Abstract: Satisfaction with democracy is supposed to be correlated with institutional performance. However, it is not clear what the real meaning of satisfaction with democracy is, and how to measure institutional performance. Secondly, there is a lack of theoretical research about the link between institutional performance and satisfaction with democracy at the individual level. Finally, in order to understand this link we have to deal with variables and indicators at different levels (aggregate and individual), which imposes some econometric restrictions over model specification. In this paper I propose a model to represent the influence of institutional performance over satisfaction with democracy, and I test some empirical hypothesis derived from the model, using a multilevel approach. The results show that economic performance is one of the most important dimensions of institutional performance that affect the overall level of satisfaction with democracy. Results also show that other dimensions of institutional performance, such as accountability, have a significant impact on democratic satisfaction.
1. Introduction

Popular feelings about political regime are associated with institutional performance (Anderson, 1998a; Easton, 1965; Klingemann, 1999; Wagner y Scheneider, 2001; 2006; Weil, 1989). Satisfaction with democracy is supposed to be correlated with different measures of institutional performance according to previous research and political trust broadly speaking (Dalton, 1999). Nevertheless, there are two main unsolved puzzles about the relationship among institutional performance and satisfaction with democracy. Firstly, there is no a definite theoretical model to explain this empirical relationship. Secondly, there are many different measures of institutional performance that can be used in empirical research, but it is no clear how to interpret the results (Klingemann and Fuchs, 1995; Montero et al., 1997, Norris, 1999). Moreover, there are some issues about the real meaning of satisfaction with democracy.

In this paper I propose a formal model to represent the influence of institutional performance over satisfaction with democracy, and I test some empirical hypothesis derived from the model. This model operates at the individual level, taking into account individual perceptions about institutional performance. I also consider aggregate measures of institutional performance such as real growth in GDP per capita. I will rely on ‘relative deprivation’ theory as an essential mechanism to show how satisfaction with democracy depends on relative comparisons through time and individuals. I will show that satisfaction with democracy is higher when the overall economic situation of society is improving, but it is also true that interpersonal comparisons are important in determining the overall satisfaction with democracy of each particular individual. Those at the top of the income distribution will be more satisfied with democracy, while the poorest will be less satisfied from a relative point of view. These are standard results in the research about satisfaction with democracy (Lockerbie, 1993). However, I will also show that overall economic performance at the aggregate level interacts with the relative position of each individual on the income distribution. The deprivation effect will higher for the poorest in society when economic conditions are worsening. On the other hand, while GDP per capita growth has an impact over the whole society, those in low income
positions are expected to improve their own perception of economic conditions in relative terms, since their original position is worse. Explanation also relies on the fact that economic crisis and stagnation usually have a stronger impact on lower income households.

Using a multilevel approach, I will estimate a model in which satisfaction with democracy is a function of individual variables and aggregate economic indicators. I will state that institutional performance (measured by economic growth) is an important explanatory factor in the evolution of satisfaction with democracy in the long run. At the individual level, socio-economic status (measured by relative income) explains why some individuals are more satisfied than others in the same society. However, institutional performance can not be taken into account only by means of economic growth. Accountability of the political regime and absence of corruption are also important factors explaining satisfaction with democracy. At the same time, the overall performance of current government affects satisfaction, since a bad government can be seen as a ‘partial regime failure’ to select the best authorities. Attitudes toward democracy and other ideological variables are also considered as explanatory factors in the model. I use a non-linear hierarchical model methodology using adaptive quadrature as estimation technique, which seems to be more adequate that traditional approaches such as PQL. Furthermore, I will derive some empirical implications at the aggregate level to understand the aggregate dynamics of support for democracy and satisfaction with political regime.

2. Institutional performance and satisfaction with democracy. How to measure institutional performance through different dimensions.

In the model I propose in this paper, satisfaction with democracy is a function of institutional performance as perceived by individuals. Two main questions need to be addressed with regard to the relationship between satisfaction with democracy and institutional performance. First at all, what is the exact meaning of satisfaction with democracy (Canache et al., 2001). And secondly, how can we measure institutional performance in the long run. There are many different meanings of satisfaction with
democracy as we can see in the literature. For most of the scholars, satisfaction with democracy is a composite index that reflects simultaneously both the evaluation of the political regime as a whole and the evaluation of the government in power. For this reason, supporters of party in government use to have a higher level of satisfaction across different political systems, since they are also evaluating the government they voted for (Montero et al., 1997).

Besides this measurement problem about what people really think when they are asked to assess their level of satisfaction with democracy, there is a theoretical problem about how to interpret this indicator. From an instrumental point of view, I will refer to the satisfaction with democracy at the individual level as the utility a particular individual derives from being part of the polity. To some extent, satisfaction with democracy reflects the contribution of the political system to the happiness of the citizenry at the individual level. For this reason, we can think of this indicator as an argument of an individual utility function. Although utilities can not be observed, and then absolute levels of satisfaction with democracy will be meaningless, this variable can be taken as an indicator in relative terms. The higher the level of satisfaction, the higher the contribution of the political system to the individual private welfare, both in the short and the long run.

Secondly, we have to deal with the problem of how to measure institutional performance. There are many different measures of institutional performance: economic conditions as the result of public policy, social policies, accountability of the political system, … For this reason, when we talk about institutional performance we are referring to a huge variety of variables and indicators. Given the different meanings of institutional performance I will decompose this concept into three main dimensions:

1. **Economic conditions.** The state of the economy can be understood as a result of economic policies put in place by political institutions. Good economic policies are supposed to promote economic growth and social welfare, and bad ones will worsen social welfare resulting in bad economic performance, such as unemployment and inflation. Given the complexity of policy-making in economic arena, economic conditions are not only the result of current government’ policies, but also of a huge
variety of political institutions, such as central banks, and other relevant actors. For this reason, economic conditions can be seen as a wide measure of institutional performance, not only affected by current government, but also by other political institutions (Clarke et al., 1993; Fuchs, 1993; Lockerbie, 1993). However, given limited rationality and the tendency to put responsibility for economic conditions into incumbents, we have to focus on economic conditions over the long run as a reliable measure of institutional performance.

Current economic conditions (such as the current rate of inflation or unemployment, or the relative annual change in GDP per capita) could be perceived by the population as the result of current economic policies of government in power. That is why these indicators are not appropriate to measure institutional performance of political regime, since they reflect the effect of current economic policies. Economic conditions
need to be persistent to be the consequence of political system (Lipset, 1994; McDonough et al., 1986, Morlino and Tarchi, 1996). Economic indicators in the log run reflect the overall performance of political institutions, since they are the result of different governments over time. Economic conditions over the past decade can be a good indicator of economic performance, since governments are usually replaced after four or five years in power, allowing change in party in power. Even if there is not change in party in power, it is important to bear in mind that citizens have had the opportunity to vote for a new government. However, since satisfaction with democracy reflects to some extent the satisfaction with government in power, the evolution of this variable in the short term is usually correlated with current economic conditions.

Continuous data from the Eurobarometer shows this correlation between satisfaction with democracy and economic conditions in the short term. As we can see in graph 1, satisfaction with democracy in Europe was very low in the early seventies and mid nineties, as a consequence of the economic crisis through these periods. It is also clear that satisfaction with democracy increased in the second half of the eighties and at the end of the nineties, when economic conditions were recovering from previous crisis. Particularly important is the correlation of satisfaction with democracy and the rate of unemployment over time. Nevertheless, the correlation between current economic conditions and satisfaction with democracy is not perfect. On the one hand, it reflects that economic conditions affect satisfaction with democracy both in the short and the long run. On the other hand, it also reflects the fact that economic performance is not the only indicator of institutional performance. Apparently, economic conditions seem to be more important in determining the aggregate level of satisfaction with democracy when economic issues are more salient in public agenda. For instance, we can observe a sharp decline in satisfaction during economic crisis because of the salience of economic conditions. Overall, however, there are some other important dimensions of institutional performance that affect satisfaction with democracy.

2. Accountability. One of the most important dimensions of institutional performance is accountability, that is, the extent to which political system is responsible to popular demands (Easton, 1975, Karp et al., 2003; Lijphart, 1994; 1999). While economic conditions reflect the result of public policy, accountability is a procedural
dimension of institutional performance. From an economic point of view, only social welfare matters as a measure of institutional performance. However, overall good economic performance does not assure that public policies are designed to serve citizenry. On the one hand, some non economic (political) issues are difficult to measure through usual economic indicators. On the other hand, there are some distributional issues to deal with economic policies that are not well represented by macro-economic variables.

Lastly, accountability of the political system assures that citizens will be able to induce a change in policies if economic conditions worsen (Bowler and Donovan, 2002). That would be impossible if political system is not responsible in front of the citizens. Usually, persistent bad economic conditions are the result of bad economic policies that can not be changed because of a non accountable political system. Then accountability and economic conditions are related dimensions. The problem arises when it comes to measure political accountability, since there are not suitable indicators of political accountability for political systems at the aggregate level. Moreover, political accountability at the aggregate level must be understood as the result of citizens’ evaluations of accountability. If citizens believe that political system is irresponsible and office holders can not be accountable, then there will be no accountability, since none will use standard institutional channels.

While the other two dimensions of institutional performance refer to the long run, government performance can be understood as a measure of institutional performance in the short-run. The overall performance of political system is the result of multiple political actors interacting in the long run. That is why incumbents’ performance can not be a good measure of institutional performance as a whole, but it reflects the ability of the political system to elect the right politicians for the right offices and circumstances. Current government performance can accidentally be bad or driven by external factors, but it is a consequence of many institutional elements. If election procedures do not guarantee that only the best politicians will be elected, then governments face a lack of incentives to improve institutional performance.
Usually, most political scientists assume that the relationship between satisfaction with democracy and government performance is a consequence of the short-run orientation of respondents when they are faced with an inquiry about the current state of democracy. I will argue that government performance is not at the core of institutional performance, but it contributes to shape citizens’ perceptions of institutional performance. In the long run, good political regimes are supposed to select the best political authorities. A particularly bad government can be seen as a drawback of the political system, since it implies the inability to elect the right politicians for the right offices (Harmel and Robertson, 1986). In the long run, bad politicians have been in power for a long time in bad political regimes, while good political systems use to have more competent and honest politicians. However, once again we can not use a direct measure of government performance. Typical assessments of government performance through economic conditions are not very reliable, since economic conditions are the results of many driving political forces. Since, no external indicator of government performance is available, citizens’ perceptions of government performance can be used as the most reliable indicator, although some other variables about political situation could be used as a measure of institutional performance in the short-run.

In this paper, I will focus mostly on economic performance in the long-run as a proxy of institutional performance, although all the three dimensions of institutional performance are taken into account and included in econometric models. More specifically, I will consider the real change in the GDP per capita through the last decade as the most reliable indicator of economic performance. GDP per capita is the best indicator of economic performance of public policy as it reflects the overall state of economic situation. Others indicators as public budget surplus/deficit could reflect some ideological principles about economic policy and are not particularly suitable as measures of institutional performance. The reason to consider the real change in the long run is to overcome the influence of incumbent government over current economic conditions. Then citizens are expected to view the change in the long run as a result of institutional arrangements and not as a product of a particular government.
However, as stated before, overall economic conditions are not the only driving force of satisfaction with democracy at the individual level, since GDP per capita can be distributed through the whole population by means of an extremely unequal social redistributive policy. There is some empirical evidence supporting the idea than more redistributive political regimes promote satisfaction with democracy and political trust, but there is not a causal mechanism to explain why these two variables should be correlated from an individual point of view. Some researchers consider the influence of redistributive policies over satisfaction with democracy including a macro variable such the GINI index on income distribution. However, this approach only takes into account inequality at the aggregate level, which implies that individual satisfaction with democracy should be affected by the overall distribution of income at the societal level. Put differently, doing that we are assuming that equality of income will affect individual utilities, which is not an easy assumption to make, since it is not clear from the model how fairness or even altruism can have a role in shaping the individual beliefs about satisfaction with democracy.

I will consider the relative household income as a measure of the economic conditions at the individual level. Citizens are supposed to form expectations about institutional performance from an individualistic point of view. That is, they are basically motivated by individual welfare. An increase in GDP per capita has not the same meaning for each particular citizen, since participation in the economic growth depends on relative income. In practical terms, an increase in GDP per capita will have a greater impact on higher income positions if redistributive policies are not changed, although things could be more complex if we take redistributive issues into account. However, that does not imply that the evaluations of institutional performance made by the richest individuals in society will change mechanically with economic growth. From ‘relative deprivation theory’, we will expect that assessment about institutional performance will be influenced by interpersonal comparisons of welfare. Although there is an unsolved debate about the possibility (or impossibility) of making interpersonal comparisons of utility, there is a huge amount of empirical evidence stating that people are usually able to make interpersonal comparisons in welfare. Assuming that individual assessments of institutional performance will depend on the individuals’ own changes in economic
situation, the influence of this variable over satisfaction with democracy will depend on inter-personal and inter-temporal evaluations of economic situations.

I also consider the influence of some other variables on satisfaction with democracy. Particularly important is to take into account the accountability of political regime. Here I rely on individual evaluations of political accountability. Under this approach, political accountability is the expectation of individual citizens about the possibility of changing political or economic conditions through political participation. We have to expect that higher political accountability will be positively correlated with satisfaction with democracy.

Apart from these indicators, there are some other variables potentially correlated with satisfaction with democracy (Merkl, 1988; Thomassen, 1995). The preference for democracy (and democratic values) is expected to be a good predictor of satisfaction with democracy to some extent, since individuals with low preference for democracy are not supposed to be happy about the current condition of democracy (Fuchs, 1995). Nevertheless, we can not expect that strong democrats will be always happy with current democracy. Since preference for democracy seems to be a theoretical issue, the evaluation of current democracy is a matter of political regime evaluation. Also we have to consider the influence of ideology over satisfaction with democracy. It is difficult to anticipate the sign of this relationship, since it would be possibly influenced by historical memories of democratic regime and dictatorships, but it could have an impact on satisfaction with democracy (Anderson, 1998a; 1998b; Inglehart, 1997).

2.1. The model and the hypothesis

From the previous discussion, we can formally express these ideas through the following model:

\[ U_i = U_i \left( \Delta GDP_{pc}, Y_i - GDP_{pc}, A_i, G_i, X_i \right) \]

where the utility \( U_i \) is conceived as the private utility derived by a particular individual from the current state of democracy in the polity and it is measured by the
satisfaction with democracy. Satisfaction with democracy is a function of the real change in the GDP per capita in the long run $\Delta GDP_{pe}$ (over the past decade), the difference in the real income of the individual and the GDP per capita $Y_i - GDP_{pe}$ (which is a measure of the relative position on the income distribution), the perceived accountability of the political system $A_i$, the individual evaluation of incumbents’ performance $G_i$, and a vector comprising other explanatory variables $X_i$.

By assumption of the model, real change in the GDP per capita in the long run is expected to have a positive impact over the satisfaction with democracy. We can state that, as long as economic conditions have improved in the past decade, citizens derive a higher utility from political regime, irrespective of their political preferences and their socio-economic status. Obviously the influence of this aggregate variable operates over the whole society. We can expect that citizens living in more prosperous societies will have higher a satisfaction with democracy. However, individual judgments about overall institutional performance are not only a function of aggregate economic growth, but also of the relative position in the income distribution. The relative position of an individual in the income distribution is expected to have an impact on satisfaction with democracy. Those who are at the top of income distribution are expected to be more satisfied with democracy, since they get better results than the average citizen. Inversely, those at the bottom of income pyramid are supposed to have lower satisfaction with democracy, since they are relatively deprived with respect to the whole society.

The main hypothesis here is that satisfaction with democracy can be analyzed from the lens of ‘deprivation theory’. According to deprivation theory, satisfaction is the result of personal comparisons through time and space. Those who feel better off in the present than in the past should be more satisfied that those who are loosing ground. In the same vein, those who feel better than the rest of the society are supposed to have a higher level of satisfaction. At the same time, those who are in the poorest conditions in the society should feel worse if their situations is bad and continuous over time (economic conditions are not improving or even worsening) and their relative position on income distribution does not change.

On the other hand, the model also includes other dimensions of institutional
performance. Accountability of the political system is a key feature of institutional performance, since accountability guarantees that public policy can be changed by citizenry by means of political participation. If politicians or political institutions are not accountable, satisfaction with democracy will worsen in the long run. Satisfaction will be even lower, if institutional performance is bad in the management of economic conditions (or any other relevant aspect) are there is no chance to change bad public policies. As stated before, current government’ evaluation and other variables are also included in the model. From this starting point the following hypothesis are derived:

**H1**: Satisfaction with democracy is positively correlated with GDP per capita growth at the societal level.  
**H2**: Satisfaction with democracy is positively correlated with household income at the individual level.  
**H3**: Satisfaction with democracy will be lower for those in low income positions when economic conditions are worsening in the long run, since that will increase feelings of relative deprivation, and economic crisis will affect mostly to low income positions.  
**H4**: Individual perception of accountability of the political system will enhance satisfaction with democracy.  
**H5**: Satisfaction with democracy is affected by personal evaluations of current government’ performance, since institutional performance is related to the ability of the political system to select the best individuals for each office, and satisfaction with democracy also refers to some extent to satisfaction with party in government.

These hypotheses are mainly related to the three different dimensions of institutional performance. Hypothesis H1 through H3 deal specifically with economic dimension of institutional performance, and they are derived from ‘relative deprivation theory’. Hypothesis H4 and H5 deal with accountability of the political system and evaluation of political situation and government performance, respectively. In order to test these hypotheses we have to deal with individual and aggregate data, which implies
some complex methodological issues, especially given that our dependent variable is not continuous.

3. Methodology and data

3.1. Data and variables

To test the hypothesis from the previous section I use a multilevel approach in which the dependent variable is satisfaction with democracy coded as a binomial variable (1 = very or fairly satisfied; 0 = not very satisfied or not at all satisfied). The model comprises various fixed effects and a random intercept. Fixed effects are both individual and aggregate variables. Independents variables included in the model try to measure the three dimensions of institutional performance, as defined above. Aggregate variables are usual economic indicators and individual variables are taken from CSES module 2 panel data.

1. Economic conditions at the society level are measured by the annual (averaged) real change in GDP per capita in the last ten years (ten years before CSES study was conducted for each country). That reflects the overall economic performance at the aggregate level. One of the most important issues in the model depicted before is how to measure the impact of relative deprivation on satisfaction with democracy at the individual level. Ideally, we need to have measures of relative income through time and individuals, which is extremely difficult given the availability of data across country. Nevertheless, the CSES data can be combined with aggregate data that make possible to evaluate these hypothesis.

At the individual level, the socioeconomic status is measured by the relative individual income. Economic relative position (or socio-economic status) is measured by the quintile of household income to which each individual belongs to. According to CSES data, population can be divided into five quintiles of income. The third quintile is taken as the base category, since it includes the median group of income in society. Then we can compare the poorest and the richest groups against the median of income. By
assumption, belonging to the first and the second group affects negatively to satisfaction with democracy. Conversely, individuals belonging to the fourth and fifth group should have a higher satisfaction than the median group of income. Furthermore, we have to consider the combined impact of aggregate economic situation and the socioeconomic position in the income distribution, including the interaction effect of both variables.

2. **Accountability** is measured through three different indicators, contained in CSES data: “Who is in power can make a difference”; and “Who people vote for makes a difference”. Both variables are coded through a five points scale which range from total agreement to total disagreement. The third variable is “How well voters’ view are represented in elections”. This variable is coded as a dichotomous variable (1 = very or quite well; 0 = not very well or not well at all). The inclusion of this variable in the model reflects the role of candidates and political parties in the accountability of the political system. To some extent, political accountability is only possible when all citizens’ interests are well represented in the political process. It means that elections should be true elections among meaningful political platforms. In the absence of representation in elections, accountability is not real.

3. **Political conditions and government performance in the short run** is measured through two variables. The first one is an evaluation of how the current government is handling his job. The responses to this question is coded as a dichotomous variable (1 = very good or good job; 0 = very bad or bad job). The second variable is how widespread is corruption. The responses to this question is coded as a dichotomous variable (1 = very or quite widespread; 0 = not very widespread or it hardly happens at all).

4. **Ideological variables** reflect ideological preferences of each individual. Satisfaction with democracy can be correlated with some ideological idiosyncratic preferences. Left-right ideology or preference for democracy as a whole are attitudinal variables potentially correlated with other political attitudes and particularly with satisfaction with democracy. We will expect that citizens who strongly disagree with democratic principles as the best form of government will have more negatively feelings about the current state of democracy. Those who think of democracy as the best form of government are expected to have more positive feelings about its current state, although
respect for democracy does not necessarily imply that feelings about real democracy in place would be equally positive.

Preference for democracy is measured by the response to the statement “Democracy is better than any other form of government”. Responses are coded as dichotomous variable (1 = agree strongly or agree; 0 = disagree or disagree strongly). Left-right ideology will have a more ambiguous effect over satisfaction with democracy. It will depend on the ideology of party in government and the history of past governments in the long run. On the other hand, left-right ideology could be correlated to some extent with preferences for democracy in those societies experiencing a democratic transition from autocratic regimes, in which there was a particular dominant ideology. This variable is measured through an eleven points scale (0 = left; 10 = right).

3.2. Methodology: Multilevel model

Mixed models are appropriate when we have to deal simultaneously with a combination of fixed and random effects. A particular kind of mixed models are multilevel models in which the usual assumption of errors normally distributed with equal variances across groups does not hold, because variances are expected to be differences across groups. In multilevel models, errors are not supposed to have the same variance across groups, although intra-group equal variance assumption holds, and errors are supposed to be independently distributed. Multilevel generalized linear models are a particular case of multilevel models in which the dependent variable is not continuous. In that case, estimation techniques for multilevel linear models are not longer useful and we have to deal carefully with some estimation issues (Bryk and Raudenbush, 2001; Skrondal and Rabe-Hesketh, 2004).

Multilevel models have a hierarchical structure, since lower level units are nested in higher level units. Then the two-level model is a special case in which individual data are nested in a second level unit. In this case, the comparative nature of CSES data allow us to consider individuals as the first level unit and countries as the second level units. Two level models typically consist of two different parts. The first part includes all the variables measured at the individual level, and the second one includes aggregate
variables. An alternative approach considers the coefficients in the multilevel model as a function of a latent variable (Bryk and Raudenbush, 2001). At the same time, perturbation term can be decomposed in two different sources of error (variance), which reflects the two sources of variation (individual and collective). We can write the two level model as:

\[ y_{ij} = \beta_{0j} + \beta_{1j}x_{ij} + u_{ij} \]

Assuming that intercept is a random term in the model, the first coefficient in the right hand of the last equation can be rewritten as a function of a latent variable and error term in the model can be decomposed as the variance at level one and the variance at level two:

\[ u_{ij} = \delta_{0j} + \varepsilon_{ij} \]

By assumption of the model, the expectation for both errors (at the individual and the aggregate level) is zero. On the other hand, errors are supposed to be constant within units in the same level. And lastly, errors at different levels are uncorrelated. The previous model can be extended to include more errors terms, associated with others random coefficients, under the previous assumptions.

The linear multilevel model can be easily estimated by restricted maximum likelihood (REML). However, when dependent variable is a dichotomous variable usual estimation techniques are not longer valid for generalized linear multilevel model. Two basic alternatives can be used to estimate generalized linear model: penalized quasi-likelihood (PQL) and adaptive quadrature. Adaptive quadrature works very well for dichotomous variables with a wide range of cluster sizes and intraclass correlations. On the other hand, adaptive quadrature requires fewer quadrature points that ordinary quadrature (Skrondal and Rabe-Hesketh, 2004). Although computationally very demanding, adaptive quadrature performs better than many other alternative techniques of estimation for generalized linear multilevel models. Actually it is implemented (among others) by PROC NLMIXED in SAS, and can be used through the ado program
4. Institutional performance and satisfaction with democracy. Main results and interpretation

After estimating the multilevel model proposed in the previous section using adaptive quadrature and Newton-Raphson optimization procedures, it is clear that institutional performance has a great impact over satisfaction with democracy at the individual level. Economic conditions, perceived accountability of political regime, and short-term institutional performance have a significant impact on the dependent variable in the model. First at all, I will focus on economic performance as an explanatory factor satisfaction with democracy, taken H1 to H3 hypothesis as the framework, and I will discuss later on the rest of hypothesis. Analysis of the economic conditions’ impact over satisfaction with democracy should distinguish between individual and aggregate effects in multilevel models.

At the aggregate level, satisfaction with democracy is highly correlated with economic performance as many other studies show. In particular, the correlation between real GDP per capita and satisfaction with democracy at the country level is above 0.70, and Wagner and Scheneider (2006) reported similar results for unemployment and inflation. In graph 1 I present the real change in GDP per capita (annual average) since 1990 for each country in the CSES database. As stated before, when we focus on the long-run GDP per capita change we take into account the long-run performance of political regime. Through this long period of time, changes in government are expected to happen, and even changes in the ideological orientation of government. That neutralizes the short-run influence of actual economic conditions, since current government can be held accountable for that, and this is not a consequences of political regime, but of current government.

Focusing on the patterns shown in graph 1, it can be seen that countries are ordered through real GDP per capita change and overall satisfaction with democracy at the aggregate level (percentage of people saying that they are very or fairly satisfied with
Two main striking results can be derived from this graph. At the low extreme, countries with low (or even negative) real change in GDP per capita over the long run have the lowest level of satisfaction with democracy. At the high extreme, countries with a rapid increase in GDP per capita over the long run have higher levels of satisfaction with democracy. Only South Korea seems to be an exception to this pattern, since its high rate of GDP per capita change has not produced an increase in satisfaction with democracy. The second main result is that there is a group of countries with high levels satisfaction with democracy and an intermediate rate of GDP change.

The previous patterns imply that economic performance is an important driving force of satisfaction with democracy at the aggregate level. But it also clear that economic performance is not the whole history about satisfaction with democracy. The central group of countries with intermediate GDP per capita growth and high levels of
satisfaction with democracy shows that other dimensions of institutional performance are equally relevant in order to explain satisfaction with democracy at the aggregate level. Many of those countries are well established democracies that enjoy a high level of regime acceptance. All of them have a high score on accountability of political regime, which could imply that shortfall of economic policies do not necessarily produce unrest and discontent with performance of political system when institutions seem to be accountable across other dimensions of political activity. At the first look, different dimensions of institutional performance seem to compensate the shortfalls on the other dimension.

Graph 3: Satisfaction with democracy and household income

At the individual level it can be seen that economic position has an impact over individual satisfaction with democracy. Satisfaction with democracy is higher in the
richest households and is lower in the poorest ones. However, correlation among both variables varies across countries. In graph 2 are shown the percentage of people fairly or very satisfied with democracy in each household income quintile against people fairly or very unsatisfied. One striking result is that differences among the poorest quintiles in satisfaction with democracy are lower than between the richest quintiles. The first and the second quintile have only a slightly lower level of satisfaction than the third quintile, which includes the median citizen in the income distribution. However, differences among the third and the fourth quintiles and among the fifth and the fourth quintiles are wider than in the lower levels of income. The higher levels of satisfaction with democracy at the top of the income distribution seem to be a constant across different countries.

This pattern shows that economic situation is highly correlated with satisfaction with democracy, both at the individual and the aggregate level, but it is also important to consider the interactive effect of individual and aggregate economic conditions. In table 1 are shown the result from the model estimated in the previous section. As can be seen the GPD per capita growth in the long run (at the societal level) affects positively the satisfaction with democracy at the individual level. Those individuals living in more efficient economic societies have higher levels of satisfaction with democracy. This is a contextual effect over the whole society than could explain differences in aggregate levels of satisfaction across countries.

At the same time, coefficients associated with household income quintiles are mostly significant, which implies that familiar income is a driving force of satisfaction with democracy at the individual level. The poorest of the society (those in the first household income quintile) have a significant lower level of satisfaction than those in the third quintile, which includes the median income citizen, although the level of satisfaction of the second quintile is not significantly different from third income quintile. At the top of income distribution, differences are also significant. Both the fourth and the fifth quintile have a significant higher level of satisfaction than those in the third quintile.
Table 1: Multilevel Model of Satisfaction with Democracy (Binomial Logit)

<table>
<thead>
<tr>
<th>Coefficients for Fixed Effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita growth (10 years)</td>
<td>0.1587549 ( ^b ) (0.0701768)</td>
</tr>
<tr>
<td>1st household income quintile</td>
<td>-0.1152211 ( ^b ) (0.0575185)</td>
</tr>
<tr>
<td>2nd household income quintile</td>
<td>0.036693 (0.068769)</td>
</tr>
<tr>
<td>4th household income quintile</td>
<td>0.1202098 ( ^c ) (0.0663384)</td>
</tr>
<tr>
<td>5th household income quintile</td>
<td>0.3208584 ( ^a ) (0.065927)</td>
</tr>
<tr>
<td>1st household income quintile * GDP per capita growth</td>
<td>0.0333067 ( ^c ) (0.0203309)</td>
</tr>
<tr>
<td>2nd household income quintile * GDP per capita growth</td>
<td>0.0027873 (0.029226)</td>
</tr>
<tr>
<td>4th household income quintile * GDP per capita growth</td>
<td>-0.0160126 (0.0280785)</td>
</tr>
<tr>
<td>5th household income quintile * GDP per capita growth</td>
<td>-0.072478 ( ^a ) (0.0271204)</td>
</tr>
<tr>
<td>Who is in power can make a difference</td>
<td>0.034246 ( ^a ) (0.0160352)</td>
</tr>
<tr>
<td>Who people votes for makes a difference</td>
<td>0.057767 ( ^a ) (0.0165)</td>
</tr>
<tr>
<td>Voters' views are well represented in elections</td>
<td>0.7511889 ( ^a ) (0.0370528)</td>
</tr>
<tr>
<td>Government Performance: General</td>
<td>1.310569 ( ^a ) (0.0381348)</td>
</tr>
<tr>
<td>Corruption is widespread</td>
<td>-0.6052039 ( ^a ) (0.0463087)</td>
</tr>
<tr>
<td>Preference for democracy</td>
<td>1.292365 ( ^a ) (0.065533)</td>
</tr>
<tr>
<td>Ideology</td>
<td>0.0498672 ( ^a ) (0.0071282)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.917864 ( ^a ) (0.1954309)</td>
</tr>
</tbody>
</table>

Variances of random effects

| Var 2 (polity) | 0.43703059 |
| Var 1 | 0.13231882 |

Note: 19192 level 1 units nested in 23 level 2 units. Model has been estimated using adaptive quadrature, implemented by PROC NLMIXED in SAS and GLLAMM in Stata. \( ^a, ^b, ^c \) denote the level of significance (p-value): 1%, 5%, and 10%.

Source: CSES data Module 2 for survey data and IMF for GDP per capita data.

Interestingly, interaction terms between household income and GDP per capita growth in the long run are also significant at the extremes of the income distribution. The
interaction term of the first quintile with GDP per capita growth has a significantly positive impact over satisfaction with democracy. That means that an increase in the GDP per capita growth has a significantly higher impact over satisfaction with democracy in the first quintile than in the third income quintile. Conversely, the impact of an increase in the GDP per capita growth has a lower impact over satisfaction with democracy in the richest quintile of society. Those at the top of income distribution are less sensible to an increase in the GDP per capita growth, and at the same time the impact is significantly higher at the bottom of income distribution.

Apparently, low income groups are more satisfied than high income groups when economic conditions are improving, since they feel they are getting better through time, and then relative deprivation through society is less intense. When economic conditions are worsening low income groups have a stronger feeling that the rest of society is living better than they are, and this comparison makes them to feel worse about economic performance of the political system. Moreover, economic crisis are supposed to affect heavily over low income groups, and then deterioration in economic environment can be easily transformed in bad feelings about institutional performance. At the top of income distribution, they are less affected by a change in economic circumstances of society with respect to satisfaction with democracy, since their feelings about institutional performance are more stable in the long run. Overall, they are the more successful group in society, and they have fewer reasons to complaint about institutional performance, even when bad times come.

Perceived accountability of political system also has a significant impact over satisfaction with democracy. All the three variables included in the model have a significant coefficient in multilevel models. As expected, satisfaction with democracy is higher when citizens feel that people’ votes makes a difference and party in power also makes a difference. That implies that citizens will be able to change bad public policies replacing party in power. From a principal-agent framework this fact also implies that government will have the right incentives to follow people’ preferences, since they can be replaced in power if do not. Current government’ evaluations also have a positive impact on satisfaction with democracy. That reflects the fact that satisfaction with democracy is affected by incumbent performance, but also that the overall performance
of political institutions depends on the procedures in place to select the best rulers. Then hypothesis H4 and H5 are also confirmed by empirical analysis.

5. Conclusions

Satisfaction with democracy is a function of different dimensions of institutional performance. In this paper I identify three different dimensions of institutional performance: economic conditions in society (measured by real change in the GDP per capita over the long run at the aggregate level) and the relative position in the income distribution (at the individual level), accountability of political system, and the short-run performance of government and elected officials. I have focused on the impact of economic performance over satisfaction with democracy, and I have found that there is a consistent relationship between economic performance and satisfaction with democracy, both at the aggregate and the individual level.

The richest groups in society are the most satisfied with democracy across different countries. And those countries with the highest rates of GDP per capita growth over the long run have the most satisfied citizens. However, other dimensions of institutional performance are also important factors determining overall satisfaction with democracy. Nevertheless, the influence of economic conditions over satisfaction varies across individuals. Those at the bottom of the income distribution have the strongest reaction toward economic conditions, which can be explained as a result of a relative privation and the fact that they support heavily the effects of economic crisis.

Other dimensions of institutional performance also have an impact on satisfaction with democracy. Accountability of political institutions plays a key role. That is the consequence that social welfare is not only a function of economic conditions, but also of the existence of institutions and political processes that allow people to have an influence on political decision-making. That guarantees that individual preferences are taken into account through the political process, and then institutional devices will replace bad policies (those that oppose citizens’ preferences). A remaining puzzle is to what extent economic performance of political systems is correlated with accountability dimension. To some extent, we have to expect from these results that this correlation would positive.
6. References


