mediating role of political knowledge on the logic of both performance and ideological voting across countries.

Table 2. Percentage of declared vote for both the incumbent and main challenger by judgements of general performance of the government and levels of political knowledge

	Declared Vote	Spain		Portugal		Norway		Sweden		Poland		Hungary	
		Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad
Factual Political Knowledge													
Low:	Incumbent:	71%	36%	71%	32%	20%	25%	48%	5%	22%	19%	73%	7%
	Challenger:	16%	50%	18%	49%	23%	26%	28%	66%	56%	39%	19%	78%
	<i>N</i> =	236	229	102	280	460	121	325	94	23	215	318	292
High:	Incumbent:	73%	38%	80%	23%	20%	30%	50%	3%	70%	25%	78%	3%
	Challenger:	14%	38%	10%	51%	27%	28%	32%	76%	10%	51%	10%	77%
	<i>N</i> =	155	136	77	264	803	210	370	92	81	611	189	179

Source: my own elaboration from the CSES Module 2 Advance Release Dataset - December 15, 2004 and CSES Module 1 for the Spanish post-electoral survey (2000 general elections). Entries in the table are column percentages of cross-tabs with declared vote in the rows and evaluations of governments' performance in the columns by levels of political knowledge (citizens with low levels of political knowledge are those presenting 0 or 1 correct responses to the three questions, whereas citizens with high levels of political knowledge are those presenting 2 or 3 correct answers to the three questions)

Let us start with the logic of performance voting. ¹⁴Table 2 compares the impact of individuals' evaluations about the government performance on declared vote choice (incumbent *versus* the main opposition party) for the well informed *versus* the poorly informed citizens. ¹⁵First, there is clear evidence here that regardless of the level of factual political knowledge, respondents with positive evaluations about the governments' performance declared to have voted for the incumbent to a much higher extent than to the challenger across countries, except for Norway, where there is no evidence about the existence of performance voting whatsoever. This result is not surprising. There was a change in government in the middle of the legislature provoked by a governmental crisis. Hence, citizens might not be held the incumbent responsible, and accordingly there seem to be no relation among performance and the propensity to vote the incumbent in 2001 elections. ***

The results also confirm that well informed citizens respond to the logic of performance voting to a greater extent than poorly informed citizens. For instance, among those having good evaluations of the government's performance around a 70% declared to have voted for the incumbent in Spain, Portugal and Hungary and for the group of miss informed citizens. This percentage is smaller but still high in the case of Sweden (48%). Those percentages are even greater among the well informed citizens (around 80% in Portugal, and Hungary, 73% in Spain, and 50% in Sweden). Finally, Poland constitutes an extremely interesting case, since it seems that the logic of performance voting only works for the well informed citizens. Moreover among those having good evaluations of the government's performance and being poorly informed only around a 22% declared to have voted for the incumbent whereas the percentage raises up to 70% for well informed citizens. Hence, Table 2 constitutes empirical evidence demonstrating the existence of performance voting in all countries but Norway. Additionally, it provides *prima facie* evidence about the potential mediating role of citizens' levels of political knowledge on the logic of performance

¹⁴ Throughout this paper (and following the specialised literature on political information) I use the term *ill informed* or *miss informed* to refer to people who are either miss informed (that is, when they have 0 correct responses to the three political knowledge questions) or who have low levels of political knowledge (that is, they have only 1 correct response to the three political knowledge questions) In contrast, *well informed* people are those who have 2 or 3 correct responses to the political knowledge questions. The use of the term is rough, meaning that ill informed people are less knowledgeable than well informed people, but I do not assume any precise degree of difference among them.

¹⁵ Tables 2 and 3 classify citizens with "low levels of political knowledge" when they have 0 or 1 correct responses to the three questions, and with "high levels of political knowledge" when they have 2 or 3 correct answers to the three questions

voting for Portugal, Hungary, and especially for Poland, ¹⁶being the cases of Spain and Norway less clear.

Let us now consider the logic of ideological voting. Table 3 compares the impact of individuals' declared ideological distance from the incumbent party on their declared vote choice (incumbent *versus* the main opposition party) for the ill *versus* the well informed citizens. To construct this table I have recodified the quadratic ideological distance from the incumbent party as a categorical variable taking four values: no distance at all (value 0 of the original variable) up to the second quartile of the distribution of the variable for each country, the third, and the fourth quartile (which constitutes the maximum ideological distance for each country).

Table 3 gives evidence of the existence of ideological voting among all countries under analysis here, since respondents having no ideological distance from the incumbent party declared to have voted for the incumbent to a much higher extent than to the challenger across countries, with no exception at all. ¹⁷ The results also confirm that the well informed citizens respond to the logic of ideological voting to a greater extent than ill informed citizens. For instance, among those having no ideological distance from the incumbent government and being poorly informed, around 83% declared to have voted for the incumbent in Hungary, 91% in Spain, 75% in Portugal, 66% in Sweden, and 41% in both Norway and Poland. These percentages are of higher magnitude for the group of well informed citizens: 95% in Hungary, 85% in Portugal, 80% in Sweden, 60% in Poland, 51% in Norway, and 94% in Spain. ¹⁸ This leads to differences between 20 and 10% across all countries with no exception. In short, Table 3 provides convincing empirical evidence about the existence of ideological voting in all countries studied here. It also constitutes evidence about the influence of citizens' political knowledge on the logic of ideological voting for all countries.

The same results appear when considering the ideological distance from the main opposition party, but this time the highest percentages of declared vote for the incumbent are

¹⁶ The contrast is of stronger magnitude when comparing the group of citizens presenting 0 correct responses to the political knowledge questions to the group of citizens presenting 3 correct responses to the political knowledge questions. I have decided not to show this second contrast (more favourable to my hypothesis) since unfortunately, I was not able to replicate this second possibility of contrast in the multivariate equations due to problems of lack of statistical efficiency (that is, very few observations)

¹⁷ Although it is true that the differences seem to be of smaller magnitude in Norway and Poland than in the rest of the countries analysed here.

¹⁸ Again, the differences among the group of citizens presenting 0 correct responses to the political knowledge questions and the group of citizens presenting 3 correct responses to the political knowledge questions are even stronger. I have decided not to show this second contrast (more favourable to my hypothesis) since unfortunately, I was not able to replicate this second possibility of contrast in the multivariate equations due to problems of lack of statistical efficiency (that is, very few observations)

(of course) concentrated in the category of maximum ideological distance from the main challenger.¹⁹ I now turn to the results of the multivariate analysis which are presented in Tables 4, 5, and 6. Each table gives the results of the voting equation estimated by multinomial logit. Given the comparative nature of this paper, these tables only provide the coefficient corresponding to the two main competing parties (the incumbent and the challenger).²⁰

¹⁹ I do not include this other table in the text but the results are quite consistent (and redundant) with the one presented in Table 3.

²⁰ The results are available to the interested reader.

Table 3. Percentage of declared vote for the incumbent and main challenger by declared ideological distance from the incumbent party and levels of political knowledge

Declared Vote by factual political knowledge	Spain				Portugal				Norway				Sweden				Poland				Hungary				
	No dist	2 nd	3 rd	Max dist	No dist	2 nd	3 rd	Max dist	No dist	2 nd	3 rd	Max dist	No dist	2 nd	3 rd	Max dist	No dist	2 nd	3 rd	Max dist	No dist	2 nd	3 rd	Max dist	
Pol Know																									
Low:	I:	91	55	6	0	75	53	33	15	41	27	20	8	66	46	31	6	41	34	11	2	83	57	14	3
	Ch:	6	26	71	79	16	36	50	61	18	21	22	33	17	27	42	67	12	25	36	77	10	30	70	87
	<i>N =</i>	<i>112</i>	<i>186</i>	<i>77</i>	<i>34</i>	<i>107</i>	<i>76</i>	<i>100</i>	<i>95</i>	<i>99</i>	<i>145</i>	<i>101</i>	<i>195</i>	<i>80</i>	<i>98</i>	<i>148</i>	<i>81</i>	<i>24</i>	<i>61</i>	<i>47</i>	<i>52</i>	<i>102</i>	<i>213</i>	<i>125</i>	<i>95</i>
High:	I:	94	62	16	3	85	51	20	10	51	29	17	6	80	52	25	5	60	45	31	3	95	67	7	3
	Ch:	5	24	54	49	17	31	50	61	9	19	33	42	10	26	56	76	7	26	41	87	1	21	69	77
	<i>N =</i>	<i>75</i>	<i>116</i>	<i>66</i>	<i>21</i>	<i>88</i>	<i>61</i>	<i>108</i>	<i>88</i>	<i>197</i>	<i>244</i>	<i>209</i>	<i>360</i>	<i>101</i>	<i>119</i>	<i>145</i>	<i>93</i>	<i>69</i>	<i>266</i>	<i>133</i>	<i>182</i>	<i>74</i>	<i>103</i>	<i>93</i>	<i>91</i>

Source: My own elaboration from the CSES Module 2 Advance Release Dataset - December 15, 2004 and CSES Module 1 for the Spanish post-electoral survey (2000 general elections). Entries in the table are column percentages of cross-tabs with declared vote in the rows and declared ideological distance from the incumbent party (re-codified in four categories) in the columns by levels of political knowledge (Low and High) divided by the same criterion as in Table 2. In the column of declared vote: I: Incumbent and Ch: Challenger. The four categories of ideological distance from the incumbent party are the following: no distance, up to the 2nd quartile, 3rd quartile and 4th quartile (maximum distance)

Tables 4, 5, and 6 provide the results of the voting equation in the six countries analysed here. They come to confirm the evidence highlighted in previous tables. For instance, and as can be read from the first column (named “All the sample”) of each country, the coefficients corresponding to the effect of the ideological distance from both the incumbent and opposition party are all statistically significant and with the correct sign across countries. That is, negative coefficients for the case of ideological distance from the incumbent and positive coefficients for the case of ideological distance from the main opposition party, given that all the tables show the effect of each independent variable on the propensity to have voted for the incumbent party *versus* the main opposition party (what I call here the Challenger). Additionally, the coefficients corresponding to the effect of electors’ retrospective evaluations of the governments’ performance turned out to be statistically significant and with correct signs in all the cases except Norway. Hence, there is clear evidence of the existence of both ideological and performance voting across countries with the exception of Norway where there is only evidence of ideological voting but not of performance voting. We have already mentioned that this results are not surprising, given the governmental changes in the year previous to election.

I shall turn now to analyse the potential mediating role of electors’ levels of factual political knowledge on their propensity to use both the logic of performance and ideological voting when casting their ballots. To empirically face this question I proceed as follows. First, I have divided each country sample in two sub-samples corresponding to the well informed and the miss informed citizens as previously explained in Table 2. I then have estimated the same equation for each of the sub-samples under the hypothesis that the magnitude of the effect of the coefficients corresponding to both ideological and performance voting shall be stronger for the sample of well informed citizens than for their miss informed counterparts across countries. These estimations can be seen in the second and third columns of Tables 4, 5, and 6. ²¹The results provide relative evidence on the influence of citizens’ levels of factual political knowledge on their propensity to rely both on the logic of ideological and performance voting when casting their ballots across countries, although with some notable exceptions. Of course, the results are not spectacular since we are dealing with serious problems of statistical efficiency. In short, the number of

²¹ It is important to remark that due to problems of statistical efficiency I was obliged to change the criteria to divide the two samples for the case of Poland where the variable Factual Political knowledge was extremely skewed, being the majority of the respondents in the highest category (1). For that reason the sample of high political knowledge corresponds to those respondents presenting 3 correct answers to the factual objective political questions whereas the low information level includes the rest of respondents.

respondents presenting certain combinations of the values of the independent variables considered here often is too small as to efficiently estimate the effect of ideological voting or performance voting among ill informed and well informed individuals separately. Yet, there is certain evidence about the potential conditioning role of factual political knowledge which I comment immediately.

I shall start with performance voting where the results appear more conclusive than in the case of ideological voting. If one compares the magnitude of the performance coefficients among miss informed and well informed citizens, it seems that the later rely on the logic of performance voting to a greater extent than the former. This tendency is clearly corroborated for the cases of Poland, Portugal, and Hungary whereas there seem to be no clear evidence for the cases of Spain and Sweden. Table 7 provides additional support of these results. It simulates the predicted probabilities of having voted for the incumbent party and its main challenger across all the multinomial voting equations but Norway. More specifically, it provides the predicted probabilities of having voted for the incumbent and its main challenger when we set constant the rest of the independent variables specified in the voting equation to their mean values.

Let us start with the case of Portugal. A miss informed individual evaluating positively the performance of the incumbent party (PS) has a probability of voting for the PS of 0.64 (that is, a 64%) whereas the same individual expressing a negative judgement about the government's performance²² might have a smaller probability of voting for PS: a 36%. This supposes a difference in the probabilities of voting for the incumbent of 28%. The magnitude of these differences is, however, of stronger magnitude if we compare miss informed citizens with well informed citizens: 53% (that is, 74% minus 21%). And the same applies for the case of Poland, where the difference in the probabilities of having voted the incumbent party (AWSP) among citizens presenting positive and negative judgements about the incumbents' performance is of only 2% among ill informed electors but of 31% among well informed citizens. There is a similar pattern for the case of Hungary, where the difference in the probabilities of having voted the incumbent party (Fidesz-MPP) among citizens presenting positive and negative judgements about the

²² And holding the rest of its characteristics constant at their mean value. This condition applies to all the comments I shall make on Table 7, but I avoid repeating it.

incumbents' performance is of only 7% for the case of ill informed electors but of 58% among well informed citizens.²³

The evidence is less clear for the case of Spain, since the differences among good and bad evaluations seem to be stronger for well informed than for ill informed citizens (77% and 53% respectively). Yet if we look at the difference in the probabilities of having voted for the main opposition party (PSOE), they are of stronger magnitude among ill informed than among knowledgeable citizens (66% and 27% respectively). Finally, in the case of Sweden there is no evidence whatsoever of a mediating role of political knowledge in the logic of performance voting.

I turn now to an assessment of the influence of electors' levels of political knowledge on their propensity to vote ideologically. As can be appreciated in Tables 4, 5, and 6, the evidence in this case is less conclusive, at least with regards to the existence of a linear mediating effect of political knowledge on ideological voting.²⁴ Yet the results point to slight differences among the well informed and the miss informed citizens. For the cases of Sweden, Spain, and Poland there seems to be no differences in the propensity to vote ideologically between the miss informed and the well informed respondents whereas the rest of the cases analysed here (Portugal, Hungary and Norway) the magnitude of the effects of ideological voting seems to be higher among well informed than among ill informed citizens, since the coefficients for the ideological distance from both the incumbent party and its challenger are higher for the former than for the latter respondents (see Tables 4, 5, and 6). These differences can be better appreciated by ways of simulations.

Figure 1 provides a measure of the effect of ideological distance from the incumbent party on the probabilities of having voted for the incumbent party *versus* its challenger among low and high informed citizens across countries.²⁵ As can be appreciated, the differences among miss informed and ill informed citizens are conclusive only for the case of Hungary and somehow Norway. For these two cases, the magnitude of the effect of voters' ideological distance from the incumbent party on the probabilities of having voted for the incumbent *versus* its main challenger is higher among the well

²³ And the same conclusion can be reached if we compare the probabilities of having voted for the main opposition party in Portugal, Poland and Hungary.

²⁴ Unfortunately, the task of testing the non linear effects is really complicated for the mentioned problems of statistical efficiency.

²⁵ The same tendency can also be appreciated when graphing the predicted probabilities of voting for the incumbent *versus* its challenger according to the ideological distance from the main opposition party for both

informed than among the ill informed individuals. The evidence is, however, not conclusive with respect to the rest of countries.

well and ill informed respondents. I do not present these graphs here, since the information they provide is somehow redundant.

Table 4. Voting in Portugal and Spain for the incumbent (only coefficients of the comparison among the incumbent and the main opposition party are provided) by levels of political knowledge

	PORTUGAL (March, 2002) (PS socialdemocratic incumbent <i>versus</i> main opposition party, the conservative: PSD)			SPAIN (March, 2000) (PP conservative incumbent <i>versus</i> the main socialdemocratic opposition party: PSOE)		
Independent variables	All the sample	Low Political Knowledge	High Political Knowledge	All the sample	Low Political Knowledge	High Political Knowledge
Constant	.87 (.87)	-1.23 (1.28)	.25 (1.4)	-4.2 (1.12) **	-7.3 (1.4) **	-8.1 (1.01) **
Ideological distance from the incumbent	-.13 (.02)**	-.09 (.02)**	-.13 (.02)**	-.16 (.01) **	-.08 (.03) **	-.17 (.01) **
Ideological distance from the main opposition party	.11 (.28) **	.13 (.03) **	.13 (.28) **	.24 (.01) **	.10 (.03) **	.14 (.02) **
Performance (1= good)	1.77 (.28) **	-1.2 (.65) +	2.62 (.49) **	1.01 (.20) **	2.37 (.36) **	2.73 (.25) **
Age	-.01 (.01)	.01 (.01)	-.02 (.01)	.02 (.01) +	.001 (.01)	.02 (.01) +
Gender	-.38 (.23)	.58 (.33) +	-.05 (.36)	-.35 (.31)	1.34 (.44) **	.46 (.29)
Education (ordinal: 1-8 for Portugal and 0-5 for Spain)	-.09 (.07)	.19 (.09) +	.04 (.10)	.19 (.09) +	.31 (.29)	.24 (.16)
Labour Market position (reference category: 5. retired)						
1. Employed	-.22 (.37)	.14 (.47)	-.32 (.65)	.02 (.51)	-1.17 (.98)	2.1 (1.9)
2. Home-duties	-.63 (.44)	.89 (.53)	.08 (.91)	-.37 (.51)	-.89 (.71)	.83 (1.07)
3. Unemployed	-.09 (.68)	-.25 (.84)	-.61 (1.2)	-.09 (.68)	-1.7 (1.4)	1.6 (1.2)
4. Students	-.79 (.84)	-3.4 (1.6)	-1.7 (1.22)	.29 (.80)	-2.7 (1.4)	2.09 (1.4)
Number of cases	662	334	328	617	371	246
LR χ^2 (33)	396.09 **	180.44 **	235.11 **	501.6 **	320.9 **	221.08 **
-2 Log Likelihood	-499.17	-253.43	-233.44	-421.8	-242.11	-153.57
Pseudo R ²	0.28	0.26	0.35	0.37	0.39	0.42

Note: Entries are logit maximum-likelihood estimates and their associated standard errors.

** Significant at the level of 99%. * Significant at the level of 95%. + Significant at the level of 90%.

Table 5. Voting in Norway and Sweden for the incumbent (only coefficients of the comparison among the incumbent and the main opposition party are given) by levels of political knowledge

	NORWAY (September, 2001) (Labour Party socialdemocratic incumbent <i>versus</i> main opposition party: H)			SWEDEN (September, 2002) (SAP socialdemocratic incumbent <i>versus</i> the conservative opposition coalition: M, FP, Kd)		
Independent variables	All the sample	Low Political Knowledge	High Political Knowledge	All the sample	Low Political Knowledge	High Political Knowledge
Constant	-.96 (.63)	-.97 (1.07)	-.96 (.63)	-3.45 (.94) **	-4.4 (1.4) **	-2.38 (1.3) +
Ideological distance from the incumbent	-.11 (.01) **	-.07 (.02) **	-.15 (.02) **	-.14 (.02) **	-.15 (.03) **	-.14 (.03) **
Ideological distance from the main opposition party	.19 (.01) **	.14 (.02) **	.23 (.02) **	.08 (.007) **	.09 (.01) **	.07 (.01) **
Performance (1= good)	-.10 (.22)	.07 (.36)	-.17 (.28)	2.76 (.47) **	3.08 (.69) **	2.55 (.67) **
Age	.01 (.01)	.01 (.01)	.01 (.01)	-.01 (.01)	.01 (.01)	-.01 (.01)
Gender	-.08 (.18)	-.23 (.30)	.08 (.23)	.50 (.23) *	.78 (.36) *	.37 (.31) *
Education (reference category: 2. medium level)						
1. Minimum level	.57 (.28) *	.48 (.41)	.65 (.39) +	1.3 (.36) **	1.1 (.59) *	1.36 (.49) **
3. Maximum level	-.17 (.20)	.047 (.38)	-.21 (.25)	-.79 (.24) **	-.69 (.39) +	-.93 (.33) **
Labour Market position (reference category: 5. retired)						
1. Employed	-.34 (.30)	-.59 (.55)	-.17 (.37)	-.03 (.42)	-.03 (.67)	-.23 (.55)
2. Home-duties	-1.6 (.67) *	-1.2 (.97)	-2.02 (1.1) +	-.02 (2.2)	-4.9 (4.9)	2.8 (1.7)
3. Unemployed	-1.02 (1.3)	-.91 (1.4)	-3.06 (1.6)	-.21 (.7)	.09 (1.1)	-.72 (.9)
4. Students	-.65 (.56)	-.85 (.89)	-.47 (.76)	.11 (.67)	.27 (.98)	-.25 (.98)
Number of cases	1506	520	986	839	385	454
LR χ^2 (33)	1055.78 **	317.92 **	770.08 **	680.26 **	345.45 **	357.05 **
-2 Log Likelihood	-1838.65	-670.66	-1140.19	-550.87	-242.93	-294.46
Pseudo R ²	0.22	0.19	0.26	0.38	0.41	0.38

Note: Entries are logit maximum-likelihood estimates and their associated standard errors.

** Significant at the level of 99%. * Significant at the level of 95%. + Significant at the level of 90%.

Table 6. Voting in Hungary and Poland for the incumbent (only coefficients of the comparison among the incumbent and the main opposition party are given) by levels of political knowledge

	HUNGARY. (April, 2002) (Fidesz-MPP: conservative incumbent coalition <i>versus</i> MSZP: socialdemocrats)			POLAND (September, 2001) (AWSP conservative coalition <i>versus</i> SLD-UP socialdemocratic main opposition coalition)		
Independent variables	All the sample	Low Political Knowledge	High Political Knowledge	All the sample	Low Political Knowledge	High Political Knowledge
Constant	-3.67 (.89)**	-2.57 (2.25)	-3.46 (1.03)**	-1.57 (.95) +	-2.11 (2.43)	-1.34 (1.07)
Ideological distance from the incumbent	-.05 (.01)**	-.14 (.04)**	-0.06 (.01)**	-.04 (.005) **	-.05 (.02) **	-.04 (.006) **
Ideological distance from the main opposition party	.04 (.007) **	.01 (.02)	.05 (.008) **	.06 (.007) **	.04 (.02) **	.06 (.008) **
Performance (1= good)	3.17 (.30) **	2.36 (.79) **	3.47 (.35) **	.86 (.39) **	-.70 (.95)	1.39 (.48) **
Age	.02 (.01)	.003 (.03)	.01 (.01)	.002 (.01)	.02 (.01)	-.002 (.01)
Gender	.14 (.25)	1.18 (.75) +	-.16 (.29)	-.12 (.23)	.25 (.66)	-.21 (.26)
Education (reference category: 2. medium level)				(ordinal variable for Poland):	(ordinal variable for Poland):	(ordinal variable for Poland):
1. Minimum level	.93 (.32)**	1.22 (.71) +	1.03 (.39)*			
3. Maximum level	.49 (.38)	-.67 (1.67)	.62 (.40)	.22 (.09) *	.22 (.24)	.19 (.09) *
Labour Market position (reference category: 5. retired)						
1. Employed	.64 (.44)	1.37 (1.13)	.31 (.51)	-.11 (.39)	-.64 (.98)	.01 (.44)
2. Home-duties	3.34 (.89)**	2.61 (1.92)	3.67 (.97)**	.47 (.54)	1.43 (1.26)	.32 (.62)
3. Unemployed	.31 (.61)	-.32 (1.1)	.64 (.71)	-.46 (.58)	.19 (1.29)	-.79 (.69)
4. Students	.23 (.86)	-1.33 (1.9)	.20 (1.01)	.15 (.74)	-1.08 (1.91)	.66 (.85)
Number of cases	872	139	733	733	167	566
LR χ^2 (33)	748.02 **	112.8 **	684.02 **	459.91 **	113.67 **	382.99 **
-2 Log Likelihood	-490.10	-71.06	-394.24	-691.47	-152.57	-510.21
Pseudo R ²	0.43	0.44	0.47	0.25	0.27	0.28

Note: Entries are logit maximum-likelihood estimates and their associated standard errors.

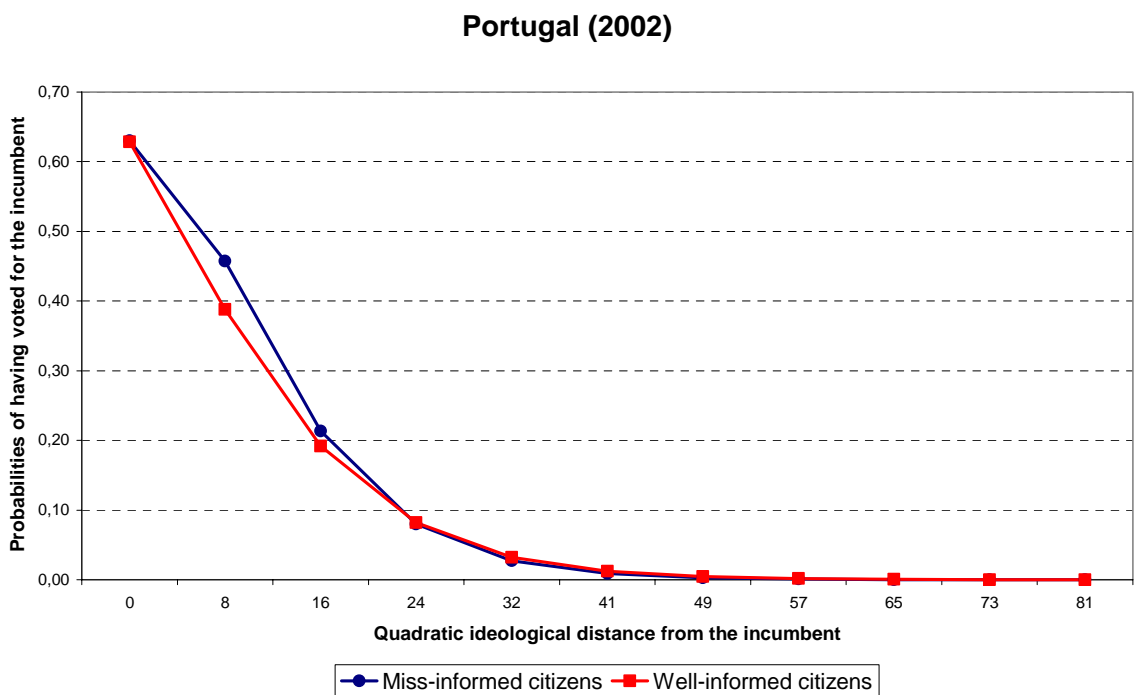
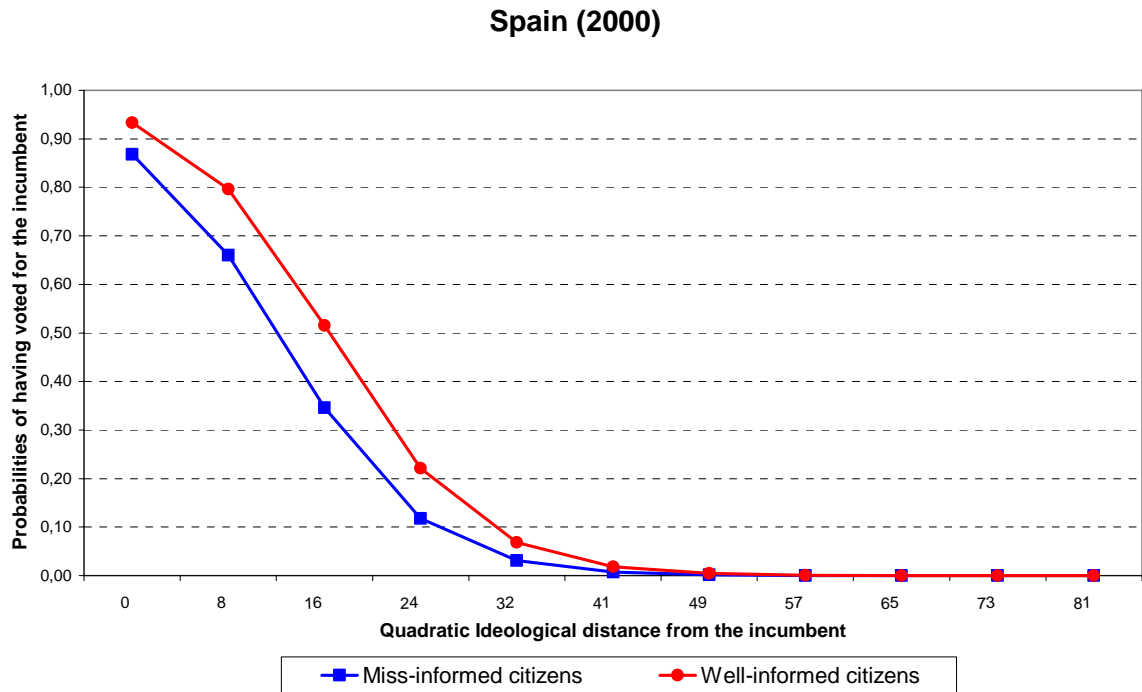
** Significant at the level of 99%. * Significant at the level of 95%. + Significant at the level of 90%.

Table 7. Predicted probabilities of having voted for the incumbent and its main challenger by retrospective judgements of general performance of the government and levels of political knowledge

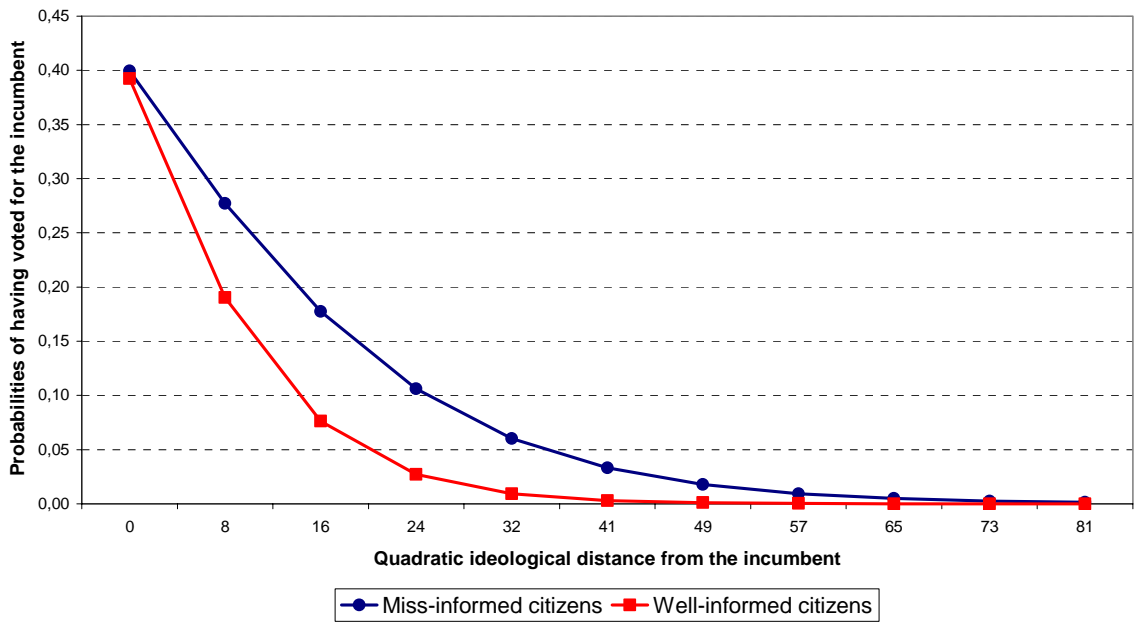
	Declared Vote	Spain		Portugal		Sweden		Poland		Hungary	
Political Knowledge		Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad
Low:	Incumbent:	77%	0%	64%	36%	48%	5%	19%	17%	7%	0%
	Challenger:	4%	25%	20%	38%	20%	48%	45%	40%	92%	99%
High:	Incumbent:	73%	0%	74%	21%	42%	5%	60%	29%	64%	6%
	Challenger:	19%	58%	9%	38%	26%	47%	21%	43%	21%	66%

Estimated probabilities were calculated with the other variables specified in the voting multinomial equation (see Tables 4 to 6) set to their sample mean values (descriptive values of the variables are given in the Appendix, Tables A.1 and A.2). Norway is not included in Table 7, since we have seen that the logic of performance voting in the 2001 elections in Norway seems not to work (see the Performance coefficient of Table 5 for Norway which did not turn out to be significant).

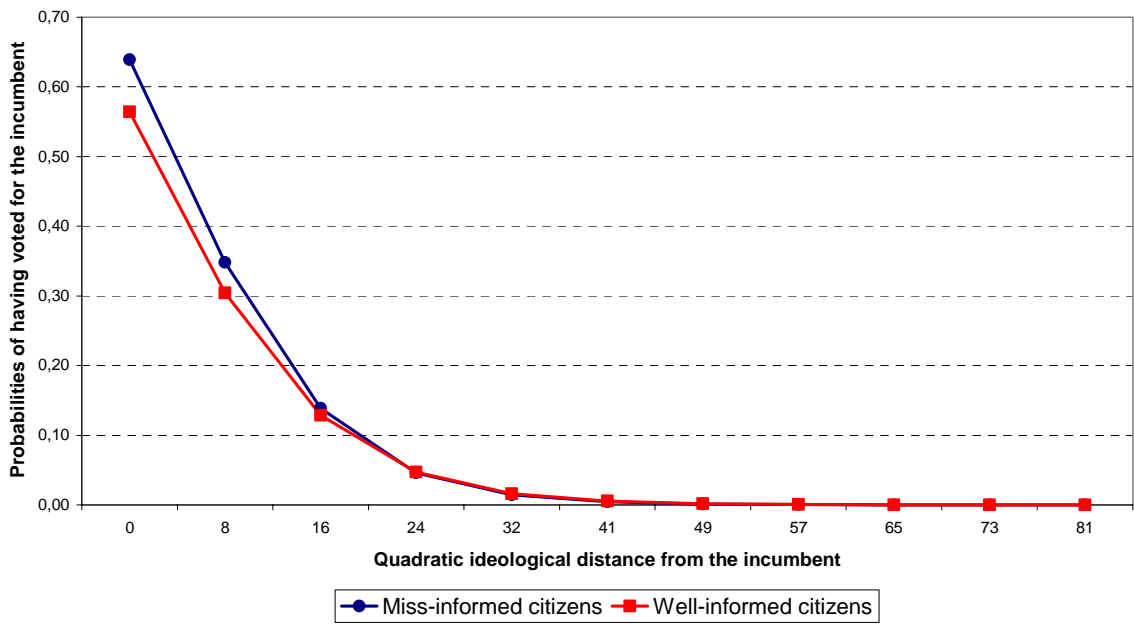
Figure 1. The effect of ideological distance from the incumbent party on the probabilities of having voted the incumbent party *versus* the main challenger among miss informed and well informed citizens across countries.



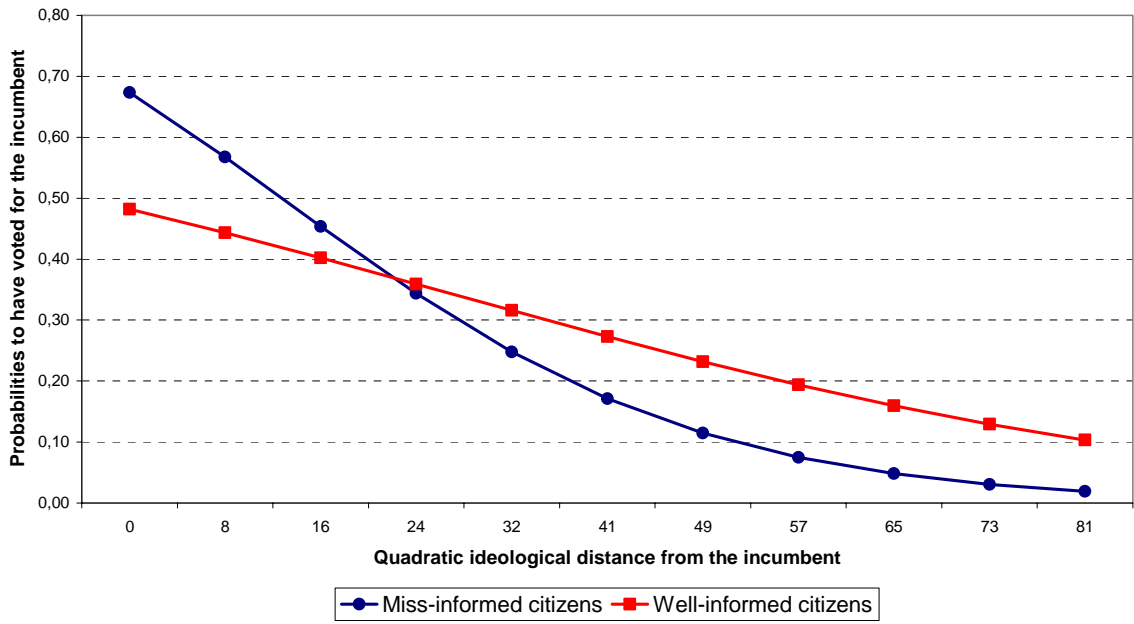
Norway (2001)



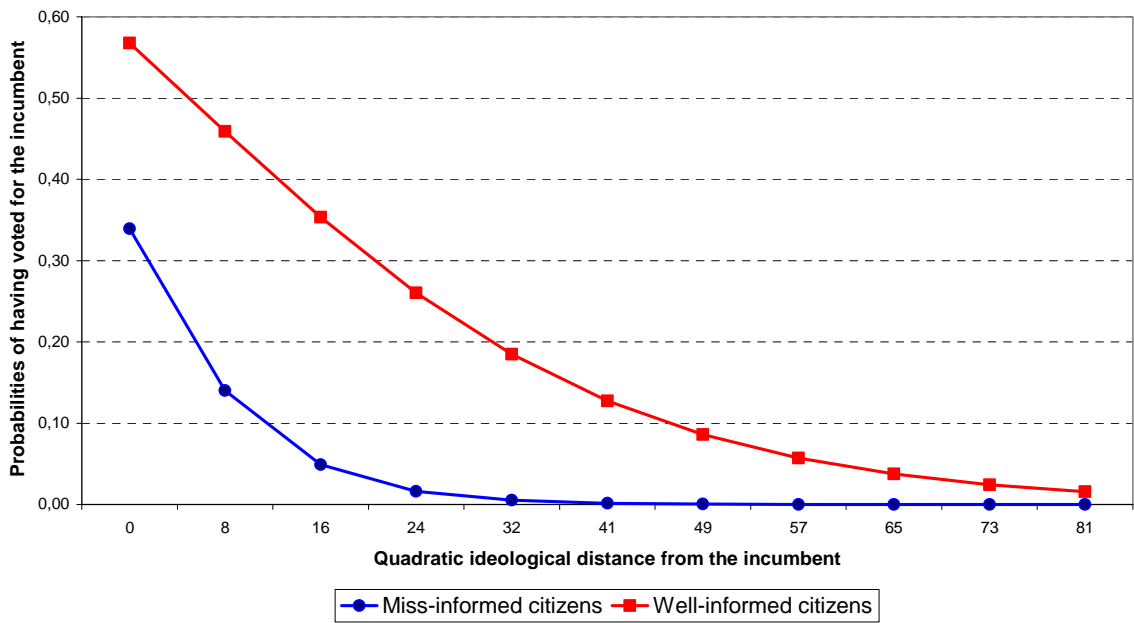
Sweden (2002)



Poland (2001)



Hungary (2002)



6. Conclusion or discussion?

This paper set out to assess the effects of political knowledge on political choices. The evidence of the empirical analysis carried out here points to a mediating role of about citizens' political knowledge in their voting decisions. For the case of performance voting, the results are more conclusive, since in four of the five countries considered here (plus Norway, where there is no performance voting for the 2001 elections) the effects of performance voting are of greater magnitude among well informed than among ill informed citizens. In contrast, the results are not conclusive at all for the case of ideological voting, since only two of the six countries analysed here (Hungary and Norway) present certain evidence showing that ideological distance on the vote is of a slight stronger magnitude for well informed citizens than for ill informed electors. These results suggest that the assumption of Downs about the role of ideology as a shortcut for citizens in order to cast their ballots is absolutely right, and it works equally for all citizens, independently of their degree of factual political knowledge.²⁶

In contrast, the comparison of six different political systems suggests that the mediating effect of voters' degree of political knowledge on the logic of performance voting is systematic. In line with previous research, the suggestion of these findings is that election outcomes could be considerably different if the electorate as a whole was generally well informed about politics (Bartels, 1996).

****To be completed****

²⁶ Nevertheless, it is also true that I have excluded from the analysis those individuals who did not respond to the ideological scales. I have made a rigorous analysis of those missing cases and effectively they tend to be related to low levels of factual political knowledge, although the relationship is far from perfect. For instance, the Cramer coefficient was around 0.30 and 0.38. **

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²⁷ To be completed

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APPENDIX. Table A. 1 Descriptive statistics of all the variables included in each equation

	Hungary					Poland					Portugal				
	<i>N</i>	Mean	sd	Min	Max	<i>N</i>	Mean	sd	Min	Max	<i>N</i>	Mean	sd	Min	Max
Vote for the incumbent	990	.41	.49	0	1	982	.29	.45	0	1	784	.41	.49	0	1
Ideological distance from the incumbent party	1042	22.8	29.7	0	100	1238	28.5	29.8	0	100	1092	8.23	14.23	0	100
Ideological distance from the main opposition party	1050	20.2	28	0	100	1329	21.6	26.9	0	100	1091	11.86	18.53	0	100
Performance	1165	.51	.50	0	1	1649	.10	.30	0	1	1193	.20	.40	0	1
Age	1198	50.3	17.3	18	92	1794	47.27	17.5	18	98	1303	45.26	16.61	18	80
Gender	1119	.39	.48	0	1	1794	.43	.49	0	1	1303	.44	.49	0	1
Education	1119	1.81	.63	1	3	1794	4.36	1.36	1	7	1295	4.41	2.04	1	8
Place in labour market	1184	2.9	1.89	1	5	1655	2.73	1.72	1	5	1293	2.13	1.63	1	5
Political Knowledge	1150	.38	.29	0	1	1794	.75	.35	0	1	1303	.47	.29	0	1

Table A. 2 Descriptive statistics of all the variables included in each equation

	Norway					Sweden					Spain				
	<i>N</i>	Mean	sd	Min	Max	<i>N</i>	Mean	sd	Min	Max	<i>N</i>	Mean	sd	Min	Max
Vote for the incumbent	1625	.22	.49	0	1	904	.38	.48	0	1	765	.54	.5	0	1
Ideological distance from the incumbent party	1890	7.86	12.84	0	100	990	8.61	14.9	0	100	1001	13.1	21.4	0	81
Ideological distance from the main opposition party	1898	12.65	17.15	0	100	986	27.01	27.74	0	100	995	7.82	14.4	0	81
Performance	1979	.78	.42	0	1	1017	.78	.41	0	1	1186	3.45	.83	1	5
Age	2052	45.45	16.36	18	79	1060	45.28	16.23	18	82	1207	45.3	18	18	90
Gender	2052	.50	.50	0	1	1060	.52	.50	0	1	1208	.48	.49	0	1
Education	2039	2.1	.63	1	3	1060	2.15	.68	1	3	1206	4.5	1.74	1	8
Place in labour market	2019	2.17	1.69	1	5	1059	2.11	1.65	1	5	1105	2.43	1.51	1	5
Political Knowledge	2052	.53	.35	0	1	1060	.49	.34	0	1	1208	.51	.27	0	1

