Government and Presidential Approval in Sub-national Governments: The Catalan Case

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Abstract

This paper uses aggregate and individual data to analyse the relation between the estate of the economy and the support for a sub-national government as Catalonia. We found that the level of economic power is not related with attribution of responsibilities and that the individual experiences influence economic evaluations. We have also tried to disentangle Prime Minister evaluations from government approval and we have found that, although being really correlated, the two ratings are different measures. We argue that our findings are consistent with Clarke et al. results (1995).

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ECONOMIC CONDITIONS AND GOVERNMENT SUPPORT

In the late 1960s it became a common journalistic assumption that economic factors play an important role in determining government popularity. In March 1968, Harold Wilson asserted “All political history shows that the standing of the government depends on the success of its economic policy” (Heath et al, 1991: 159). As can be seen the notion of some kind of link between economic conditions and government support is firmly established within scientific community and the literature dealing with it has grown considerably, being now very extensive\(^1\).

Most popularity functions assume a simple “reward-punishment” model of the type suggested by V. O. Key (1968). At it is simple: if economic conditions are good, so the most common argument goes, the electorate will reward incumbents, while it will punish them if economic conditions are less than satisfactory. Political actors are usually well aware of their standing with the mass public, as well as the potential political consequences of inadequate economic performance. It has been often alleged that governments, therefore, attempt to influence economic policy outputs by manipulating the levels of fiscal and monetary policy. The outcomes of such attempted manipulations -that are the economic conditions attained- serve as guidelines for the electorate’s evaluations of government performance. The implicit assumption behind this statement is that the government is directly responsible for economic conditions. Butler and Stokes had already argued that government responsibility for the economy is a fundamental assumption of the dialogue between parties and the electorate.

“Modern electorate tend to solve (the) problem of causal reasoning by assuming that certain causal relationships must exist rather than by discerning what they are. Electors focus their attention primarily on certain conditions, which they value positively or negatively and simply assume that past or future governments affect them. The public can call for a government’s dismissal in economic hard times just as it calls for a team manager’s dismissal in a losing season, in each case concluding that causal relationships must exist without knowing in detail what they are” (1976:25).

This hypothesis contrast with the strict notion of rationality, that would consider that voters differentiates between changes attributable to the government and those caused by other factors. For instance, the rise on the oil price in the seventies affected the major

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\(^1\) For overviews, see Lewis-Beck (1988) and Nannestad & Paldam (1994).
part of Occidental economies, a factor over which many governments had no influence. In that case, it would be unfair to blame the government for that situation.

The notion of responsibility is of prime importance in this kind of studies since it is evidence that those government or political parties in charge of the economy are actually held responsible for economic performance by the mass public. However, who has the power to affect economic performance on western democracies? If in a globalisation context of increasing economic interdependence it is hard to distinguish who hold the real power, in the case of a sub-national government without explicit macroeconomic competencies it seems an impossible task. This paper will try to inquire whether, and to what extent, economic variables statistically correlated with state-governments exhibit the same effect on a regional government without important competencies in this area.

Recent models of party support dynamics include Prime Minister approval variables, which for a long time has constituted a controversy in the literature. Our paper will be a contribution to this debate. Taking for granted the conceptual differences between Prime Minister approval and Government popularity (measured as governmental approval) and assuming that public perceptions of how well the prime minister is doing will be determined to a large extent by how well they believe their government is doing, we will try to find out if we can distinguish them in the Catalan context with the available data.

The paper begins with an overview of Catalan politics. Next, with time series analysis, we try to find out if economic conditions drive sub-national government support. Then, individual level data is used to strengthen the macro results and to discern whether voters really attribute economic responsibility to this government. In that sense, we will also use evaluation of policies as an alternative to clarify government responsibilities. Finally, there are examined, both the aggregate and the individual level, the connections between Prime Minister and governmental approval and their interrelationships. The conclusion considers the implications of the findings for future efforts to model party-support in Spain and Catalonia.
An overview of Catalan politics

Democracy brought a new form of territorial organisation of political power in Spain, which is known as “Autonomic State” or “State of the Autonomies (self-governing communities)”. This is undoubtedly one of the Constitution’s main innovations, which aims to solve the historic necessity to articulate Spain’s national and cultural plurality into a new political unit. This new form of territorial organisation implies a vertical distribution of the state power between the central institutions and the territorial ones, granting to each of them some competencies, bodies and resources (Fossas & Colomé, 1993). Therefore, the Autonomous Communities (AA.CC.) are territorial entities with a legal-constitutional power.

The Catalan government has assumed competencies in issues such as culture, research, tourism, mountains, fishing, publicity, sport, public works, guardianships of minors, foundations and associations. On other issues, it only assumes the execution of the state legislation: penitentiary, labour, international exhibitions (Fossas & Colomé, 1993: 21). In relevant issues such as industry, agriculture and trade, education, media, health or police force, the Catalan government has ruling powers but within the state laws. It can be seen that issues directly related with sovereignty (nationality, international affairs, armed forces, and monetary system), certain branches of law (commercial, penal and labour) or issues related to macroeconomic policies or to the general planning of the economic activity correspond to the State.

The approval of the Statute of Autonomy² of Catalonia in the referendum on October, 25th, 1979, made possible, a few months later, the first autonomous elections, which took place on March, 20th, 1980. Since that date, the Catalans have gone five times to vote in order to elect their representatives at the Catalan Parliament. The autonomous elections have been the basis for the legitimisation of the development of the Catalan autonomy. They have been also the basis for the legitimisation of Spanish democracy itself. As it was impossible to imagine an autonomy in Catalonia without a democratic framework in Spain, it is not possible to imagine a stability and a consolidation of

² The Statute of Autonomy has a double nature: on one side, it is a Law of the Parliament, and on the other, “the essential institutional rule of each AA.CC.” as the Spanish Constitution itself states (art. 147.1) (Fossas & Colomé, 1993).
democracy in Spain without a Catalan autonomy based in the elected nature of its own institutions. The Catalan government is then the fundamental basis and most symbolic expression of the Catalan self-government, as well as the expression of Spanish democracy.

There has never been such a long period of democratic and autonomous stability. Five elections, with four completed full term governments, constitutes a period long enough to allow us, with assurance, to depict some features and make some reflections on the autonomous electoral processes and the study of government support in Catalonia.

Since the first democratic elections, the nationalist coalition Convergència i Unió (CIU)\(^3\) has been in power and from 1984 to 1995 with the absolute majority of parliamentary seats. The strength of the governing coalition and the stable unity of the parties which compose it have made also possible the continuous presence of the hegemony of CiU in Catalan politics at the electoral level, as well as at the institutional level. Moreover, during this long period of time, there hasn’t been any strong and effective opposition and, therefore, any clear alternative. In a context of lacking a basic political debate, with only simple low-level political strategies for eroding the opponent and a strong personalisation of the campaigns and “presidentialisation” of Catalan politics the following elections have perpetuated the model (Vallès & Molins, 1990; Pallarès & Font, 1990). The CiU’s mandate has been defined on the basis of the ratification of Jordi Pujol as the President of the Generalitat\(^4\) as a guarantee for the continuity of government action (through his actions, his policies and his image)\(^5\). CIU and Jordi Pujol had lead the Catalan autonomy for at least 19 years, a period of time which constitutes what we could metaphorically call the childhood and part of the adolescence of the Catalan autonomy. During this period of time, from 1980 until now, there has been the process of characterisation, construction and consolidation and of the autonomy. In this context, the charismatic figure of Jordi Pujol and the lack of a strong

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\(^3\) Convergencia i Unió (CiU) is a pre-electoral coalition, composed by of two parties: Convergencia Democràtica de Catalunya (CDC) and Unió Democràtica de Catalunya (UDC).

\(^4\) The government of Catalonia is known as the Generalitat.

\(^5\) The access to institutional resources has allowed CiU to strengthen its organisational structure and widen its electoral “appeal” (in resources, utility and image).
alternative have produced a kind of inextricable nexus between the President and Catalonia.  

Nevertheless, the support which appears behind CiU’s absolute majority in the autonomous level, is unique compared to other type of elections in Catalonia. Thus, in the general elections the winning force has always been the Catalan Socialist Party (PSC) which is connected with the Spanish Socialist Party (PSOE). In the local elections, the global triumph is “divided”. This changes are produced by the phenomena of “differential abstention” and “dual vote”, that have acquired big significance in Catalan politics (Montero & Font, 1991; Riba, 1995).  

Apart from the above phenomena but connected with it, the electoral alignments and the interplay competition have been structured in the space defined by the interrelation of two main attitudinal axes. The Left/Right continuum is the main dimension of the political conflict in the party system of European democracies, and the axis of Nationalism (or the subjective national identification) expresses the conflict derived from the problems related to national integration between Catalonia and Spain.  

The government party -CIU- political discourse adopt moderate tones in relation to nationalism, with irregular emphasis according to the circumstances, while at the socio-economic level is located at the centre of the Left/Right axis adopting a liberal point of view. Its discourse is a really economic one, emphasising the role of businessman and small and medium-size companies in the development of the country. For instance, this economic discourse can be seen in the reason given by the nationalist coalition for supporting the State Government. The pacts reached in 1993 with the socialist party and from 1996 with the Popular Party have been explained by the necessity of an economic stability in order to achieve the convergence criteria for the entrance to the European Currency Unit (EURO).  

6 To figure out the strength of the identification between the person and Catalonia, it is worth mentioning the case “Banca Catalana”, in which Jordi Pujol was accused of irregularities in the management of a bank before he was elected president. People filled the streets in a demonstration of support for Catalonia considering that accusing Pujol was accusing Catalonia.  

7 In industrialised areas the left forces receive the major support while in the rural areas the nationalist coalition get better results.  

8 We want to remind that European Union issues have a lot of importance in Spanish politics. After a long period of dictatorship, the entrance in the European Community in 1996 was understood as the end of Spanish isolation.
THE DYNAMICS OF CATALAN GOVERNING-PARTY APPROVAL

The evaluation of the government performance, both in retrospective terms as well as in terms of confidence in what they can do in the future, constitutes a fundamental element in the vote orientation in contemporary democracies. The evaluations of the work carried out by the Generalitat is exceptionally positive, even if we compare it with the evaluation Catalan people make of the central government (Montero & Font, 1991), or with the evaluations the citizens of other Autonomous Communities make of their respective autonomous governments (Montero & Torcal, 1992). In addition, this positive evaluations goes beyond the limits of the loyal CiU electorate and it is high among the dual voters the coalition receives (Canals, Pallarès & Virós, 1991). Two factors help two explain such popularity. On the one hand, the structure of government responsibilities of the Autonomous Communities, in which these act mainly as lending services institutions, not having to participate in collecting taxes. This appears to be a favourable framework for their popularity being higher than the one of other administrations with collecting functions. On the other hand, as we have already said there is the emphasis the Generalitat has put on explaining its performances and, very specially, the inability of the opposition to find a convincing criticism of such performance

In this section, we shall try to see if we can apply the conventional wisdom that the state of the economy drives political support to a sub-national government. However, before starting our specification, it is important to point out one fact: Catalan politics have to be placed in the Spanish general political framework outside which its dynamics cannot be understood. We are conscious of the extremely importance of the political context on models of political support, as it structure the assignment of credit and blame. Although this assumption is of extremely importance for our case, due to a lack of data, we are not going to focus on it. As we have already mentioned, we just want to see if we can apply the hypothesis tested in State governments to regional ones. We don’t want to suggest economic is a decisive factor but examine whether it influences or not.
Data and measures

In order to account for the popularity of the nationalist party during its mandate we use aggregate monthly data between May 1991 and October 1995. Our first purpose was to estimate a function that covered the whole period of nationalist government (from 1980 until today), but we came across the problem of data frequency. While during the 80s, survey data related to the Catalan government and subjective economic perceptions was almost non-existent, from 1996 to 1998 the frequency of this data is really irregular. Therefore, our choice has been to use a unique source of data with a monthly periodicity. Using monthly data, instead of quarterly data, carries certain advantages as well as disadvantages. On the one hand, there is more “noise” with monthly data, which can produce a reduction of the fit of the model. On the other hand, by aggregating monthly data into quarterly data we lose information and the number of observations decreases.

This period of time includes an autonomic election in 1992 and finishes a month before the 1995 elections were held. From an economic point of view, this period is characterised by an important economic crises, which started at the end of 1992 and touched its bottom in 1994. In the political sphere, it is worth mentioning the governmental support given by CiU to the socialist government after the 1993 general election and the electoral success of the Popular Party in the European elections of 1994. This conservative electoral victory finished with the socialist hegemony since 1982 and continued a “search and destroy operation” (guerra de “acoso y derribo”) towards the government of Felipe Gonzalez and towards its nationalist partners, CiU and the PNV (Basque Nationalist Party), which had already started two years earlier. This period is also characterised by the existence of an atmosphere of extreme political and social tension, fuelled by political scandals (Banesto, Rubio, Roldan, Filesa, etc).

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9 It is true that we could fill the missing observations between 1996 and 1998 with some type of extrapolation technique. However we have rejected this possibility. We have considered that 18 missing observations over 36 are too many observations and our results wouldn’t be reliable.

10 The data analysed come from LINE STAFF election surveys.

11 It is worth mentioning that European Elections in the Spanish case can be seen as an opportunity of citizens to show their satisfaction or dissatisfaction with the current incumbent. In 1996, the Popular party won the General elections.
Our dependent variable—which will be used as an indicator of that popularity—is the evaluation of the Catalan Government in a ten-point scale. Figure 1 shows a relatively high valuation of the “Generalitat” between May 1991 and October 1995, with a mean of 6.19 and a median of 6.37.

**Figure 1: Dynamics of government approval, May 1991-October 1995**

The analysis will include Catalan as well as Spanish data indicators. As many studies stand for, media is an important source of information. Taking into account that most of the television channels and press are statewide, it could be possible that people’s perceptions are more influenced by the Spanish economic indicators than the Catalan ones. By introducing this two kind of aggregated indicators, we want to test either people is more influenced by their social or territorial setting or by the national one. Economic effects on support for the government are measured by monthly unemployment and inflation rates provided by the Instituto Nacional de Estadística (Spanish Statistic Institute). We haven’t used any other macroeconomic variable in the estimation of the model. As comparative research shows, unemployment and inflation are by far the most widely used and the most consistently significant indicator of macroeconomic performance. Public opinion also shows that they are the economic issues of most concern to most people and they are highly salient by the press. Apart from introducing the Catalan and Spanish unemployment rate independently, we have also included their difference. By this strategy we want to see if electors attribute the difference between these two rates to the economic record of the Catalan government.
As one important recent innovation in popularity model specification has been the inclusion of “subjective economic variables”, that is, public evaluations of national and personal economic conditions, we have also included measures of economic evaluations in terms of retrospective and prospective, egotropic and sociotropic perceptions. In this case, it is important to point out that the Spanish economic evaluations are obtained from representative surveys of the whole Spanish population. Catalan citizens’ evaluations of the Spanish economic situation could not be found.

The literature of economic voting and popularity functions is not unanimous about the convenience of using levels of the variable or the changes of those levels as predictors of government support. Using levels of the variables is full of problems and difficulties because of the non-stationarity phenomenon\(^\text{12}\). If the variables are non-stationary modelling them in level form will produce serious inferences and generate “spurious regressions” where regression coefficients appear statistically significant even when the variables are in fact absolute unrelated. To solve the spurious regression, political scientists have differenced the data. Differencing the data means removing the possible trends of the data and then, throwing away potentially useful information that may contain useful proofs of causal relationships between variables. Yet, if the trends of the variables are differenced, a possible evidence of an association is removed. As Sanders et al. point out, it is possible from a theoretical point of view that the trends of two variables reflect a long-term causal relationship, although the deviations from the trends (the short term fluctuations) are entirely unrelated (1987: 87)

From a theoretical and technical point of view, it is preferable to use the changes of the variables rather than their levels. Moreover, it is more reasonable to think that people knows the ups and downs of the variables rather than the real values. We employ Dickie-Fuller unit root test\(^\text{13}\) to determine whether the series are non-stationary. Analyses covering this period reveal that government approval, unemployment rate and

\(^{12}\) A series is weakly stationary if it mean and variance are time invariant and its auto-covariances of lags \(i\) and \(j\) depend only of the length of the time lag separating \(i\) and \(j\). See, Terence C Mills (1990:64).

\(^{13}\) Dickie-Fuller test is a simple t-ratio, but with non-standard critical values, which vary depending upon whether one includes a constant or deterministic trend in the regression analysis that generates the unit-root test statistic (Clarke et al., 1996 :20). The null hypothesis is that series has a unit root. The rejection of this hypothesis implies that the series is stationary.
the economic subjective perceptions are non-stationary but become stationary first differenced (table 1).

**Table 1: Unit Root Tests for Stationarity**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1991M5-1995M10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original series</td>
</tr>
<tr>
<td>Government support</td>
<td>-3.95</td>
</tr>
<tr>
<td>Catalan macroeconomic data</td>
<td></td>
</tr>
<tr>
<td>unemployment</td>
<td>-0.24*</td>
</tr>
<tr>
<td>inflation</td>
<td>-9.3</td>
</tr>
<tr>
<td>Spanish macroeconomic data</td>
<td></td>
</tr>
<tr>
<td>unemployment</td>
<td>-0.14*</td>
</tr>
<tr>
<td>inflation</td>
<td>-8.25</td>
</tr>
<tr>
<td>Catalan Econ. Evaluations</td>
<td></td>
</tr>
<tr>
<td>Personal Retrospective</td>
<td>-4.03</td>
</tr>
<tr>
<td>Personal Prospective</td>
<td>-4.39</td>
</tr>
<tr>
<td>National Retrospection</td>
<td>-3.05**</td>
</tr>
<tr>
<td>Spanish Econ. Evaluations</td>
<td></td>
</tr>
<tr>
<td>Personal Retrospective</td>
<td>-1.49*</td>
</tr>
<tr>
<td>Personal Prospective</td>
<td>-1.88*</td>
</tr>
<tr>
<td>National Retrospection</td>
<td>-0.53*</td>
</tr>
<tr>
<td>National Prospective</td>
<td>-1.83*</td>
</tr>
</tbody>
</table>

Critical Values, Unit Root Test

<table>
<thead>
<tr>
<th></th>
<th>p ≤ 0.05</th>
<th>p ≤ 0.01</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2.88</td>
<td>-3.47</td>
</tr>
</tbody>
</table>

*Fails to reject the null hypothesis of unit root, p ≤ 0.05.
**Fails to reject the null hypothesis of unit root, p ≤ 0.001.
Note: All test conducted with constant but without trend.

To avoid misspecification, we follow the Hendry methodology for model building\(^{14}\). Model parameters are estimated using OLS procedures. We also include the level of support for the government during the previous month (S\(_t-1\)). This specification

\(^{14}\) It basically consist on trying to estimate a general and unrestricted specification (greatest number of variables, lags) that exhaust much of the information we need. As may be expected the resultant model includes regression coefficients statistically non-significant. Accordingly, the independent variables associated with those coefficients are excluded from the model and a new shorter model is re-estimate, until we find the appropriate one. In addition to this method, we devised a complementary routine that followed a variable to variable basis. Each of the previous independent variables and their lags are introduced as a single estimator in the model, generating a list of variables with influences popular support in an autonomous manner. This routine did not change the previous model, but it has been useful in guaranteeing that our model is well specified.
represents a distributed lag model, using the Koyck transformation (Harvey, 1981), which has become a standard approach to the analysis of government popularity. From a technical point of view, this approach is reasonable due to the inherent interdependence of the observations in a series and the persistent problem of autocorrelation in time series functions. Time creates dependence not only between variables but also within them. This idea corresponds to the reality of government popularity. As far as our opinion today (i.e.: on politicians, economic evaluation) typically is very much like the opinion we had yesterday, apart from something different. In order to control for lagged effects, the lagged dependent variable is included as a control measure. This formulation is convenient because it means that only current values of the independent economic variables need to be included in the model instead of a more complex lagged model formulation (Anderson, 1995:93). Moreover, the level of government support during the previous month captures the lagged effects of the independent variable, which can remain in the future. The smaller of the coefficient for $S_{t-1}$, the shorter the memory of the system (Beck, 1991 ; McKuen, Erikson & Stimson, 1992).

**Empirical results**

The model estimated is known as a partial adjustment of an autoregressive distributed lag specification (ADL-PA):

$$Gov_t = \beta_0 + \beta_1Gov_{t-1} + \beta_2 \Delta Caun_{t-2} + \beta_3 \Delta Gret + \epsilon_t$$

Where $Gov = \text{Nationalist party support}$; $Caun = \text{catalan unemployment rate}$; $Gret = \text{Catalan economic retrospection}$; $\epsilon = \text{error term} \sim N(0,\sigma^2)$; $\beta_0 = \text{constant}$; $\beta_{1-3} = \text{regression coefficients}$. The results (table 2) shows that the Catalan unemployment rate two months ago and Catalan general retrospection affects government support. It can also be seen that Spanish measures of the state of the economy do not figure in the model, neither do the difference between the Catalan nor the Spanish unemployment rate. The lagged endogenous variable is really small showing a certain instability of the dependent variable data.
Table 2: Model of the effects of economic conditions on nationalist party support

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Model 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.45</td>
</tr>
<tr>
<td>Gov (-1)</td>
<td>.44</td>
</tr>
<tr>
<td>Δ Catalan Unemployment (-2)</td>
<td>-.38</td>
</tr>
<tr>
<td>Δ Catalan Economic Retrospections</td>
<td>.80</td>
</tr>
</tbody>
</table>

Model Diagnostics

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² (estandarized)</td>
<td>0.40</td>
<td>D.W</td>
<td>2.03</td>
</tr>
<tr>
<td>A: Serial correlation (LM)</td>
<td>14.1492 (.291)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B: Funcional form</td>
<td>.26641 (.606)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: Normality</td>
<td>.58143 (.748)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D: Heteroscedasticity</td>
<td>.32817(.567)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: A: Langrage multiplier test of residual serial correlation; B: Ramsey’s RESET test using the square of the fitted values; C: Based on a test of Skewness and Kurtosis residuals; D: based on the regression of squared residuals on squared fitted values.

It is well known the instability of the estimated coefficients in these models\textsuperscript{15}. For that reason, we have also used recursive and rolling regressions in order to check how stable is our relationship\textsuperscript{16}. Both analyses display a strong stability of the coefficients for all three variables, showing the robustness of our model.

It would be unreasonable to expect economic variables alone to be sufficiently powerful to explain changes in aggregate support for the Catalan government. Politics is a crucial factor that partially determines the dynamics of support (Eulau & Lewis-Beck, 1985). For that reason, we include a political component in the model. We want again to remind that our interest is not to estimate a popularity function, it is to find out whether

\textsuperscript{15} As Paldam points out, the VP-function is a function that is on the one hand unstable and, on the other hand, often highly significant (1991:28).

\textsuperscript{16} Recursive regressions involve basically estimating the whole model with successive periods of estimation which grow longer in each estimation. On the other hand, rolling regression involves successively re-estimating the model for established periods of, say 25 points. First, we estimate a model for the first 25 points, then, from 2 to 26 and successively until the last point.
the economy affects government support. In some way, we are using political variables as control measures.

As political variables we have included a set of dummies. Three for elections (1992 autonomic, 1993 General and 1994 European elections); several variants of a political scandal affecting the government (the case Cullell)\(^{17}\); one for the Olympic Games held in Barcelona in 1992; four alternative variables of CiU’s support to the Spanish socialist Government; and several variables modelling electoral cycles and tendencies.

The resulting model is the following:

\[
Gov_t = \beta_0 + \beta_1 Gov_{t-1} + \beta_2 \Delta Caun_{t-2} + \beta_3 \Delta Gret_t + \beta_4 Cullell_t + \varepsilon_t
\]

Where \(Gov\) = Nationalist party support; \(Caun\) = catalan unemployment rate; \(Gret\) = Catalan economic retrospection; \(Cullell\) = political scandals; \(\varepsilon\) = error term \(\sim N(0,\sigma^2)\); \(\beta_0\) = constant; \(\beta_1,..,\beta_4\) = regression coefficients.

It can be seen that only one political variable –the case Cullell- prove a statistically significant influence on approval\(^{18}\). However, the important point is to see that the economic variables are still really important and even their coefficients have improved as well as their statistical significance. Then we can conclude that Catalan aggregate economic conditions influence support to a government without macroeconomic competencies and the model seems to perform according to the simple reward-punishment hypothesis.

\(^{17}\) Although we have called Cullell to a political scandal, it is worth mention that this case not stands only for a specific event. During 1994, several cases of corruption damaged the image of the Catalan government in a Spanish context of political and social tension. We have created several dummies in order to capture the effects of these damaging events, ranging from one to 8 months (between May 1994 and November 1994).

\(^{18}\) We are conscious about the problem of heteroscedasticity of our model. After having checked what is the problem in model specification, we consider that heteroscedasticity may be produced by the political variable. This dummy variable takes value 1 between May 1994 and November 1994, which constitutes a long period for a dummy variable. We have estimated a different dummy for each month separately and we have seen that some of them were not working. Because of parsimonious specification, we decide to leave our first choice. Cullell taking 1 between-November 1994.
Table 3: Economic and political effects on Catalan party-support

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Coefficient</th>
<th>T-ratio (Prob)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.96</td>
<td>7.08 (.000)</td>
</tr>
<tr>
<td>Gov (-1)</td>
<td>.21</td>
<td>1.84 (.071)</td>
</tr>
<tr>
<td>Δ Catalan Unemployment (-2)</td>
<td>-.63</td>
<td>-5.05 (.000)</td>
</tr>
<tr>
<td>Δ Catalan Economic Retrospections</td>
<td>.67</td>
<td>2.69 (.010)</td>
</tr>
<tr>
<td>Cullell</td>
<td>-.46</td>
<td>-5.08 (.000)</td>
</tr>
</tbody>
</table>

Model Diagnosis

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>0.63</td>
</tr>
<tr>
<td>R²( estandarized)</td>
<td>0.60</td>
</tr>
<tr>
<td>D.W</td>
<td>2.02</td>
</tr>
<tr>
<td>A : Serial correlation (LM)</td>
<td>12.111 (.437)</td>
</tr>
<tr>
<td>B : Funcional form</td>
<td>.54168 (.462)</td>
</tr>
<tr>
<td>C : Normality</td>
<td>.80003 (.670)</td>
</tr>
<tr>
<td>D : Heteroscedasticity</td>
<td>5.0791 (.024)</td>
</tr>
</tbody>
</table>

Note: A : Langrange multiplier test of residual serial correlation; B : Ramsey’s RESET test using the square of the fitted values C : Based on a test of Skewness and Kurtosis residuals; D : based on the regression of squared residuals on squared fitted values.

The fact that Spanish indicators do not affect the popularity of the Catalan Government is somewhat astonishing. Even expecting that Catalan variables would have stronger effects on Catalan Government than the Spanish ones, we did not expect the latter variables to be insignificant. How can people only react to Catalan macroeconomic data? We know voters have a limited economic knowledge and therefore, it seems difficult they can distinguish the two indicators. On the other hand, it has become common to assume that people may be willing to delegate their expectations’ formation to others “advisers” such as the media. Weatherford (1983:161) has maintained that there is “no question that citizens have realistic, but firmly grounded impressions of their own personal financial condition”, so that media influence might be confined to national economic conditions. Some more evidence of the crucial role of the media in interpreting and magnifying the macroeconomy is found in Sanders et al. (1993). As we have already mentioned media uses to reflect the Spanish economic situation and not the Catalan ones. The results of our analysis seem to contradict the above assumptions.
Perhaps, people surroundings really matter and the power of mass media is not so important as it is expected.

The fact that general expectations outweighed the influence of personal expectations would easily located Catalan voters as sociotropic. In a temporal dimension the general expectations locate them in the retrospective side. Although we recognise the theoretical appeal of the questions contended in those debates, we think that the interrelation between the four dimensions is so strong that being one or another the variable which affects the support may be an accidental question. In this sense, Clarke et al. (1995) analysing competing models, finds that personal expectations variants generally do well in the British case, although they do not outperform one or more alternatives incorporating other types of economic evaluations.

**POPULAR SUPPORT WITH INDIVIDUAL DATA**

The above results suggest that the economy influence sub-national government. But are these aggregate findings compatible with the individual voter calculus of the naive reward-punishment theory? It is an ecological fallacy being committed? Maybe citizens don’t perceive where the real economic power is. Maybe, they don’t distinguish between the Spanish and Catalan economic government management. Maybe, they see the Generalitat as a central political economic authority. In order to respond to these questions, micro-level analysis is especially important because they allow us to test the causal relations associated with aggregate popularity models and, consequently, validate our results. We must remind that popularity functions are basically descriptive. The models themselves serve for discover the factors that affects government popularity, but they do not really serve us to know what is the inherent process that generates the individual perceptions leading to this support. For that reason, the two bodies of research are intimately related to one another and they need each other in order to validate our hypothesis in a more conclusive way.

A typical issue in which micro-level analysis can bring forward some evidence is in the relation between Prime Minister and government approval. At an aggregate level, the series corresponding to them are so close and simultaneous that their effects on government support seems to be inextricable. Traditionally, Prime Ministerial approval
has not been introduced as an explanatory variable of government support because analysts have thought that the statistical relationship between the two series is “too close for comfort”. However, recent research, conducted basically by Clarke et al.\textsuperscript{19}, have reopened the debate about the relations between Prime Minister evaluation, government popularity and vote intention. In our case, this debate is of great importance due to the existence of a charismatic leadership.

We argument that the use of individual data can help us to strength the macro results. Hence, we are going to work now with individual level data, with the objective to discern if Catalan voters really attribute economic responsibility to the autonomous government and to bring some light into the Prime Minister debate previously mentioned.

In this section, we use 1998 individual survey data in order to explore the factors that conforms citizens evaluations of government performance\textsuperscript{20}. In the survey, there are two 10 point-scale questions. One is about the evaluation of the President Pujol and the other about the Catalan government evaluation. The responses to these questions will be our indicators of presidential and governmental evaluation respectively. In addition, we also use a group of questions about evaluation of specific policies carried out by the Generalitat, such as education, health, occupation or environmental policies. These questions provide us with more detailed information about the judgement citizens make of the different aspects of the governmental task. Finally, there are two more dichotomous questions. The first is a general assignment about government approval and the second is vote intention for the ruling governing coalition.

**Government and President evaluation**

The traditional failure in popularity functions to include public judgements of Prime Ministerial performance in aggregate party support functions is remarkable because Prime Ministers are pre- eminent figures in political life. They represent the visible link between the government activities and politics due to the role of mass media in present

\textsuperscript{19} See, for example, Clarke & Stewart (1995) and Clarke, Stewart, & Whiteley (1997)

\textsuperscript{20} The data proceeds from a Line Staff study (Ref. 6576-3) commissioned by the Generalitat of Catalonia Government and conducted in November 1998.
societies. Moreover, this absence also contradicts the results of a number of individual level analysis of electoral behaviour that demonstrate that public reactions to the Prime Minister have important effects on the vote.

As we said before, the leader factor is very important when analysing support for the CiU coalition. This is due to several facts. Jordi Pujol founded one of the parties that compose it, he is its unquestionable leader, he has been the president since he won the first autonomous elections in 1980 and his appeal for one sector of population is evident. As a result, for many people there seems to be identification between the leader and the government.

Although the conceptual difference in the above concepts, the difficulty to disentangle them empirically and the uncertainty about the causality of the relationship has lead researchers to adopt two different strategies when working with aggregate data. Firstly, not to include president evaluation in models of government evaluation. Secondly, to incorporate president evaluation, using a special technique to cope with the problem (Error Correction Models, ECM)\textsuperscript{21}. Using this mechanism in the previously estimated Catalan popularity function, we have seen that Prime Ministerial approval ratings have no-significant long-term effects on governing party popularity (Table 4). Therefore, in an aggregate level we cannot conclude that the cited variable is empirically different of party support.

However, some aggregate time series analysis indicates that prime ministerial approval ratings influence governing party support net of the effects of other variables (Clarke et al., 1995; 1997). Furthermore, some individual-level studies demonstrate that leader image have significant effects on electoral choice\textsuperscript{22}. After having examined our aggregate level results, in this section we will analyse the relation between the two variables using individual data.

\textsuperscript{21} This specification has recently been popularised by Clarke, Stewart & Whiteley (1995; 1997). We have used the Engle & Granger representation theorem.

\textsuperscript{22} See Crewe & King (1994), Miller (1990).
Table 4: Error Correction Model of the Effects of Prime Ministerial Approval on Government support

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Coefficient</th>
<th>T-ratio (Prob)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.27</td>
<td>180.99 (.000)</td>
</tr>
<tr>
<td>Δ Catalan unemployment (-2)</td>
<td>-7.4</td>
<td>-6.32 (.000)</td>
</tr>
<tr>
<td>Δ Catalan Economic Retrospections</td>
<td>.22</td>
<td>.85 (.382)</td>
</tr>
<tr>
<td>Cullell</td>
<td>-.51</td>
<td>-6.00 (.000)</td>
</tr>
<tr>
<td>Δ Prime Ministerial Approval</td>
<td>-.23</td>
<td>2.53 (.015)</td>
</tr>
<tr>
<td>RESID (-1)</td>
<td>-.09</td>
<td>.586 (.561)</td>
</tr>
</tbody>
</table>

Model Diagnostics

- $R^2$: 0.68
- $R^2$ (estandarized): 0.64
- D.W: 1.4
- A: Serial correlation (LM): 12.9629 (.372)
- B: Functional form: .90696 (.341)
- C: Normality: .95707 (.620)
- D: Heteroscedasticity: 4.3400 (.037)

Note: A: Lagrange multiplier test of residual serial correlation; B: Ramsey’s RESET test using the square of the fitted values; C: Based on a test of Skeness and Kurtosis residuals; D: based on the regression of squared residuals on squared fitted values.

First of all, we briefly check the association between our two variables. Figure 2 presents 95% intervals of confidence for the means of government evaluation for groups defined according to the value given in the president evaluation scale. At a first glance, the plot shows an impressive relation between presidential and governmental evaluation at an aggregate level: the higher the presidential evaluation in the group, the higher the mean of governmental evaluation ($r = 0.98$). However, it is a somewhat distorting image. We know that correlation among aggregate units that combine information from many cases is always bigger than among individuals. Averaging government ratings smoothes out individual evaluations because extreme observations balance one with another.

Figure 3 shows a quite different picture than Figure 2. It contains the values of individual presidential evaluation for groups, not only their means. In it, we can observe that for each specific value of president evaluation there is an important dispersion of...
the values in government evaluation, ranging from 1 to 10 in many cases. The median of government evaluation for groups, represented by the thick line inside the boxes, is also strongly correlated with the values of the presidential rating in a parallel way that what occurs for the mean (r = 0.94). However, as can be deduced from the dispersion stressed by the graph, the individual Pearson correlation between these two variables is only 0.61, far away from the unity.

**Figure 2: Aggregate association among group means evaluation of President and Government**

![Aggregate association among group means evaluation of President and Government](image)

**Figure 3: Individual Association among evaluation of President and Government**

![Individual Association among evaluation of President and Government](image)
From the statistic point of view, we can reject the null hypothesis that the population correlation is 1 with a significance level less than 0.001. The big sample used to calculate it \( n = 1908 \) give us very precise confidence intervals for the population correlation that in any case contains the unity. As a result, we can assert with 99.9\% of confidence that the correlation between president and government evaluation is bigger than 0.56 and minor than 0.66. This is in fact an important correlation but no stronger than those that exist among other variables we are used to use in our analysis without bother us about if they are too close or not. In conclusion, we can distinguish perfectly well between president and government evaluation at the individual level and use the first as an explanatory value for the second, although at aggregate level they are extremely strongly correlated.

**Factors underlying governmental specific policies evaluations**

Evaluations of the government policies, where attribution of responsibilities look clear, can be a good method to validate our aggregate findings. Let us now turn to the set of variables that contains the citizens’ perceptions about how well are the different departments of Catalan government ruling their competencies. We are interested in knowing what is the relation between the general government approval and the evaluation of policies related to specific sectors. It seems sensible to assume that the opinions that citizens have of specific policies are particular consequences of their more general perceptions about how the government is doing in some main hidden aspects they consider important. That is, we hypothesise that there are some common latent factors underlying policies evaluations and we are interested in highlight them.

An initial exploratory factor analysis of the twelve variables recording policy evaluations determines the existence of three factors. One of them weights heavily in the “culture”, “Catalan language” and “education” policy variables. As a result, we can recognise it as a *cultural factor*. The variables with more important weights on the second factor are “financial aid to firms”, “occupation”, “housing” and “public works”. It seems clear that this is an *economic factor*. Finally, the third factor is strongly
correlated with the “health” and “welfare” policy variables, which are related with social policies. Therefore, we will identify it as a social factor. The rest of the variables, youth, law and order and environmental policies, are somewhat correlated with the three factors related above, but they are less well explained by them. In consequence, we have decided no to include the last variables in a second confirmatory factor analysis. The three factors we found explains conjointly more than 65% of the total variance in policies evaluation, being the percentage of variance explained for each factor quite similar: 25% the economic factor; 21% the cultural factor; and 19% the social factor.

Hence, we can conclude that the evaluations that citizens give on policies related to specific policies carried out by the departments of the government are mainly concretions of more general evaluations based on its perceptions on cultural, economic and social governmental performance.

The cultural factor. The existence of a cultural factor in policy evaluation is coherent with the reality of politics in Catalonia. In fact, the nationalists parties and, in particular, CiU claim for a greater level of autonomy, due to the so called “differential fact” of the region based on the historic and linguistic Catalan characteristics. It is quite normal that such a sub-national government emphasises all the cultural policies oriented to increase citizens’ “national” identity. By strengthening Catalan identification, its support for negotiating with the Spanish government the transference of more power increases. In such a circumstances, cultural policies acquire great importance and people recognise it when consider them as one of the main aspect of government evaluation.

For example, there has been recently a great debate in Catalonia concerning the politics of language due to the discussion of a new Language Law in the Catalan Parliament. In contrast to the 1983 Linguistic Normalisation Law that was reached by consensus, there were opposite views between parties about the necessity and the content of the 1998 Linguistic Policy Law. Once the ancient law succeeds in that almost all people understand Catalan, the new one intends to increase its use among people and institutions. And this goal was seen as a threat for an important sector of Spanish speakers living and working in Catalonia. The supporters and opposing to this aim have
different views about the Generalitat record on cultural aspects and, consequently, will report different positions in the evaluation of language policies.

The social factor. In addition to the cultural factor, it is quite coherent the presence of a social factor, related with welfare and health policies. Catalonia is one of the autonomous communities in Spain with a higher level of competencies, among them health and some welfare policies. Health policy is very important not only because its impact on daily life of people and the great volume of resources devoted to it but also because the innovation in the lending of service introduced by the Generalitat. In fact, Catalonia was the pioneer in Spain in introducing some aspects of private management in the service of public health. This initiative has been somewhat controversial because while for some people it enhances the service for others is a way of privatisation one of the pillars of the welfare state. Moreover, there is a Department of Social Welfare in the Generalitat that carries out some social policies and, specially, it distributes financial aids among institutions, associations and non-governmental organisations that works in favour of the needed. The character of the mainly beneficence of these policies and the lack of transparency in the distribution of the subsidies has also generated some criticisms. As a result, there are different opinions about the goodness of social policies carried out by the Generalitat and this social aspect of the government record is taken into account by citizens when evaluate its policies.

The economic factor. What is more interesting from our point of view is the presence of an economic factor in the evaluation of governmental policies that explains even more variance than the cultural factor. From an external point of view, it can sound somewhat strange that citizens give importance to economic policies in the evaluation of a government with almost no power in economic matters. However, it is coherent with our results at the aggregate level that show the significance of unemployment and Catalan economic retrospection on government support.

The importance that Catalan citizens assign to economic issues is perfectly reflected in their statements. When asked in an open question about what is the more important problem in the country, 64% of citizens say unemployment and 12% mention other economic issues as economic situation, housing or taxes. That is more than three quarters of respondents (76%) considers that the main problems of the country are of
economic nature. On the other hand, when asked about the problems that worried them at a personal or familiar level, the unemployment concerns descent until 19%. However, there is a 17% of respondents that considers the instability of jobs as problem and 15% more that are preoccupied for the rest of the economic issues. In all, more than half of surveyed (51%) is worried about economic issues at their personal or familiar level.

Another aspect to point out is that, when asked about what is the most important action carried out by the Generalitat during the last few months, there are 60% of non-respondents. However, more than half of those who give some answer cite actions related with the economy (45% say public works and 6% other issues as incentives to creating jobs or aids to create new enterprises).

In sun, Catalan community has a greater concern about economic issues. Three quarters of people considers them as the most important problems that have to face our country and half is preoccupied for economic aspects affecting his familiar life. Finally, half of those who are capable to indicate an important achievement of the Generalitat, report public works or economic policies. In consequence, is coherent that, when evaluating the results of specific policies, they take into account the underlying economic factor.

Once we have found three underlying factors of citizens’ policies evaluations, the question is are they related with the attitudinal axes that structure the political conflict in Catalonia? The answer is yes.

As we have said in the introduction, there are two independent political dimensions in Spain. The first is the well known Left/Right dimension, that plays in Europe a similar role that the liberal-conservative in United states (Inglehart & Klingemann, 1976), and that embody different cleavages, such as economic, social or defence (Budge & Farlie, 1983; Padró-Solanet, 1993). The second is the dimension related with the process of political decentralisation that some comparative European studies have detected in specific countries (Laver & Hunt, 1992; Klingemann, 1995). In Spain we call it the nationalist dimension. It expresses the tension between the different nations and cultures composing the Spanish State. Its importance varies between regions, being especially strong in an historic autonomous community as Catalonia is. Let us see how are related these two dimensions with the three factors.
On the one hand, the cultural factor we found is related with the group of policies that emphasise the historic and linguistic aspects of Catalonia in order to increase the national identity of citizens. This factor is clearly related with the nationalist dimension and explains an important part of the variance in the evaluation of specific policies. The importance of the cultural evaluation is due, precisely, to the fact that the government that citizens evaluate is a regional government, ruled by a nationalist coalition, that use the cultural factor as an alibi for claiming more autonomy. On the other hand, the economic and the social factors are related with the socio-economic Left/Right dimension, as can be deduced from the studies cited above. The percentage of variation explained by both factors conjointly is superior to the variation explained by the cultural factor in coherence with the relative importance of the left-right and nationalist dimensions, being the first more relevant than the second.

**Influence of policy evaluation and President approval on governing party support**

In previous sections we have seen that citizens evaluate the set of policies carried out by the departments of the Generalitat based on their outcomes in three main areas that are related with the two dimensions that structure the political conflict in Catalonia. Besides, we have also seen that we can distinguish well enough the evaluation of the President from the evaluation of the government at the individual level. The corresponding variables are correlated indicating that one can explain partially the other, but no so strongly correlated for invalidate the analysis.

Now, we use the three evaluations on government performance as well as presidential evaluation in order to predict governmental approval. In addition, given the lack of data in party identification or party feeling thermometers in our sample, we use a dummy

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\[23\] To test empirically the association between the factors and the dimensions of the Catalan political space, the best strategy would be to calculate the Pearson correlation among the three factors we found and some variables that express the individual positions of citizens in this political space. Unfortunately, there is not a question in the survey about self-location in the Left/Right scale. Neither is in the nationalist scale. There is only one question about the perception that citizens have of the Left/Right position of the governing coalition CIU. This can be used in some sense as a rough proxy for the self-placement in the Left/Right dimension. We can understand than those who consider CIU as a right political force are the leftist, than those who consider it as a centre force are the centrists, and than those who consider the coalition as a left force are the rightists. The correlation between this approximate self-placement and the economic and social factors is very significant, though small. Their sign tell us that left-wing people evaluate badly the economic and social task of the government than right-wing people do.
recording if the respondent voted for CiU or not in the last autonomous election in order to control for party identification.

Table 5 shows the results of the estimation of a logistic regression predicting governmental approval from the values of the cited variables. The model is highly significant and predicts correctly 90% of the cases. All variables are significant at the 0.001 level and its coefficients are positive. It means that the higher the evaluation in economic, cultural and social policies, the higher the probability to approve the government. Similarly, the higher the President’s evaluation, the higher the probability to approve the government. The reported vote in the 1995 elections is also significant at the 0.05 level indicating that, other things being equal, people who voted for CIU has a higher probability to approve the government than people who voted for other parties. This fact seems to insinuate the existence of a reciprocal effect between government approval and vote intention: people who approve the government tends to vote for the incumbent party and people who voted last time for the party now in office tends to approve its record.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic factor</td>
<td>0.8822 **</td>
<td></td>
</tr>
<tr>
<td>Cultural factor</td>
<td>0.9991 **</td>
<td></td>
</tr>
<tr>
<td>Social factor</td>
<td>0.5473 **</td>
<td></td>
</tr>
<tr>
<td>Presidential evaluation</td>
<td>0.3190 **</td>
<td></td>
</tr>
<tr>
<td>Vote for CIU in 1995</td>
<td>0.6840 *</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.0580</td>
<td></td>
</tr>
</tbody>
</table>

N: 622
Model Chi-square: 213.51 **
Overall correct prediction: 89.55%
$R^2_{LA} *100$: 37.3%

** Significant at 0.01 level; * significant at 0.05 level

Due to the fact that the logistic model is not lineal it is difficult to grasp what are the variables that have a major impact in governmental approval, because it is something that varies depending on the other variable values. For example, one typical citizen, with middle perceptions about government record in economic, cultural and social
policies, that gives an evaluation to the President equal to the mean, and that voted for CiU in 1995, has a probability to approve the government of 0.95. In contrast, if he did not vote for CiU, the probability descents until 0.90. Then, for this moderate citizen there is only a difference of 5% in the approval probability depending on his vote in the last autonomous election. However, this difference is not always the same. For a more extreme individual, with a negative evaluation of economic, cultural and social policies and also with a negative evaluation of the president (for example, -1 in each factor and 4 for Pujol evaluation) the difference is bigger. He has a probability of 0.40 to approve the government if he had voted for CIU in the previous election and 0.15 if he had not.

The best way to decode the information provided by the model is displaying graphically the conditioned effects of each variable subject to specific values of the rest of variables. Figures 4 to 6 represent the conditioned effects of economic, cultural and social policy evaluations respectively in government approval subjects to presidential approval. All three shows a clear asymmetry with respect to the mean. Concretely, the effects of an increase of one unity in the value of policy evaluations are bigger when the citizen has a negative perception of them than when he has a positive one. Furthermore, they also show that, when policy evaluations are negative, the effect of an increase of presidential evaluation is very important while it is far smaller when policy evaluations are positive.

Figure 7 shows the effects of presidential evaluation in governmental approval conditioned by the evaluation of economic policies. It manifests that increases in presidential evaluation have in many cases a big impact on the probability to approve government. For instance, when the economic evaluation is negative (say, -2), the difference of probabilities between one citizen that evaluates Pujol with 1 and another that evaluates him with 10 is more than 60%. However, this impact decreases when the economic evaluation become positive, being quasi null when it reaches the maximum. Moreover, the graph enlightens the importance of the economic factor in governmental approval. In fact, people with economic evaluations equal or superior to the mean will always approve the government, even if they rate the president extremely worse.

24 The economic, cultural and social variables are standardised. As a result, its mean is zero and its standard deviation 1. Negative values correspond to evaluations below the mean and positive values over the mean. The president evaluation variable ranges from 1 to 10, being the mean 6.67.
CONCLUSION

In this paper we have examined if economic variables influence popular support for sub-national governments, using the classical political-economic aggregate model. In a first stage we have estimated a model with macroeconomic indicators and variables of economic perceptions and later on, we have introduced variables measuring specific political events in order to control the previous results. Secondly, we validate our aggregate findings using a micro-level approach. In this section we have also tried to bring some light into the prime minister/party approval ratings debate, as we consider it highly important in the Catalan case we are analysing.

The empirical results contained in this study clearly shows the following points:

- **The responsibility hypothesis works in political institutions without explicit macroeconomic competencies.** In consequence, it seems that the relation between responsibility and economic power is no so straightforward as it could be thought. The foundations of the traditional reward-punishment hypothesis remain unclear. An alternative to see if people attribute economic changes to the incumbent may be to use evaluations of the policies, where the attribution of responsibilities looks clear. Our analysis has showed that factors underlying policy evaluations affects Catalan government approval.

- **Support to sub-national governments appears to be influenced by regional economic indicators and not by the national ones.** The research has shown that Spanish economic indicators are not significant, even though they are more enlightened by the media than Catalan data. Therefore, it seems that there are different economic perceptions among the regions composing a country. The cause for that reason could be that citizens’ perceptions are mainly coloured by their experiences and his nearby context (i.e., social, political, etc), although mass media plays also an important role. It is possible that people only takes into account mass media information when it appears to be credible and according with their experiences.
Prime Minister and party approval ratings are distinct in spite of being strongly correlated at an aggregate level \((r = 0.81)\). In this sense, Catalan data shows that the individual correlation of these two variables is between 0.56 and 0.66, far away than the unity. In addition, logistic models for government approval demonstrates that people with good perception of economic record have a high probability to approve positively the government even though they have a negative evaluation of the Prime Minister.

In conclusion, the question of why people should attribute economic changes to the “incumbent’s action” remains unclear. One of the assumptions that lay behind the reward-punishment hypothesis is that there is a “clarity of responsibilities” in terms of which party (or parties) is (are) responsible for macroeconomic policy and performance. Without clarity of responsibility, there is no reason that there should be any correlation between party support patterns and the economy. A second assumption behind the hypothesis, is the existence of a viable and credible opposition to which citizens may approve or vote if they don’t like the incumbent party’s performance. As David Sanders states, if, for whatever reasons, voters believe that the opposition fail to offer a credible alternative to the incumbent party, then, regardless to the political complexion of the incumbent, macroeconomic performance need not necessarily damage the government (1998: 8). Therefore, in conditions of non-credible opposition there should be no correlation between party support and the state of the economy. For instance, this sort of situation might have existed in England during 1980’s and 1990’s. By this time, the labour party was immerse in a crisis and had serious problems of credibility. It was not seen as a potential governing party (Seyd, 1997; King, 1997). However, in fact, several studies have showed how the conservatives were affected by macro-economy (Sanders et al., 1987; Clarke et al., 1995).

In this context, how should the economy influence Catalan government support? People perceive that the performance of the economy is due to the governments’ control, independently if it has already power. It seems that people do not know where the power is. As a consequence, accountability or attribution of responsibilities does not mean to have competencies in a concrete area. A critical question here may be whether people is responding to the economy itself or to a political debate. As Butler and Stokes said, “What the economy means as a national issue depends on the economic debate
between parties and is capable of changing over time” (1975: 391). The model for explaining the connections between the economy and politics seems to be a model of debate, which includes persuasiveness, perceptions, sympathies and so on. This explanation reflects Thatcher’s claim “there is no alternative”. Conservatives could not be blamed for economic conditions because world recessions, technical advances, strikes, etc might cause them. This is also the Catalan case. As we have already said, the Catalan government emphasises economic issues. Pujol always attributes the economic success of the Spanish economy to his influence in Spanish politics when his party gives parliamentary support to the national government. It is probable that, when the European Union acquires more power, the responsibility of attributions in any statewide government support would follow a similar pattern than the one found between Catalonia and Spain. The political discourse has a substantial role as mediating variable between the economy and politics. Can we say that it is a matter of discourse, not a matter of competencies? 

25 Surely, the institutions, the level of competencies and the general political context influence the discourse.
Figure 4: Effects of economic evaluation in government approval conditioned to presidential evaluation

Figure 5: Effects of cultural evaluation in government approval conditioned to presidential evaluation
Figure 6: Effects of social evaluation in government approval conditioned to presidential evaluation

Figure 7: Effects of presidential evaluation in government approval conditioned to economic factor
References


BUTLER, DAVID & DONALD STOKES (1976) Political Change in Britain. New York, St Martin’s Press.


