

INCOME LEVELS & ECONOMIC VOTING

ENDOGENEIZING THE ECONOMIC REASONING OF VOTERS

Ignacio Jurado

Juan March Institute

ijurado@ceacs.march.es

1. INTRODUCTION

Since Downs (1957) and Key (1964) settled down the bases of economic voting, the research on the topic has focused on how citizens vote in response to the economic performance and expectations. This has led to assess the weight that citizens place on the economy and how do they place this weight when making their voting decisions. Theoretical models have been worked out, conceiving that voters may vote either selecting the good economic types (Fearon 1999) or rewarding the ones that performed well (Ferejohn 1986). Similarly, voters can pay attention either to the general performance of the whole economy or evaluate their own welfare variation to decide to whom to vote. In assessing all this, some variables have been set up to mediate the economic reasoning. However, the income level of the individual has been put aside.

We can conceive the research on economic voting as the research on how the economic conditions influences the voting decision (Fraile 2001a), I argue that it should not only be taken into account as an external influence on the individual, but as a personal feature that shapes the electoral reasoning and decision. This is the central claim of this paper: to endogeneize how the individual reasons her economic vote depending on her level of income. If the arguments of economic voting are built on the economic interests of the voter, it is reasonable to expect that her economic interests are much mediated by her income level. Hence this paper accounts for whether the level of income links systematically some parties with voters and whether the economic calculation of the voter makes some income sectors take into account some kind of economic evaluations rather than others.

Analyzing this topic has a big relevance in democratic theory terms. If we want to go beyond an elitist theory of democracy, it is essential that citizens are able of controlling the actions of their leaders. Democracy has a sense if officers act in the

best interests of citizens (Fraile 2001a). Modelling how citizens evaluate their politicians would allow us to learn more about how the individuals control their politicians and how their manipulation of economic performance can be avoided.

In the next section, I discuss the main arguments of the different democratic and voting models, stating that there is still research to be done in the combination of all them, specifically with the income variable. Section 3 presents the arguments on which I base my proposal of combining the economic voting models on the base of their link with income. Section 4 deals with the methodology and data used in the empirical analyses. Section 5 comments the results and speculates with how we can interpret them. Finally, section 6 concludes.

2. DEMOCRACY MODELS AND ECONOMIC VOTING

To assess how citizens deal with the economy in elections, the literature has analyzed two dimensions. The first relevant dimension is the theoretical background of democracy and whether voters are concerned with the past economic performance or the expectations about the future performance of the economy. The second one is which are the economic records taken into account when casting a vote, the personal or the national ones.

Two views on democracy and elections: Retrospective and prospective models

This question can be posed as what are elections all about, mandates or accountability? This issue has occupied many pages in the social scientific literature, but it is still incompletely answered. The first scholars that dealt with the issue emphasized its retrospective elements. This literature stated that retrospective accountability worked because politicians wanted to be re-elected, so they anticipate possible electoral punishment and have incentives to perform on behalf of the citizens. This is Key's (1966) mechanism of reward and punishment, which has been the reference continuously developed (Barro 1973, Mayhew 1974, Fiorina 1981, Kiewiet and Rivers 1984, Ferejohn 1986, Manin 1997).

Ferejohn (1986) built the reference model on accountability, using a principal-agent benchmark. Voters have incomplete information and can not monitor with how much effort the incumbent has pursued their interests or if they have sought rents.

They can just establish a welfare threshold above which they re-elect the incumbent. The incumbent knows the external conditions to the economy and knows how costly in terms of effort it is for them to reach the welfare threshold. The model sets a trade-off up in which the voters can not demand neither a too high threshold, because the incumbent will anticipate the loss of office and extract rents, nor a too low, because the incumbent will have no incentives to make any effort. In this conception of democracy, citizens are not the initiators of public policy, but just an audience that tolerates certain behaviours depending on the results (Keech, 1995). The development of this literature on retrospective accountability has led to a deeper research on which are the conditions under which politicians are rewarded or punished for their accomplishments in office. Information merges as the most relevant condition, allowing voters to take into account the external conditions, such as the economic cycle, that constraint the success ability of the government (Manin et al., 1999).

The subsequent work on the model has generally validated its basic outlines¹. From the initial strong assumptions, the scholars have been relaxing some of them to see how far we can go. There are contextual conditions that ease or complicate the electoral economic accountability. The heterogeneity in the perception of economic conditions (Duch et al., 2000), the spread of different levels of education (Krause, 1997; Fraile, 2006), the influence of media (Hetherington 1996) the information liberty (Adserà et al. 2003) or long-term institutional factors that favour the clarity of responsibilities (Nadeau et al., 2002), the subnational governments' economic performance and the coattails with national politicians (Hibbing and Alford 1981; Leon-Alfonso 2006; Rodden and Wibbels, 2007) or just the different effects of economic national policies in the national boundaries (Kiewiet and Rivers, 1984) are different causes accounted in the literature of whether there may be more or less retrospective accountability. Whether the income level of the voter mediates this retrospective accountability is still an enigma.

The second relevant view on elections and democracy is the mandate theory. It conceives the decision of voters as an evaluation of future performance. However, the fact that voters might screen candidates' future performance and evaluate them, does not mean that the past actions of the incumbent are irrelevant. One of the conditions of a well-working democracy under this theory is that past performance matters as an information signal of how candidates may perform in office (Manin et al. 1999). Thus,

¹ However, Kiewiet and Rivers (1984) show the plurality of approaches and assumptions that account for different results and divergent relevance of some variables.

in a prospective model, elections would be a question of selecting good types, rather than the bad ones, and giving them a mandate. Fearon (1999) proposed the theoretical model that included this claims. He asserted that repeated elections as sanctioning devices have little ability to induce politicians to do what voters would want done. Electoral accountability is not in principle necessary for elections to produce responsive public policy. Citizens should select the best types to rule the country. He also accounts for some empirical statements that, at least, call into doubt the pure accountability view of the electoral game. If this was so, it would be difficult to explain facts like the popular dislike for clear office-seekers, the demand of principles (even when these are not shared by the voter) in politicians, the implementation of term limits (that would destroy any incentive for re-election and would be a shirking triggering) and the empirical absence of last period effects. In these terms, he modeled the prospective selection voting and how possible problems of adverse selection could merge.

In selecting the good types to rule the country, two problems may arise. First, the circumstances on which the incumbent is elected might vary, so it may happen that politicians face situations that were not foreseen in the campaign and that the citizenry could not consider when voting. Therefore, Stimson et al. (1995) propose a model of dynamic representation, by which, thanks to public opinion, politicians may update their mandates. Second, Stokes (2001) sets the dilemma out of how politicians should behave when they reach power and they feel they should unfulfill their electoral compromises, because the general interest demands it. This question is of big philosophical importance. In addition, the empirical patterns are also not clear. On the one hand, Levitt (1996) shows that in their votes in the Congress, politicians follow mainly their own political criteria and not the economic interests and ideological patterns of their constituency. On the other hand, Klingemann et al. (1994) show how governments do not systematically shirk from what is promised in the campaign and reasonably fulfil their manifestos.

With the already established benchmark of these two theories (mandates and accountability), the question may not be whether elections are a question of mandates or accountability, but how voters combine both mechanisms. Some authors have done the effort of integrating both theories (Lockerbie 1992; Mackuen et al. 1992; Stokes 2001). Moreover, Maravall and Przeworski (1998) showed how retrospective and prospective evaluations do not overlap and are not casually related (though they may correlate because variables such as ideology can influence both).

However, it has been under researched whether citizens give the same weight to the evaluations and which variables mediate and influence the combination of retrospective and prospective voting mechanisms.

What do voters vote on? Sociotropic and pocketbook voting

The second relevant dimension is the economic grounds on which voters evaluate the incumbent or the candidates. Ferejohn (1986), in building his model, fixed a threshold of personal consumption. Voters would then vote in pocketbook terms, just paying attention to their personal economic variation during the incumbency. Pocketbook is a quite attainable accountability mechanism. One could expect that voters are not interested in politics, but in the outcomes they produce and the incidence on their utility incomes (Downs 1957). This is why theoretical models generally adopt this benchmark. However, Kiewiet and Rivers (1981) state rightly that the debate between sociotropic and pocketbook voting is not equivalent to the distinction between self interested and altruistic politics. Sociotropic voting does not need to be altruistic (Kinder and Kiewiet 1979, Kiewiet 1983, Kiewiet and Rivers 1984) nor pocketbook voting self-interested. A voter could think in pocketbook terms just because it is less costly. One's financial status is well known and can easily be monitored (Klorman 1978) and the personal experiences could even be a shortcut to understand the whole economy's performance (Popkin et al. 1976). Both on self interested or altruistic terms, the pocketbook voting theory makes much sense, but has not fared well when subjected to empirical test (Kinder and Kiewiet 1981; Sigelman and Tsai, 1981; Sears and Lau, 1983; Sigelman et al. 1991). The reasons could be linked to the belief by voters in economic individualism, eliminating the connection between their individual well-being and political evaluation (Feldman 1982). In addition, pocketbook voting could result not very relevant to the final electoral outcomes, because in aggregate terms the financial improvements of some citizens are balanced with the financial losses of others (Markus, 1988).

Sociotropic voting means that citizens engage in an analysis of the national economic performance in order to decide which vote to cast. Since "*The American Voter*" (Campbell et al. 1960), it has been proved that citizens make sociotropic judgements and evaluate the general economic outcomes. This sociotropic model does not presume that voters engage in sophisticated analyses of macroeconomic policy (Markus 1988). It is enough that voters carry out "*rough evaluations of national*

economic conditions, evaluations that are at least partly independent of their own personal circumstances and then credit or blame the incumbent accordingly" (Kinder and Kiewiet, 1981, p. 132).

The strength of the sociotropic vote hypothesis lies in numerous empirical analyses that have validated it (Campbell et al. 1960, Kinder and Kiewiet, 1981, van der Brug et al. 2001). Nevertheless, it is still to be convincingly explained why voters pay attention to the global national economic conditions, when the rational choice paradigm would predict that voters just pay attention to the maximization of personal advantage (van der Brug et al. 2001). To demonstrate the success of sociotropic voting is different than accounting for the reasons of it (Kinder and Kiewiet, 1981). Though this is probably a field of study for the Social Psychology, some political literature has researched and speculated about it. Van der Brug et al.'s (2001) attribute sociotropic voting to the idea that men and women are social animals who identify with the community they live in and take pleasure from that community's successes. In my opinion, this kind of arguments are quite naïf. It is more feasible to conceive general economic conditions as an information shortcut of what the government is really doing for the citizenry, given that citizens may attribute the causes of their economic problems either to the immediate environment or to their own failings (Kinder and Kiewiet 1981). Intertemporal reasoning is also expectable. Citizens might think that, even when in the short term they are not favoured, good macroeconomic conditions could also benefit them in the long run (Markus 1988). Sociotropic voting could also be used as a rationalization of partisanship (Weatherford 1983)². Finally, the preference for sociotropic reasoning could just be a question of psychological reasoning, where information about national conditions is typically transmitted by media and conveyed at a level of abstraction appropriate to nationally-oriented political judgements, while the personal economic performance remains as a subjective representation (Kinder and Kiewiet, 1981).

In this paper, I consider both voting possibilities. It could be that voters are more sophisticated and both sociotropic and pocketbook evaluations are simultaneously in work when people vote (Kinder and Mehane, 1983; Kiewiet, 1983; Weatherford. 1983). The question would then be how they are combined. Both evaluations could be independent of each other (Kinder and Kiewiet 1979, 1981) or one could influence the other. For instance, Feldman (1982) argues that pocketbook

² However, Kinder and Kiewiet (1981) deny any evidence of this.

voting mediates the sociotropic one and only works in cases in which there is a perception of governmental responsibility for financial well-being.

Combining the theory of democracy and the economic voting mechanisms

Economic voting models, as shown, have developed sophisticated evaluation and selection mechanisms to explain how the incumbent is chosen. What has scarcely been done, and it is one of the goals of this paper, is to unravel not only if voters use these evaluation mechanisms, but how do they combine them and which voters make use of each of them. The accountability models have frequently assumed that voters reason homogeneously (Maravall 1999), as well as the empirical literature has assumed that the economic vote is homogeneously distributed in the population (Fraile 2001a). These studies have considered that the selection processes, no matter how sophisticated, are similar to the whole electorate. Only some authors have claimed that the electorate is a body that reasons heterogeneously. These authors have researched on the personal features of the electorate that may shape their vote reasoning. These characteristics, like different welfare thresholds or ideology, would lead to cast different votes. It is admitted that both retrospective and prospective elements are present in the voting decision. However, it is scarcely studied if these elements are combined equally in every voter and which are the personal features that lead to take into account more sharply retrospective and prospective evaluations.

Maravall and Przeworski (1998) showed that some citizens respond to the classical models and are purely economic voters, who punish for bad economic performance. Nevertheless, there are others who do not take into account retrospective evaluations because they are purely ideological and exonerate unconditionally the bad economic records. There other voters which combine ideology with economic evaluation. Sánchez-Cuenca (2003) considers that this last profile is the ordinary voter, who is placed somewhere between the perfect ideological supporters and the purely sensitive to government's performance. Another interesting perspective on prospective voting is given by Fraile (2006), when she identifies prospective mechanisms with ideological voting. Those voters, that weight less the past performance and look to the future, do it in ideological terms.

Apart from ideology, it has also been analyzed how social class shapes the economic voting. Weatehrford (1978) showed that the perception of the impact of

economic conditions is class-biased. In addition, Fraile (2001b) has researched on how social class influences the weight given to prospective and retrospective evaluations. She finds that there are no differences in the level of retrospective sociotropic voting between social classes. However, she discovers that rank and file workers and qualified manual class vote less prospectively than the rest of the electorate. She explains this result in political sophistication and educative terms. Prospective accounts require better sources of information and more intellectual skills. Low class voters, who tend to be less educated, are unable to have reliable prospective information, so they give to these evaluations less weight when voting.

These studies are appealing and open a new field of research. However, they omit the variable of interest here. It is still to be analysed whether the level of income is a relevant variable in order to cast a retrospective or prospective, pocketbook or sociotropic vote. However, one would think that if economic voting responds to economic motivations, the level of income must be a relevant variable that shapes this vote. This paper pretends not only to introduce the income as a relevant feature in the economic voting, but as a variable that might have leverage on how the citizens process their vote decision. This is the basis of the arguments I will develop in this paper.

3. SOPHISTICATING THE ECONOMIC VOTING: THE ARGUMENTS

This paper deals with the economic voting, assuming that the classical benchmark is insufficient. Economic voting until the date has dealt with how voters react to the economic performance in the ballot. It has conceived the individual as an observer of the economy. I propose an extended theory of economic voting in which economic voting includes also how the economic well-being of the individual, as a personal feature, influences her vote reasoning. A vote is rational if it is a goal-directed optimizing behaviour (Suzuki and Chappell 1996). Hence, an economic vote would be rational if it pursues the economic interests of the individual. We expect an economic calculus by the voter of which candidate optimizes the vote. In this calculus, all the personal characteristics of the individual that affect her economic interests, should shape how the voter decides the vote. Paradoxically, the literature on economic voting has ignored the income of the voter as a key feature of this vote. Therefore, I want to study the economy not just as a context, but also as a feature of the individual. This could provide a wider outlook of how the economy, in all its

dimensions, influences the vote. There are two arguments to think the vote reasoning may be shaped by the economic calculus arisen from the economic well-being of the individual. The first one concerns the direct effect of the income itself. The second concerns how the income level and the economic interests derived from them, shape the effect of the economic evaluations on the vote.

Regarding the direct effect, a rational perspective on the individual leads to think that she is going to vote to the candidate that provides her the highest utility (Downs 1957). The literature has always assumed that the highest utility arises in a similar manner to all income sectors. While it has researched on how the different partisan or ideological identifications, social class, educational levels or evaluations of the economy, within others, shape the utility of a certain vote, income, surprisingly, has always been ignored. However, economic calcula by the voter could systematically lead them to think that their economic interests are safeguarded by a specific party. This link has frequently been argued to be mediated by other variables. For instance, low income people's economic interests are better pursued by left parties, so they develop a partisan identification with them (Fiorina 1981). It is reasonable to expect that, as well as a voter can feel emotionally identified with a party, certain income sectors of the population feel, in pure economic terms, that a party defends better their interests. To test this argument is the first goal of this paper.

The second argument of this paper deals with income as a mediating variable. As it has been shown, the literature on accountability has focused on how citizens evaluate politicians. They can be evaluated on many grounds. In what concerns economic voting, we are interested in performance. When evaluated on performance, two more elements are relevant. First, politicians could be assessed from a pocketbook or a sociotropic point of view. Secondly, citizen's evaluation can have two directions. They can evaluate retrospectively, using elections as a reward and punishment mechanism to avoid moral hazard problems, or prospectively, being elections a contest to choose the best agent and avoid adverse selection setbacks. Despite the literature has generally assumed that the combination of these voting mechanisms is homogeneous to all the population, it is reasonable to expect that the way citizens evaluate their politicians is different depending on their personal features. Some authors have analyzed some of them like education or social class. Income should also be a crucial variable determining the economic interests of the individual and, thus, which are the economic records that she must observe to cast a vote. However, this has still not been researched.

To test this second argument, it should be shown how these mechanisms combine depending on the income. I expect to find that the income level influences how citizens weight their evaluations of the economy. While they are exposed to different kinds of economic evaluations, the income status might lead them to turn their minds in different directions or simply to pay more attention to certain evaluations and not others.

This argument covers the two dimensions of the economic evaluations: the object of analysis (own well being or general economic performance) and the direction (retrospective and prospective). Regarding the economic performance on which the individual focuses, it could be that some income levels believe that their economic interests are more in line with the whole country, while others think their interests are income-specific, voting the former in sociotropic and the latter in pocketbook terms. Similarly, some individuals could vote less in economic terms, both sociotropic or pocketbook, either because they have their economy safeguarded or because they feel alienated in their economic interests and conceive the vote as an ideological consumption.

Similarly, the second dimension can be shaped by the income level. It is reasonable to consider that when individuals vote economically, their income level should shape their economic reasoning. Hence, it could be that some income sectors look to the future, because they expect that their economic welfare may be more vulnerable to policy changes, while others assume their economic profit is less volatile and use past performance as a cue of whether the incumbent satisfies their interests or not. This kind of arguments, in which the income level is a mediating variable of all the vote reasoning and economic calculation in order to cast an economic vote, are going to be tested in this paper.

Summing up, there are arguments to think that the personal economic features shape the economic reasoning of the vote. This paper proposes a sophisticated theory of economic voting, that would integrate these elements. To accomplish this, two kinds of analyses are necessary. The first one should test whether there is an economic identification, beyond the classical partisan identification, between income levels and parties. The second would assess whether individuals process the economic evaluations in a different manner and focus on different economic dimensions depending on which is their economic starting point and the economic interests.

4. METHODOLOGY AND DATA

GRUPO DE TRABAJO 04

Instituciones de las democracias actuales: mecanismos de rendición de cuentas, evaluación y transparencia

The test of these arguments is not easy. We have to deal with individual data that include questions both about retrospective and prospective evaluations of the economy and income of the respondent's household³.

Three are the problems associated to the question about income in electoral surveys. Firstly, citizens quite often reject to answer this question. The rate of non-respondents is saliently higher than with other questions⁴. These high rates of non-response could mask a bias. It could be that it is a specific income sector of the population the one that tends to leave unanswered this question. Secondly, it could also be claimed that there is a risk of a bias in the responses. Citizens could not like to be identified either as too poor or too wealthy so the former would exaggerate their income and the latter reduce it. Lastly, and possibly because of the previous two caveats, surveys usually do not include this question in the questionnaire⁵.

Nevertheless, I have dealt with these three hindrances in order to be able to make the proposed analysis. First of all, I have made a detailed analysis of the social, political and economic variables, in addition to the prospective and retrospective evaluation ones, to see if the non-respondents have any salient distinguishing feature in comparison to the rest of the population. However, all variables have a very similar distribution when we observe the respondents and the non-respondents separately⁶. This confirms us that we can proceed considering the non-respondents as missing cases and our results would not be biased⁷.

The second problem, the biased responses, is not worrying. As long as the risk of non response is higher in the poorest or richest families, the biases would be directed from the tails of the distribution to its median values. These would tend to blur the differences between the upper and bottom categories and the median one. In my whole analyses I use the middle category of income as the reference one. Hence, if many wealthy or poor citizens would answer pretending to be mid-income people, the differences between the middle category and the rest should be less significant.

³ It is relevant that the question is asked about the household's income and not the respondent's. There is a vast literature (Esping-Andersen, 1999) praising the household as the unit of analysis in relation to income.

⁴ In the two surveys I use in this paper, the 1996 one records a 25.86% of non responses and the 2000 a 29.07%.

⁵ For instance, in Spain only the post-electoral surveys of 1986 and 2000 have asked about the total income of the household. It has also been a quite unusual question in the monthly CIS barometers.

⁶ The only result worthy of mentioning is that in both surveys the students tend to answer less to this question.

⁷ Nevertheless, to reinforce the results, I have repeated all the analyses of this paper imputing the income missing values and the results are basically the same.

Thus, this potential bias should strengthen the significance tests. If despite the potential bias, the income variables remain significant, this would reinforce the validity of my results and make them more credible.

Regarding the third problem, the frequent dismissal of the income question, this undoubtedly reduces the coverage of any analysis. This can be solved by using sufficiently representative surveys, whose results can be generalized. Fortunately, apart from the 2000's post-electoral survey, which is very complete and provides very rich data on all social variables, the barometer of March 1996⁸ queries about both the income of the household and the different retrospective and prospective evaluations of the economy⁹. Both surveys fulfil the additional requirement of being, at least *de facto*, post-electoral¹⁰. This is necessary because we can expect that voters are in average better informed, because the media have focused more during the campaign on this kind of information. It is also more probable that due to the electoral atmosphere, the citizens have been impelled to personally evaluate the economy. The relevance of picking a survey done after an election lies also in the updating of information. All prospective evaluations of the economy done close, but before an election, are dependent on the expectation of who is going to govern after the ballot. This undermines the possibility of relying on these data. The 2000's survey was a panel, so every respondent of the post-electoral was also asked before the elections. Fraile (2001b) claims that in these cases it is better to use the evaluations of the pre-electoral and the vote declared in the post-electoral. She argues that the evaluations in the post-electoral can be a rationalization of the vote. Although I recognize this can happen, I consider that this risk is lower than using pre-electoral prospective evaluations of the economy built on the expectations about who is going to win the electoral race. This is why I use only post-electoral data.

As it has been said, the shortage of data sets the question up of whether these are sufficiently representative to our research. I could only employ the two mentioned election surveys: the 1996 and 2000 ones. Fiorina (1983) warns about the risks associated to using few surveys. However, the totally divergent features of these two turn them in very representative of different contexts. The 1996 elections took place

⁸ The 1986 post-electoral survey is useless for my intentions, because it includes no questions about retrospective and prospective evaluations of the economy.

⁹ The only combination for which there are no questions in the survey is the prospective pocketbook evaluations. Hence, I can not analyze this specific evaluations and I just introduce the retrospective sociotropic and pocketbook evaluations and the prospective sociotropic ones.

¹⁰ The Barometer of March 1996 is done in the same month of the elections of that year, so we can consider it a post-electoral survey, despite officially it was not.

in a crisis period¹¹, while the 2000 elections were in a period of economic expansion. The incumbents were not only different, but how they reached the ballot were also quite distinguishable circumstances. In 1996, the PSOE was discredited after 14 years of incumbency and many scandals in the last years. On the other hand, the PP reached the ballot quite reinforced in their image of good economic agents after achieving the inclusion in the Euro-zone. The electoral results were also different. In 1996 the incumbent lost, while in 2000 the incumbent not only won, but increased its majority to the absolute one. In addition, if we consider also, as the extended economic voting does, the evaluation of the opposition, in 1996, the PP was generally considered to be prepared to rule the country. On the contrary, in 2000, the PSOE seemed to be a chaotic party that had been incapable of surviving to Felipe González's resignation. This had given the electorate a weak image of the party and the candidate¹².

Therefore, although it would have been preferable to have more surveys to include in the analyses, I think these two elections represent quite neatly the universe of possible electoral scenarios. We are interested in testing if the economic calculus of citizens facing an election is different depending on their wealth. To this purpose, we want to observe how the citizens process their economic evaluations into votes depending on their income. The contextual circumstances in each studied ballot were so different, that, if the results coincide, we can be very sure that the processing of the evaluations is very generalizing. We would not expect that they are election-specific and that these apply just to the specific circumstances of these two elections, because they have almost nothing to do with each other.

Variables¹³

Once described the data used, we have to pick the variables of interest for our analysis. Firstly, I have included some socioeconomic control variables. Gender, given that in Spain, women vote more frequently to the incumbent (Maravall and Przeworski 2001). Similarly, I introduced the age and the age squared, to control if the effect is non-linear. The employment situation is also controlled with five categories: employed (reference category in all analyses), retired, unemployed, student or houseworker.

¹¹ Although it is true that the economy was initially recovering.

¹² For instance, in the preelectoral survey of 2000 (CIS, 2382), the percentage of citizens that preferred José María Aznar as president was 65% higher than for Joaquín Almunia.

¹³ In the appendix, I explain with more details how the variables of interest have been built.

The main argument of this paper is about economic voting. Therefore, I needed an income variable and control variables that may correlate with the income of the individual and might have an influence on the vote for the incumbent. Regarding income, in both surveys, the variable had ten categories. I recoded the variable in three categories: low, middle and high income¹⁴. Concerning the statistical controls, it is usually argued that the higher the income, the more conservative the vote. Although this is a very rough argument, it is important to control all the ideological and partisan elements to unravel precisely the influence of the income on the economic voting. Hence, I introduce a variable of partisan identification with the incumbent (the PSOE in 1996, the PP in 2000). I also introduce the subjective ideology of the individual. Economic voting models tend to introduce simply the variable. This implies assuming linear effects of the ideology on the vote. However, this is incoherent with the spatial models and the dynamics of party competition. It is reasonable to expect that the effects are not linear. Incumbent parties, which in these analyses are center-left and center-right parties, might lose votes in both extremes of the voters' distribution. Therefore, I prefer not to exclude these non-linear effects and categorize the ideology in four dichotomic variables: left, center-left, center-right (which is the reference category) and right.

Likewise, I introduce a variable of satisfaction with the political system to control the potential effects of lower income citizens systematically punishing the incumbent because they blame the whole political system, independently of their ideology.

Finally, I also control for the educational level. As I pretend to unravel whether the level of income influences the way citizen's evaluate the economy and make their personal calculus in order to choose voting the incumbent or not, it is important to isolate this effect from the educative records. More educated people could be able of making more sophisticated analyses or, perhaps, take more into account retrospective or prospective evaluations. Therefore, I intend to extract this effect and isolate simply the pure economic thinking, beyond the capacity of making more sophisticated analyses or having access to better sources of information. They do not necessarily correlate and it could well be that the economic thinking leads the individual in a direction and the educative in another.

Regarding the dependent variable, this is the vote for the incumbent. It is built as dichotomic (1, vote for the incumbent; 0 vote for other party or not to vote).

¹⁴ More details in the appendix.

Therefore, I specify probit regressions with robust standard errors to control heterokedasticity¹⁵.

I test the following models for the 1996 and 2000 elections. The results are shown in tables 1 and 2:

$$\text{Model 1: Prob (vote incumbent)} = \beta_0 + \beta_1 \text{control variables} + \varepsilon_i$$

$$\text{Model 2: Prob (vote incumbent)} = \beta_0 + \beta_1 \text{control variables} + \beta_2 \text{retr-sociot} + \beta_3 \text{prosp-sociot} + \varepsilon_i$$

$$\text{Model 3: Prob (vote incumbent)} = \beta_0 + \beta_1 \text{control variables} + \beta_2 \text{retr-pock} + \beta_3 \text{prosp-sociot} + \varepsilon_i$$

$$\text{Model 4: Prob (vote incumbent)} = \beta_0 + \beta_1 \text{control variables} + \beta_2 \text{retr-sociot} + \beta_3 \text{retr-pock} + \beta_4 \text{prosp-sociot} + \varepsilon_i$$

$$\text{Model 5: Prob (vote incumbent)} = \beta_0 + \beta_1 \text{control variables} + \beta_2 \text{retr-sociot} + \beta_3 \text{retr-pock} + \beta_4 \text{prosp-sociot} + \beta_5 \text{low income} + \beta_6 \text{high income} + \varepsilon_i$$

$$\text{Model 6: Prob (vote incumbent)} = \beta_0 + \beta_1 \text{control variables} + \beta_2 \text{retr-sociot} + \beta_3 \text{retr-pock} + \beta_4 \text{prosp-sociot} + \beta_5 \text{low income} + \beta_6 \text{high income} + \beta_7 \text{low income} * \text{retr-sociot} + \beta_8 \text{high income} * \text{retr-sociot} + \beta_9 \text{low income} * \text{retr-pock} + \beta_{10} \text{high income} * \text{retr-pock} + \beta_{11} \text{low income} * \text{prosp-sociot} + \beta_{12} \text{high income} * \text{prosp-sociot} + \varepsilon_i$$

where *low* and *high income* are two dummy variables and *retr-sociot* is the retrospective sociotropic evaluation, *retr-pock* is the retrospective pocketbook evaluation of the government and *prosp-sociot* is the prospective sociotropic one.

The first model includes just the control variables, which show the expected effects when they are significant. Furthermore, there is a relevant finding beyond the field of interest of this paper. The hypothesis of non linear effects of ideology on the vote decision is validated. However, this non linearity is not such to be u-shaped. In the case of the PSOE, they lose votes along their right of the voter's distributions.

¹⁵ I choose probit regressions, instead of logit ones, because I think it is more probable that the distribution is normal and I minimize the probability of committing type II errors. Nevertheless, the trends are similar if we specify these models as logit.

However, the left variable has no significantly different effects to the center-left variable¹⁶. This means that the existence of a party on the left of the PSOE does not decrease the probability of voting this party. It is particularly remarkable that this result appears also in the 1996 election, when IU, the former communist party, reached its better results of the democratic era. This non-linearity is similar for the PP. On their left, they progressively lose votes. The left variable's parameter is significantly larger than the center-left one. However, at their right, the ideology does not yield significant different effects. This result is constant all through the paper.

The second model introduces the income variables and the two sociotropic evaluations of the economy. Two results are of interest. Firstly, the retrospective and prospective assessments are highly significant, of the expected sign in both elections and not significantly different. This means that both voting mechanisms are at work and are similarly influential, validating the assessments of some literature (Kinder and Mehane, 1983; Kiewiet, 1983; Weatherford, 1983).

In the third and fourth model, I test the pocketbook voting hypothesis. In the first of them, I substitute the retrospective sociotropic evaluation of the economy with the retrospective egocentric evaluation. This is significant for the 2000 election, but not in the 1996 one. However, the significance in 2000 is just a result of an omitted variable bias. Once the retrospective pocketbook evaluation is reintroduced in the fourth model, the significance of the egocentric assessments fades out in favour of the sociotropic one¹⁷.

¹⁶ All through the following analyses, a Wald test has been done to reject or not that two variables are similar.

¹⁷ Their correlation is just 0.12 in 1996 and 0.40 in 2000, so I dismiss multicollinearity and attribute these results just to the significance of the retrospective sociotropic evaluation. In model 3, this variable is omitted and partially gives an influence to the truly insignificant variable of the retrospective pocketbook evaluation of the economy.

Table 1: Vote for the incumbent (PP); 2000 election

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
gender	0.122 (0.064)*	0.045 -0.07	0.098 -0.069	0.049 -0.07	0.042 -0.079	0.024 -0.079
age	0.018 (0.011)*	0.022 (0.011)*	0.021 (0.011)*	0.023 (0.011)*	0.023 (0.013)*	0.025 (0.013)*
age squared	-0.0001 (0.0001)	-0.0002 (0.0001)	-0.0002 (0.0001)	-0.0002 (0.0001)	-0.0002 (0.0001)	-0.0002 (0.0001)
left	-2.226 (0.101)**	-1.982 (0.111)***	-2.043 (0.109)***	-1.975 (0.111)*	-1.943 (0.122)**	-1.9520 (0.122)**
center-left	-1.14 (0.067)**	-0.992 (0.073)***	-1.021 (0.072)***	-0.988 (0.073)*	-1.043 (0.083)**	-1.038 (0.084)**
right	-0.044 -0.122	-0.082 -0.133	-0.093 -0.13	-0.081 -0.133	-0.153 -0.148	-0.138 -0.147
party ID	1.305 (0.084)**	1.106 (0.090)***	1.12 (0.089)***	1.106 (0.090)*	1.107 (0.105)**	1.118 (0.105)**
sat pol syst	-0.321 (0.049)**	-0.153 (0.056)***	-0.232 (0.054)***	-0.15 (0.056)*	-0.149 (0.062)**	-0.149 (0.063)**
retired	-0.066 -0.106	0.025 -0.116	0.035 -0.115	0.03 -0.116	0.122 -0.127	0.129 -0.126
unemployed	-0.304 (0.114)**	-0.316 (0.124)**	-0.286 (0.122)**	-0.299 (0.125)*	-0.228 -0.139	-0.22 -0.138
student	-0.121 -0.121	-0.116 -0.128	-0.127 -0.129	-0.116 -0.128	-0.089 -0.149	-0.078 -0.15
housework	0.157 -0.097	0.158 -0.105	0.168 -0.104	0.159 -0.105	0.191 -0.118	0.19 -0.119
low education	-0.218 (0.072)**	-0.173 (0.077)**	-0.178 (0.078)**	-0.162 (0.078)*	-0.21 (0.087)**	-0.222 (0.088)**
high education	-0.047 -0.083	-0.063 -0.09	-0.045 -0.089	-0.067 -0.09	-0.183 (0.106)*	-0.199 (0.108)*
retr-sociot		0.41 (0.051)***		0.389 (0.054)*	0.382 (0.060)**	0.481 (0.084)**
retr-pock			0.18 (0.051)***	0.064 -0.054	0.004 -0.061	-0.109 -0.09
prosp-sociot		0.472 (0.057)***	0.559 (0.056)***	0.469 (0.057)*	0.464 (0.065)**	0.482 (0.088)**
low income					-0.191 (0.078)**	-0.15 -0.099
high income					-0.179 -0.216	-1.213 -1.103
low income*retr-sociot						-0.232 (0.121)*
high income*retr-sociot						0.301

GRUPO DE TRABAJO 04

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						-0.271
low income*retr-pock						0.21
						(0.122)*
high income*retr-pock						1.197
						-1.026
low income*prosp-sociot						0.012
						-0.131
high income*prosp-sociot						-0.693
						(0.407)*
Constant	0.724	-0.065	0.212	-0.119	0.06	0.022
	(0.273)**					
	*					
Observations	3426	-0.301	-0.302	-0.306	-0.341	-0.342
Pseudo-R2	0.439	0.476	0.464	0.476	0.463	0.467

Probit regressions. Robust standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 2: Vote for the incumbent (PSOE); 1996 election

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
gender	-0.086	-0.104	-0.089	-0.111	-0.041	-0.034
	-0.11	-0.123	-0.12	-0.123	-0.142	-0.144
age	-0.019	-0.019	-0.021	-0.021	-0.025	-0.03
	-0.02	-0.022	-0.023	-0.022	-0.025	-0.025
age squared	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0003)
left	1.141	1.14	1.154	1.137	1.131	1.092
	(0.182)**		(0.205)**	(0.206)**	(0.234)**	(0.234)**
	*	(0.206)***	*	*	*	*
center-left	1.081	0.992	1.003	0.987	1.064	1.031
	(0.179)**		(0.203)**	(0.205)**	(0.233)**	(0.232)**
	*	(0.204)***	*	*	*	*
right	0.272	0.278	0.244	0.264	0.384	0.345
	-0.297	-0.365	-0.352	-0.363	-0.397	-0.393
party ID	2.01	1.985	2.01	1.986	1.971	2.003
	(0.099)**		(0.111)**	(0.112)**	(0.128)**	(0.129)**
	*	(0.112)***	*	*	*	*
sat pol syst	0.056	0.094	0.048	0.094	0.045	0.036
	-0.088	-0.099	-0.103	-0.099	-0.114	-0.116
retired	-0.183	-0.094	-0.115	-0.088	-0.351	-0.346
	-0.194	-0.208	-0.206	-0.207	-0.238	-0.239
unemployed	-0.034	0.086	0.019	0.07	-0.048	-0.096
	-0.141	-0.154	-0.156	-0.156	-0.177	-0.18
student	-0.205	-0.07	-0.117	-0.081	-0.181	-0.2
	-0.23	-0.259	-0.251	-0.259	-0.321	-0.327
housework	0.004	-0.037	-0.034	-0.037	-0.065	-0.061
	-0.152	-0.174	-0.17	-0.176	-0.205	-0.208
low education	0.155	0.293	0.238	0.286	0.213	0.225
	-0.123	(0.140)**	(0.136)*	(0.139)**	-0.157	-0.159
high education	-0.279	-0.332	-0.3	-0.337	-0.125	-0.129
	(0.164)*	(0.182)*	(0.177)*	(0.182)*	-0.205	-0.204

GRUPO DE TRABAJO 04

Instituciones de las democracias actuales: mecanismos de rendición de cuentas, evaluación y transparencia

retr-sociot	0.306		0.308	0.292	0.512	
	(0.075)***		(0.075)**	(0.080)**	(0.136)**	
			*	*	*	
retr-pock		-0.032	-0.058	-0.047	-0.113	
		-0.09	-0.093	-0.106	-0.172	
prosp-sociot	-0.218	-0.17	-0.22	-0.254	-0.285	
	(0.081)***	(0.082)**	(0.081)**	(0.093)**		
		*	*	*	(0.143)**	
low income				0.266	0.202	
				(0.136)**	-0.141	
high income				-0.419	-1.278	
				-0.423	(0.599)**	
low income*retr-sociot						-0.309
						(0.167)*
high income*retr-sociot						-0.388
						-0.354
low income*retr-pock						0.048
						-0.221
high income*retr-pock						-0.002
						-0.387
low income*prosp-sociot						0.019
						-0.186
high income*prosp-sociot						1.804
						(0.622)**
						*
Constant	-2.228	-2.208	-2.215	-2.147	-2.237	-2.058
	(0.503)**		(0.576)**	(0.576)**	(0.653)**	(0.661)**
	*	(0.579)***	*	*	*	*
Observations	1433	1183	1181	1177	886	886
Pseudo-R2	0.472	0.493	0.480	0.492	0.482	0.490

Probit regressions. Robust standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

This could validate Feldman's (1982) arguments that pocketbook evaluations are a projection of sociotropic ones.

Until here, we have tested propositions that have already been explicitly or implicitly analyzed. The originality of this paper basically lies in the next two models. The fifth model introduces one of our variables of interest: the categories of income. Low income people had a higher probability of voting the PSOE in 1996 and lower the PP in 2000 in comparison with the middle income category. Given that every ideological influence is expected to be controlled with our ideological, party identification and political system satisfaction variables, this should be explained in pure economic calculus' terms. Low income citizens, independently of their ideology,

tend to think that the PSOE favours more their economic interests than the PP. On the other hand, there are no differentially significant probabilities for the high income citizens of voting the incumbent in both elections. Thus, in the view of this model, we would assert that there is an economic identification between low income people and the PSOE.

In model 6, the interactions between the income and the assessments of the economy are introduced. In analyzing the results, I will prioritize the 2000's ones, because the sample is much larger and the interpretation is easier given that the incumbent won the election.

The first outcome is that the conclusions of model 5 vanish. Low income's higher probability to vote for the PSOE, which was significant in both elections, loses this significance. Once we have controlled the interactions between economic evaluations and levels of income, there is no relevant effect. This implies that it was not true that lower income people vote more for the PSOE and less for the PP because just a the matter of their income level, but because how they process the information about the performance of this party. Specifically, the low income citizens stand out for their retrospective evaluations of the economy. On the other hand, the high income parameter becomes negatively significant in the 1996 election. This could mean, that in pure economic thinking terms, low income people do not find that the PP or the PSOE benefits more their interests and rely them because of ideology, partisan identification and their evaluations of the economy, but high income people, apart from voting in these terms, might find that the PP favours their specific economic interests. However, as long as this is not an observed pattern in the 2000 elections, and the low income variable is not significant anymore, I conclude that there is no evidence of economic identification between income levels and parties. Thus, the first arguments to be tested in this paper are rejected.

The remainder of the patterns of variables in the previous models remains. There are no more changes in the levels of significance of the variables introduced in previous models.

Focusing on the interactions introduced in this model and how the income shapes the economic voting of the individuals, low income voters take less into account their retrospective assessment of the national economy. The parameter is negative and significant. For positive values of the independent variable, that is positive assessments, the probability of voting the incumbent is lower than other voters (there are no significant differences between middle and high income citizens).

Similarly, for negative values, the probability is higher. Hence, they penalize and reward less for previous performances of the economy. On the other hand, low income voters do not weight differently the prospective evaluations of the economy in comparison with medium income citizens

High income citizens do not show differential voting patterns in relation with their retrospective evaluations of the economy. However, they do show idiosyncratic patterns in relation with their prospective evaluations. In 2000, high income citizens took less into account the prospective expectations of the national economic performance in order to vote the incumbent or not. For the negative values, they penalized less, while the positive ones translated in lower probabilities of an incumbent vote. In the 1996 elections, when the final outcome of the ballot was a government change, this variable deserves a careful interpretation. Again, we find that the parameter of prospective evaluations of the economy is significantly different for the highest income individuals. Although it is of the contrary sign, the result is similar to 2000. In 1996, the incumbent lost the election. Once voters have updated this information and they know that the PP has won, we observe that, the better the expectations about the PP's prospective economic performance, the higher the probability that they had voted for the previous incumbent, the PSOE. This means that these people attributed lesser responsibilities prospectively, as it was also shown for the 2000 election. Their better expectations about what the PP could do in office had previously translated in a smaller probability of voting for this party (in comparison with the medium income category) and a higher to the PSOE. Thus, they rewarded less the PP for what they expected they could do in the future. Again it is important to emphasize that these results do not imply a total reverse of the literature up to the date. The single prospective parameter is still highly significant and of the sign expected. The prospective responsibilities are generally rightly allocated. The interaction just tells us that this mechanism is less intense for higher income people. Or even, that they tolerate, more than the rest of the citizenry, worse national economic performances in the future.

The third result of interest concerns pocketbook voting. We can nuance the generalized assertion of the literature about its irrelevancy. In 2000, the retrospective evaluations of the own personal economy were still insignificant. However, the interaction was positive and significant for low income individuals. Hence, only this population sector took into account their personal economic experience to vote or not for the incumbent. We are cautious with this result, because it is not replicated in the

1996 election, so it might be election-specific. However, as I will explain below, it should not be a surprising result, especially if one interprets it together with the retrospective sociotropic assessments of these individuals.

In the probit regressions we can only interpret the significance and sign of the parameters. To assess their magnitude and compare their relevance, I calculated some predicted values of the 2000 elections in tables 3, 4 and 5 and plotted them in graphs 1 to 3. In table 3, we observe the variations of voting the incumbent for low and high income individuals as the retrospective sociotropic evaluation of the economy changes. Using King's (1989) first differences method, we obtain that when we turn from a voter with the worst retrospective sociotropic assessments of the economy to a voter with the best ones, low income voters augment their voting probability to the incumbent in 92%, while high income voters do it in 94%. Hence, the difference is just of a 2% of voting probability. When we plot these results in graph 1, we check that the line of probabilities just cross in the upper values. Hence, the differences in voting terms of the weight placed on the retrospective sociotropic evaluations by low and high income voters are small.

Table 3: Variation in vote to
the PP

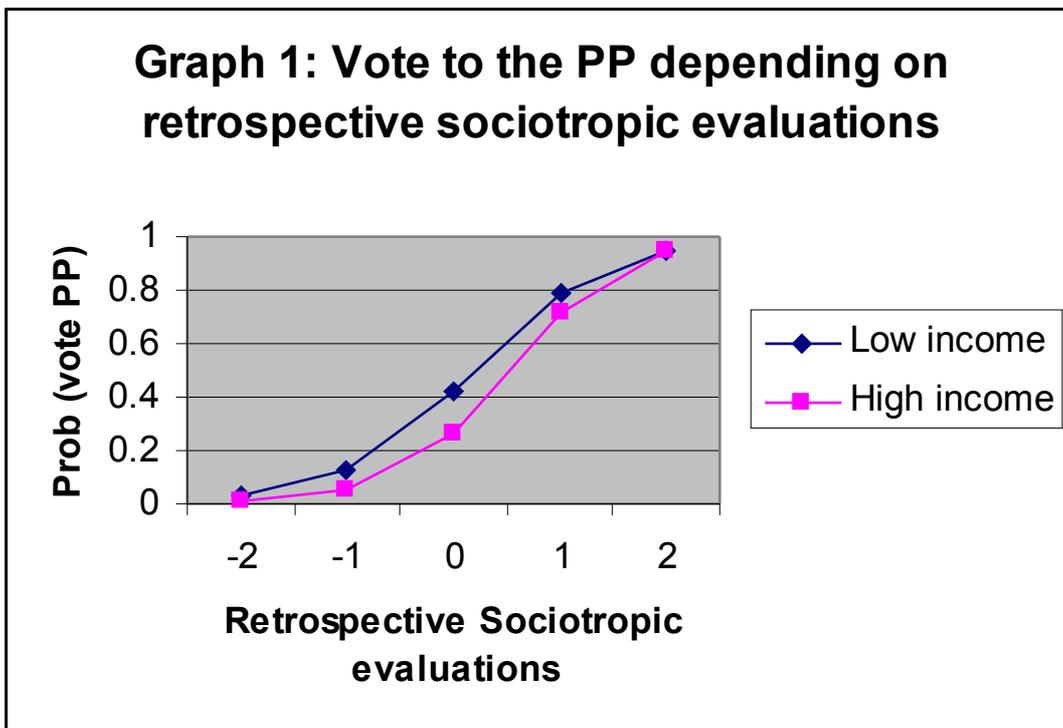
Retrospective evaluation	sociotropic	LOW	HIGH
		INCOME	INCOME
		P(vote PP)	P(vote PP)
-2		0.03	0.01
-1		0.13	0.05
0		0.42	0.26
1		0.79	0.71
2		0.95	0.95
	Dif max-min	0.92	0.94

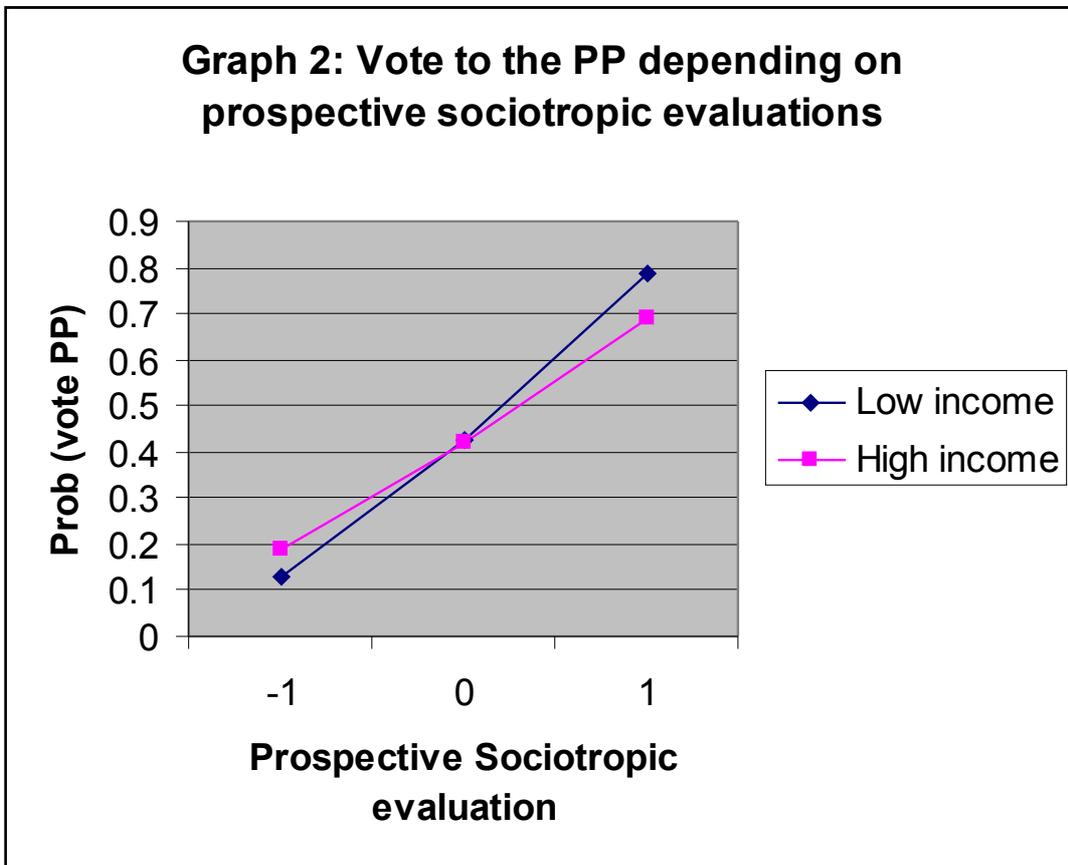
Table 4: Variation in vote to the PP

		LOW	HIGH
		INCOME	INCOME
Prospective	sociotropic		
evaluation		P(vote PP)	P(vote PP)
-1		0.13	0.19
0		0.43	0.42
1		0.79	0.69
Dif max-min		0.66	0.50

Table 5: Variation in vote to the PP

		LOW	HIGH
		INCOME	INCOME
Retrospective	pocketbook		
evaluation		P(vote PP)	P(vote PP)
-1		0.28	0.36
0		0.40	0.41
1		0.54	0.45
Dif max-min		0.26	0.08





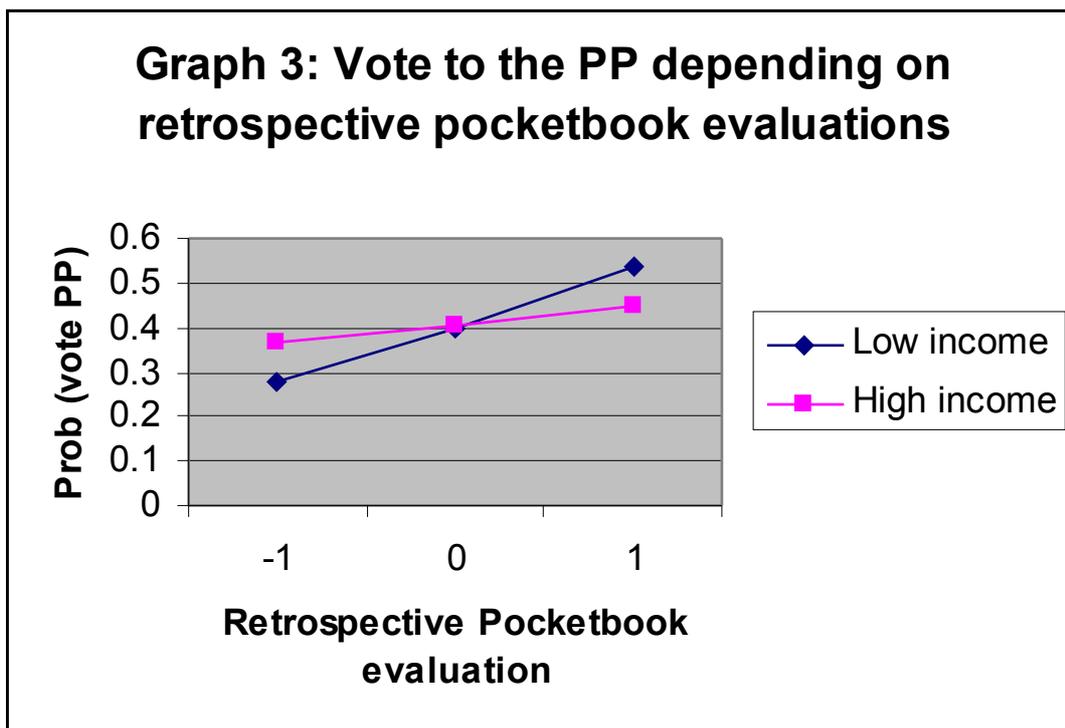


Table 4 shows that these differences are higher for prospective sociotropic assessments. The increase in the voting probability for low income citizens is 16 % higher. Graph 2 also shows how high income voters exonerate more future worst performances and reward less the good expectations about the economy. We prove that the differences in prospective sociotropic voting are larger than the retrospective one.

Finally, when we turn from a low income voter with the worst assessments of her variation in personal well-being to one with the best ones, her voting probability increases in 26%, while for high income voters it just increases in 8% (table 5). Graph 3 shows how low income voters take more into account their retrospective pocketbook assessments, both in negative and positive terms.

It is quite important to insist that these results are obtained controlling for educative levels of the individual. Hence, its interpretation should be done in economic

terms, and not attributing them to sophistication or information of the voter. Furthermore, even when an individual were more educated, it could be that the economic process of the calculus of her interests would lead her to pay more attention to certain evaluations of the economy for which not much information is needed. Hence, in the same individual, the sophistication would lead him in a direction and the economic interests in another.

Focusing on this interpretation of these empirical results, I have shown that low income people vote less on retrospective sociotropic terms. Linking this fact with their economic calculus requires thinking how they might process the past economic events. Low income people tend to feel that they are excluded of the good national economic performance (Narayan, 2000), while on the other hand, they may feel that they have been the first to be affected when the economy has performed badly. Hence, they may simply take less into account the past economic performance and pay more attention to other evaluations of the economy.

Regarding the pocketbook voting, it also makes sense that those who are less wealthy are also more risk averse and feel to have more to lose (Coate 1995). If they think that a government has affected them personally, it is reasonable to expect that they would reward or penalize it more intensely. On the contrary, wealthier citizens are less risk averse. They can afford to dismiss their personal economy in their vote decision, because this will probably be more stable and some losses may not be so crucial in total welfare terms. Hence, they pay attention to the national economic performance. As a certain vote decision may not be so significant in personal economic terms, they might use the shortcut of national economic performance to visualize the skills of the incumbent. Low income people, on the contrary, may be less interested in the real skills of the incumbent as long as she provides them a minimum threshold of welfare.

Hence, interpreting the two retrospective votes together, it is coherent to think that low income people may deduct attention on the general economic performance during the incumbent rule and focus their attention on their personal one. As they are risk averse, they may be open to reward even low increases in their income, while they feel they never take benefit from the general economic performance.

Finally, it is striking the result concerning prospective sociotropic voting and high income citizens. Those might be more sophisticated and might have a better idea (possibly because they will tend to be more educated) about what could happen with

the economy in the future¹⁸. However, they weight less these evaluations in their voting decision. To explain this, first of all we have to draw the distinction between the information people have and the use they make of it. Specially, when we have controlled for education and specifically analyze the economic calcula. These effects should be isolated from the influence of educative sophistication in the evaluations of the economy. Hence, it could well be that high income people have more information about how the economy may evolve, but in pure economic terms, they give less importance to it. But why would high income citizens tolerate future worse economic situations better? In my opinion, this would happen either because they do not attribute the responsibility of this to the government¹⁹ or because they do not have such a strong interest on a good economy. The first possibility is linked to economic risk. We could expect that high income citizens have guaranteed their income sources, so the future economic policies may not be determinant to their economic interest. It could also be that their economic interests lie beyond specific economic policies and they feel there is just a small and disregarded probability that a new incumbent risks their well-being. Likewise, the second possibility is that high income citizens have an interest in worse economic performances. Economic crises increase the opportunities for rent seeking. High income people may be more prepared to face these situations and even take profit of it, so they would weight less the eventual future economic performances in their voting decision.

6. CONCLUSIONS AND FUTURE RESEARCH

This paper has as a starting point the fact that voting models have been insufficient to explain how the economy shapes the vote decision. They have taken into account the economy as an external influence on the vote, but have dismissed the economy as an internal variable shaping and mediating the vote decision. If the economy is relevant, it is logical to expect that not only the economic results or expectations are influential, but also that one of the main variables shaping the vote reasoning is the income of the individual. In this paper, a sophisticated model of the economic voting is proposed, including the income level of the individual, which represents the economic interests of the individual. In this extended model, two arguments are tested: whether the income level of the individual leads to a specific

¹⁸ This is the argument in Fraile (2001b) to explain why non-manual classes vote prospectively.

¹⁹ However, Fraile (2001a) shows how voters attribute in a huge majority the well performance of the economy to the government.

partisan link beyond the party identification and whether the income level shapes the vote decision through different evaluation mechanisms.

Testing these arguments is not easy. Electoral surveys present some hindrances in using income variables. In the case of Spain, only two electoral surveys are possible objects of research. However, these two elections (1996 and 2000), are so divergent that control a great variability of scenarios and, as they provide similar results, are reliable.

Regarding the first argument, I find no strong evidence that there is an economic identification between income sectors and political parties. Only after controlling the interactions between evaluations of the economy and income levels, I find in one of the surveys a negative link between being a high income voter and voting the PSOE. However, I am cautious with this result.

Concerning the interactions between income levels and the weight placed to the different economic evaluations, there are some results worthy of commenting. First, the literature, in denying or affirming the pocketbook voting, has possibly been misled by a specific feature of low income people. This is the only income sector that shows a positive pocketbook voting, which is of big magnitude.

On the other hand, sociotropic voting is used by the whole population in its two dimensions: retrospective and prospective. However, the income level of individuals nuances the magnitude of these mechanisms. While low income citizens place less weight on the retrospective sociotropic evaluations, high income people take less into account the prospective sociotropic ones.

In future research, this sophisticated theory of economic voting should be developed further. The first step is to clarify how income might be a filter through which individuals look to the economy and evaluate it. In refining the economic voting models, it should be tested whether the results of this paper hold in other countries. It must also be further assessed how, once the individual has evaluated the economy, the income level of individuals shape their economic voting and how the different voting mechanisms are combined. It is also necessary to deepen into the specific mechanisms that account for them. In this paper it is hypothesized that low income people may either feel excluded from the general performance of the economy or are more risk averse, so they weight less the retrospective sociotropic evaluations and place more importance on the pocketbook voting. On the other hand, high income people may be less risk averse and feel that future performances are not crucial for

their well being or they might simply expect economic gains from rent seeking in economic downturns.

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GRUPO DE TRABAJO 04

Instituciones de las democracias actuales: mecanismos de rendición de cuentas, evaluación y transparencia

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APPENDIX: VARIABLES OF INTEREST

Vote for the incumbent: This is a dichotomic variable, being 1, declared vote for the incumbent, and 0, any other response. I excluded all the missing cases, but I included the abstentions. I wanted to analyze the probability of voting the incumbent versus any other possibility. There were no substantive reasons to exclude the abstention but include the vote for small parties with no representation, for instance.

Income: The ten categories of income included The first covers from 50,000 to 150,000 ptas., the second from 150,000 to 500,000 ptas, and the third for higher incomes.

Retrospective sociotropic evaluation: There is no direct question in any of the questionnaires about the retrospective evaluation of the national economy. However, I use as a retrospective evaluation of the economy the question of how the respondent would evaluate the current economic state of affairs. Although this is not a perfect measure, in an electoral context a reflection about the current economic performance has a connotation of evaluation of the performance during the office period of the incumbent. These variables have five categories and have been recoded so that the negative evaluations are of negative sign, and the positive, of positive sign. The categories are: -2, very bad; -1, bad; 0, normal; 1, good; 2, very good.

Prospective sociotropic evaluation: The variable's question in 1996 was "how do you think the economic situation of Spain will be in a year's time?" In 2000, the question was "After the elections, how do you think the economic situation will be?" The three categories of the answer have been recoded to be: -1, worse; 0, similar; 1, better.

Retrospective pocketbook evaluation: To build this variable, I had to homogenize both surveys. In 1996 the question posed was "is your personal economic situation better, similar or worse than a year ago? In 2000, however, we find no equivalent question. Thus, I had to use, with the same justification than for the national economic performance, the question about the current economic situation of the household. As it had five categories, I recoded them to have equivalent categories for both elections: -1, bad; 0, normal; 1, good.

Satisfaction with the political system: To build this variable, I had to use two different questions of each survey. In the 2000 survey the question was whether the individual was or not satisfied with the democracy as a political system. No equivalent question was asked in 1996, so I used the one I considered more similar. The

question was whether the respondent was satisfied with the State of the Autonomies. Though the question had a more specific political meaning, I consider it shows whether the respondent has or not antisystemic ideas.

Education: The rich education data of the surveys was recoded in three categories: 1, no studies or primary education; 2, secondary and FP; 3, some university studies finished.