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Catalan cases

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# Separatism and Identity: A comparative analysis of the Basque and Catalan cases\*

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## Abstract

Regionally-based nationalist parties are a normal part of political processes but at times, the separatist goal surfaces in an overt effort to secede. We study what issues are activated in voters' preferences when responding to separatist efforts. We examine this question through a careful, analytical comparison of the Catalan and Basque regions of Spain during the period 1998-2016. We exploit the fact that these two regions are comparable in their histories and political systems, yet the Basques pushed to leave Spain in the early 2000s and the Catalans pursued independence about fifteen years later. We find that secessionist efforts by regionally-based parties have been reflected as a rise in language-based identity politics. In this regard, we find strong evidence supporting that secession and separatism is rooted in identity politics, rather than economic discontent or political ideologies.

**Keywords:** Identity; spatial voting; secession; language politics

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# 1 Introduction

Radical separatist parties arise out of the local cultures within nations. These parties demand autonomous powers, public policies that are attuned to their particular constituencies, and laws that reinforce cultural differences. Such demands reflect sincere preferences of people, but they create tensions among the regions in a nation, making national politics difficult to manage and pulling voters in the regions away from the ideologies and partisan divisions that characterize the usual left-right orientation of national politics. Radical parties are often viewed as a threat to the nation-state, as most ultimately seek to form separate countries. Those goals, however, are rarely manifest. Regionally-based nationalist parties have become a normal part of political processes throughout the world; separatist parties run for elections and win seats in regional and national legislatures in Belgium, Canada, Denmark, France, India, Italy, Pakistan, Spain, and the United Kingdom (Zirakzadeh, 1989). In all of these instances, separatist parties function within the normal political and governmental process, and often are even part of the national government (Heller, 2002; Ruiz-Rufino, 2012). At times, however, the separatist goal surfaces in an overt effort to secede (Brancatti, 2006). Notable recent examples include attempts in Scotland and Catalonia to separate from the UK and Spain, respectively, through public referenda. Separatist movements can also result in violent political acts, even civil war, such as in the former Yugoslavia in the 1990s (Jenne, Saideman and Lowe, 2007).

What fuels the secessionist moment in a country? We examine this question from the perspective of the voters. When a region seeks to leave a nation, what ideas or values are activated within that region that increase public support for secessionist parties and leaders? We provide a careful, analytical comparison of the Catalan and Basque regions for the period 1998-2016. We exploit the fact that separatist efforts in these similar regions have not coincided in time. We show that secessionist efforts in Catalonia and the Basque region have been reflected as a rise in language-based identity politics. We consider, and set aside, three alternative explanations: economic self-interest, ideology or spatial preferences of voters, and party alignments and dealignments. We find no evidence that the increase in separatist vote comes from economic discontent or hardship in the regions, from changes in the ideologies of the electorates, from changes in the ideological alignment among the parties, or from the emergence of new parties or the disintegration of older parties.

Our approach is both comparative and analytical. We provide a careful comparison of two Spanish regions, the Basque Region and Catalonia, and examine the nature of electoral support for separatist parties in their Parliamentary Elections to the Regional Government. We compare the regions through the lens of an analytical empirical model that allows us to measure the importance of economics,

ideology, and identity in the choices that voters made in each regional election from 1998 to 2016 (immediately before the Catalan independence vote). To capture the main features of voters' preferences, we estimate an empirical spatial model of voting in each of the Basque and Catalan regional elections. The model that we employ allows estimation of the salience of multiple spatial dimensions of voting as well as the importance of valence issues in a multi-party context. We extend the application of that model to a comparative perspective.

We explore individual survey data about the regional elections in these areas. The Election Surveys conducted by the Centro de Investigaciones Sociológicas (CIS) ask comparable questions in both regions on perceptions of the economy, individuals' positions on the left-right and nationalism, individuals' perceptions of the ideological orientations of the political parties, language usage, cultural identity, as well as vote choice and party identification.<sup>1</sup> This allows for immediate comparison of the estimates of the models for the two regions and understanding not only what changed over time in Catalonia, but what changed (and did not) in the Basque region in the same period. Our data set contains 23,800 individual level data for the Basque region, and 28,600 individual level data for the Catalan region.

The politics surrounding the separatist movements in the Basque Country and Catalonia provides an ideal comparison for testing theories of secession (Conversi, 2000). The two regions have similar economies; they have similar histories (both were on the same side of civil wars in the 19th and 20th Centuries); they have been within the same constitutional system (Spain) for the same amount of time; and they have very similar party systems. In fact, the contrast between the regions presents researchers with a puzzle. Both regions have had strong pro-independence parties in their regional politics from the time of the 1978 Spanish Constitution. By most historical accounts, the Basque separatists were far more strident and radical, and most political observers of Spanish politics from 1980 to 2010 would have expected the Basques to push separatism strongly than the Catalans. However, the Basque region kept silence about separatism since 2008 and the terrorist band ETA, that pursued the independence of the Basque region, disarmed in 2017. In the meanwhile, Catalonia has persevered in its secessionist strategy (Guibernau, 2013) and in 2017, the Catalan Government called a referendum on secession .

Our comparative strategy exploits the fact that separatist efforts in these regions did not coincide in time. In both regions, political leaders attempted to break with Spain. The 2001 parliamentary elections to the Basque Government were plebiscite elections that confronted two blocks, the one defending the Constitutional regime, and the other defending self-determination out of the limits of the

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<sup>1</sup>The CIS is a public entity of the Spanish Government. Population size in the Basque Country and Catalonia are around two million and seven and a half million respectively.

Spanish Constitution. In Catalonia, the 2015 parliamentary elections to the Catalan Government were plebiscite on Catalonia independence with two differentiated blocks, the constitutionalist, and the defenders of a referendum of independence for the region. The Basque separatist movement lost its strength in 2009 when the leader of the dominant nationalist party, Juan José Ibarretxe, lost the Presidency of the Basque Parliament. By contrast, in Catalonia, the separatist movement broke in 2010 just after the Spanish Constitutional Court rejected the Catalan Statut, a bill passed by the Spanish Government and approved in referendum by the Catalans that provided additional autonomy to the region (Rico and Liñeira, 2014; Heller and Shvetsova, 2018). We analyze six consecutive elections to the regional parliaments of these two regions and compare the importance in voters' preferences of spatial and valence issues during this period. We then explore what are the common factors that affected voters' decisions in the 2001 Basque elections and the 2015 Catalan elections.

There is an extensive literature on the analysis of secessionism and the movements that seek regional independence. Reaching independence and becoming a new state can be viewed as more rewarding for several reasons: i) individuals believe that their economic conditions will become better off; ii) individuals believe that they will feel more attached to their representatives, their culture, their flag and other identity symbols (Collier and Hoeffler, 2011; Sorens, 2012); or iii) individuals believe that they will get rid of their totalitarianism regime. The arguments in i) are connected to the poor performance of central government politicians and the negative impact on the region. Several authors have suggested this line of argument for Quebec secessionist movement (Blais and Nadeau, 1992; Clarke et al., 2004; Boylan, 2015), but others have discarded the economic argument as an explanation of the Catalan nationalism upturn (Cuadras-Morato and Rodon, 2019). According to the arguments in ii), language and culture generate in-group effects against those who do not share their regional identity (Collier and Hoeffler, 2011). Political parties at the regional level take part of this division and can be rewarded or punished in terms of votes (Ansolabehere and Puy, 2016). Language has been shown to have an impact on the secessionist vote-share (Gellner, 1983; Sorens, 2005) and on the construction of states (Laitin, 1988; Laitin et al., 1994). In relation to the arguments in iii), several authors suggest that secessionism can be produced by the heterogeneity in preferences or culture among individuals of different regions (Wittman, 2000; Le Breton and Weber, 2003; Desmet et al., 2011).<sup>2</sup>

As far as we know, analysis on secessionist vote have been made over global

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<sup>2</sup>A research by Emizet and Hesli (1995) develops alternative theories for the Soviet Union, where high levels of social and economic development together with concentrated populations provided the contextual environments most conducive to early demands for sovereignty-

samples where each observation is a region (e.g., Sorens, 2004, 2005) or an ethnic group (e.g., Saideman and Ayres, 2000). In those analyses, regional or ethnic characteristics such as percentage of the population speaking the local language, group size or regional growth rate are independent variables, which may have an impact on the regional vote-share for secessionist parties, or on a dummy variable that indicates whether the ethnic group desires separatism. In contrast, our analysis explains individual voting decisions. From this perspective, we provide a novel analysis that explains from a dynamic perspective the electoral support for secessionism in two Spanish regions, the Basque Country and Catalonia. We believe that our results are of immediate application to other nations integrated by heterogeneous regions in terms of their cultural and linguistic identities.

The rest of the paper is organized as follows. Section 2 provides a comparison of the two regions in terms of party alignment, identity and assessment of the economic situation. In Section 3, we present an analytical empirical model of vote-choice in the regions. Section 4 estimates the salience of multiple issues in the preferences of voters. Section 5 quantifies and compares the patterns of identity voting. Section 6 provides the conclusions.

## 2 Comparing the Basque Country and Catalonia

The electoral system in the Basque and the Catalan autonomous parliaments is proportional representation. In this section, we provide a comparison of these regions in terms of their party systems, their identities and language of voters, and the perception about the economic situation.

### *Party systems and positional issues*

In the Basque Country, since the approval of the Spanish Constitution in 1978, the Nationalist Basque Party (PNV) has held the Basque Presidency for all but three years, from 2009 up to 2012, when the leader of the Euskadi Socialist Party (PSE) became President of the Basque Government. From 1987 up to 1998, the PNV governed in coalition with the PSE, and for the period 1998 up to 2009, the PNV governed in coalition with other parties: Euskal Herritarrok (EH) and Ezker Batua-Berdeak (the green left union that represents the nationwide left union party, IU). Importantly, the 2001 political campaign confronted two blocks, constitutionalists and nationalists (or pro-independence). The former of these blocks, that included the Spanish People's Party (PP) and the PSE, defended the autonomous regime approved in the 1978's Spanish Constitution. The second block proposed regional self-determination above the limits established by the Spanish Constitution. In 2012, the PNV recovered the Basque Presidency and, starting in 2016, governed in coalition with the socialist party. Since 2016, there are two additional nationwide parties, Podemos and Ciudadanos.

In Catalonia, since the approval of the Spanish Constitution, the coalition of *Convergència* and the *Democratic Union* (CiU) governed in Catalonia for more than 20 years, from 1980 up to 2003. After this period, the *Catalan Socialist Party* (PSC) held the *Catalan Presidency* for two legislatures during the period 2003-2010. CiU was reelected in 2010 and governed with the support of the PP. In 2012, the *Catalan president*, Artur Mas, called early elections and since then, CiU has governed in coalition with other nationalist parties, ERC and CUP. Importantly, the 2015 *Catalan elections* were plebiscite on Catalonia independence, with two confronted blocks: *Junts pel Sí* (JxSí) that joined all the pro-independence parties except for CUP, and the constitutionalist parties represented by the PSC, PP and *Ciudadanos* (C's). The new party *Podemos* (renamed as *Catalunya Sí que es Pot*) kept an ambiguous position.

Both the *Basque Country* and *Catalonia* show a similar party system with up to three non-nationalist parties that occupy the right, the center and the left, and two strong nationalist parties each occupying the left and the right respectively.<sup>3</sup>

We analyze reported responses to the post-electoral surveys run by the CIS concerning perceived parties' position and self-reported positions, in both the left-right and the nationalist dimension, during the period 1998-2016.<sup>4</sup> The left-right dimension represents the ideological position of parties regarding its degree of interventionism in the economy or its socialist versus conservative values. Responses are reported on the 1 to 10 left-right scale, where 1 means extreme left and 10 means extreme right.<sup>5</sup> Nationalism is understood as the degree of political decentralization of the *Autonomous Government*. Responses are reported on the 1 to 10 nationalist scale, where 1 means full centralization (or minimal autonomy for the region) and 10 means independence from the *Spanish Government* (or full autonomy for the regional government).

In Figure 1, we represent the average position of the parties in the left-right and nationalist dimensions for the period 1998-2016. Figure 1 reveals several facts:

First, the dominant parties in the regions, PNV and CiU, occupy a similar center-right nationalist position with no other party around.

Second, since 2015, nationwide parties compete with other close parties, the PP competes with C's to dominate the right non-nationalist quadrant, and the socialist party competes with *Podemos* and minor left-wing parties (IU, ICV+EUiA) for the left non-nationalist quadrant.

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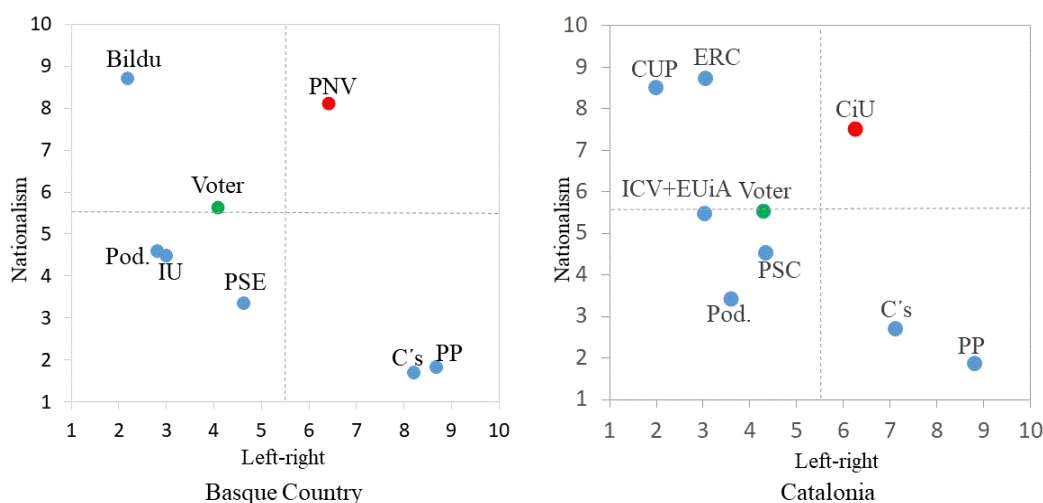
<sup>3</sup>As pointed out by Ordeshook and Shvetsova (2014), the number of political parties multiply in heterogeneous societies.

<sup>4</sup>In the post-electoral surveys, we cover an average sample size of 2,100 respondents to each Basque election and about 1,700 in each Catalan election. There is no party position question in the CIS surveys before 1998.

<sup>5</sup>There is a debate on the real meaning of left-right self-placement (Otjes, 2018). In particular, for the *Basque Country* see Strijbis and Leonisio (2012) and Dinas (2012).

Third, in both regions, the left nationalist quadrant is occupied by a party, Bildu in the Basque region and ERC in Catalonia (the left-nationalist in the Basque region renamed in several occasions EH, PCTV and Bildu).<sup>6</sup> Some other smaller parties occupy a more extreme position in this quadrant, the CUP in the 2012 and 2015 Catalan elections and Aralar in the 2005 and 2009 Basque elections.

Fourth, in both regions, the average respondent holds a center-left position with an intermediate nationalist position (labeled as "Voter" in Figure 1). Besides, the average respondent in each region is slightly more leftist than the two strongest nationwide parties, PP and the socialists (PSE and PSC), and in between the main nationalist parties in their left-right dimension.



**Figure 1:** Average parties' perceived positions for the period 1998-2016

Election results (percentage of votes and seats) to the Autonomous Governments in Euskadi and Catalonia are described in Table A1 and A2 of Appendix A. In the Basque region, there are top five political parties that divide 95 percent of the votes over the period 1998-2016. These parties are the PNV (with average vote share of 36 percent), the PSE (with average vote share of 22 percent), the PP (with average vote share of 17 percent), the left nationalist party renamed in different occasions EH/PCTV/Bildu (with average vote share of 18 percent), and IU (with average vote share of 4 percent). Since 2009, the PSE has reduced its vote-share from 31 percent to 12 percent, and both Bildu and Podemos have capture a large fraction of these votes. In Catalonia, up to 2003, there are five parties

<sup>6</sup>EH was banned in 2003 due to its ties to the terrorist band ETA, and since then, the same ideological ground was renamed in several occasions.



dividing the electorate. The nationalist-right CiU (with average support of 35 percent), the PSC (with average vote share of 35 percent), the PP (with average vote share of 10 percent), the left ICV (with average vote share of 5 percent) and ERC (with average vote share of 12 percent). Since 1991, the PSC has reduced its vote share from 38 percent to 13 percent, and the new parties C's, CUP and Podemos altogether add 35 percent of the vote share in 2015 (half of which corresponds to C's).

Interestingly, in the Basque region, the nationalist parties have regularly added more than 50 percent of votes, with this percentage reaching its maximum in the 2012 election when nationalist parties captured about 60 percent of votes. In Catalonia, the nationalist vote (that includes CiU, ERC and CUP) reached a maximum of 48 percent of votes in the 2012 and 2015 elections. Importantly, the higher support of nationalist parties in the Basque region did not follow any stronger strategy toward secessionist but instead, in the last years, secessionist efforts to secede have become stronger in Catalonia.

### *National identities*

Separated from voters' positions on the nationalist issue, there is a survey question that measures national identities: "Which of the following answers better identifies you?: 1) I feel only Spanish; 2) I feel more Spanish than Basque (or Catalan); 3) I feel equally Spanish and Basque (or Catalan); 4) I feel more Basque (or more Catalan) than Spanish; 5) I feel only Basque (or only Catalan)." For each of the regions, we divide the responses in three categories: those responding 1 or 2 (labeled as Spanish), those responding 3 (labeled as Equal), and those responding 4 or 5 (labeled as Basque or Catalan). We join pre and post electoral survey responses. Figure 2 provides the percentage of respondents to each of the proposed categories in the two regions.<sup>7</sup>

In the Basque Country, the Spanish identity represents about 10 percent of the responses. The Basque identity about 50 percent of the responses, and the Equal about 40 percent. We observe how responses have kept very stable over time.

In Catalonia, up to 2012, Catalan and Equal identities represented more than 40 percent each, and the Spanish identity about 15 percent. We observe a noticeable shift in 2012, the percentage of Catalan responses raised in 12 percentage points.<sup>8</sup>

The identity is closely related to the local languages spoken in these regions, Catalan in Catalonia and Euskera in the Basque region.<sup>9</sup> Several studies (Aspachs-

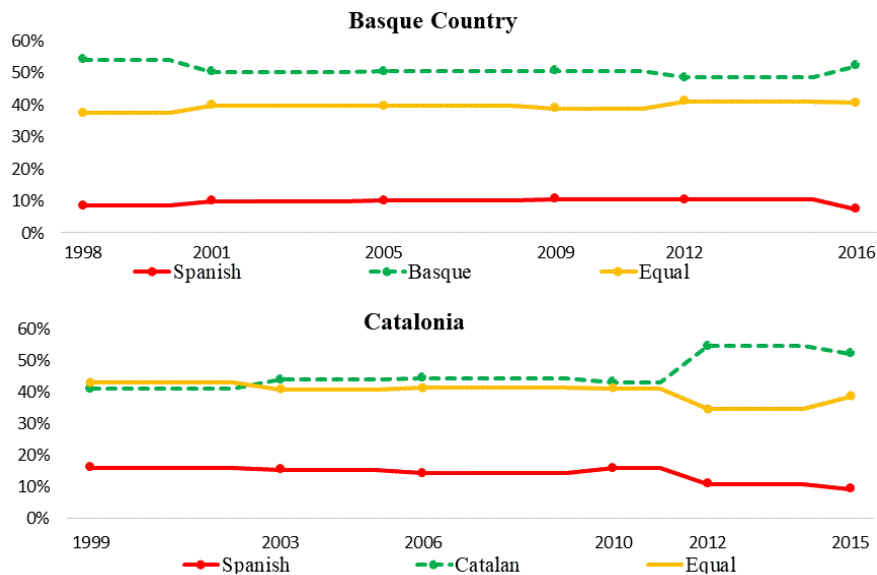
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<sup>7</sup>Figure 2 measures a total of 26,527 responses for Catalonia and 24,575 responses for the Basque Country, that is, about 4,000 responses per election year.

<sup>8</sup>This raise coincides with the decision in 2010 of the Spanish Constitutional Court of rejecting the Catalan Statut.

<sup>9</sup>The Euskera language has unknown linguistic roots, whereas the Catalan language has Latin

Bracons et al. ,2008; Clots-Figueras and Masella, 2013) show that compulsory Catalan language policy implemented in Catalonia had a significant effect on identity. We first analyze the magnitude of these local languages and second, we study the association between language and identity in the regions.



**Figure 2:** Comparing self-reported national identities of Basques and Catalans

The following table describes the percentage of the population speaking Euskera in the Basque Country and Catalan in Catalonia. The statistics for the Basque Country are obtained from the Sociolinguistic survey carried out every six years by the Basque Government. The analysis gives samples of around 4,000 respondents and distinguishes between two categories, bilingual (Spanish and Basque) and passive bilingual (who understand but do not use Euskera regularly). We add the two categories to compute the percentage of the population that can speak Euskera.<sup>10</sup> Regarding Catalonia, all the post-electoral CIS's surveys, with the ex-

roots The Levenshtein distances to the Spanish language using the ASJP Database version 18 (Wichmann et al., 2018) are 101 and 72 for the Euskera and the Catalan respectively, where the value above 100 means that the language does not even possess those similarities which are expected to exist by chance (Isphording and Otten, 2013).

<sup>10</sup>The CIS survey ask respondents to report if they speak fluent Euskera. This question is different from that of the Sociolinguistic Basque Survey. According to the CIS, the percentage of fluent Euskera speakers is about 37 percent for the years 2005, 2009, 2012 and it rises to 41 percent in 2016.

ception of 2006, ask respondents whether they speak fluent Catalan. We calculate the percentages over samples of around 1,500 respondents.

Year	Euskera speakers*	Year	Catalan speakers**
2016	53%	2015	83.2%
2011	49.4%	2012	86.3%
2006	48.4%	2010	79.7%
2001	40.8%	2003	82.2%
1996	41.6%	1999	80%

\*Basque Government \*\*CIS

Table 1: [Language spoken in the Basque and Catalonia regions](#)

The comparison reveals that there are more Catalan than Euskera speakers, 53 percent of the Basque population can speak Euskera and about 83 percent of the Catalan population can speak Catalan according to the surveys of 2015 and 2016. Since 1996 up to 2016, an additional 10 percent of the Basque population speaks Euskera. Since 1999 up to 2015, the percentage of Catalan speakers in Catalonia has kept quite stable around the 82 percent of the Catalan population.<sup>11</sup>

The following table explores the percentage of Euskera versus non-Euskera speakers, and Catalan versus non-Catalan speakers who identify with the Basque and Catalan identities. We separate responses in two periods to compare the evolution: 2005-2009 and 2012-2016 for the Basque Country, 1999-2010 and 2012-2016 for Catalonia.<sup>12</sup>

Basque identity		
Years	Speak Euskera	Do not speak Euskera
2012-2016	77.3%	33.3%
2005-2009	79.7%	33.2%

Catalan identity		
Years	Speak Catalan	Do not speak Catalan
2012-2015	61%	5.9%
1999-2010	48.1%	6%

Table 2: [Percentage of nationalist identities among local language speakers](#)

<sup>11</sup>A study on Catalonia shows increasing expected earnings among individuals who are proficient in Catalan and those who are not (Paolo and Raymond, 2012).

<sup>12</sup>The table contains reported responses to the 2005, 2009, 2012 and 2016 electoral CIS's surveys to the Basque Government, and responses to the 2003, 2010, 2012 and 2015 post-electoral CIS surveys to the Catalan Government.

The table reveals two facts:

First, about 8 out of 10 Euskera speakers self-identify as Basques. In contrast, about 3 out of 10 non-Euskera speakers self-identify as Basques. There is no relevant shift in these numbers across the two analyzed periods.

Second, about 5 out of 10 Catalan speakers self-identify as Catalans for the 1999-2010 period, and 6 out of 10 Catalan speakers self-identify as Catalans during the 2012-2015 period. Among non-Catalan speakers, less than 1 out of 10 self-identifies as Catalan, with no relevant shift over the periods of analysis.

We deduce that language is much more divisive in Catalonia, speaking Catalan (over not speaking) in the last analyzed period, multiplies by 10 the probability of self-reporting Catalan identity, speaking Euskera (over not speaking) however, only multiplies by two and a half the probability of self-reporting Basque identity. Still, the association between language and identity is stronger in the Basque Country than in Catalonia: about 80 percent of Euskera speakers self-identify as Basques, whereas about 60 percent of Catalan speakers self-identify as Catalans. Interestingly, the 2012's upraise in Catalan identity (represented in Figure 2), can be mostly attributed to Catalan speakers: when comparing the 2012-2015 and the 1999-2010 periods, an additional 13 percent of Catalan speakers (representing about 9 percent of the Catalan population) self-declared their Catalan identity.

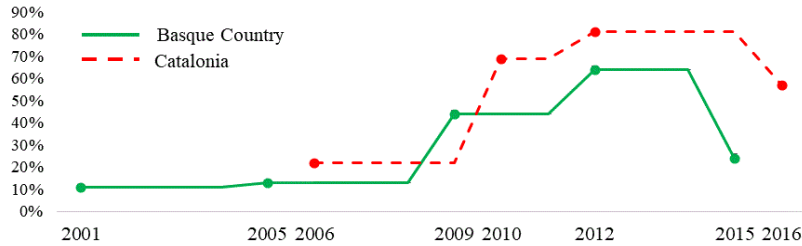
### ***Assessment of the economic situation***

Starting in 1998 for the Basque region and in 2006 for Catalonia, the CIS's surveys ask the same question in the two regions: "What is your perception about the economic situation in your region? There are five responses: 1) Very good; 2) Good; 3) Regular; 4) Bad; 5) Very bad."<sup>13</sup> We measure the percentage of responses with a negative economic perception about their region (i.e., the Bad and Very bad responses over total responses to this question). Figure 3 presents the comparison.

The comparison reveals that respondents showed low negative perception during the years of economic prosperity (from 1998 to 2006), highly negative perception during the years of economic downturn (from 2007 to 2013), and a decreasing negative perception during the period of economic recovery (2015 onwards). There is strong variation over time. In 2012, about 64 percent of respondents in the Basque Country and about 81 percent of respondents in Catalonia, reported negative perception of the economic situation in their region. By contrast, in 2005 and 2006 respectively, only 13 percent of Basque respondents and 22 percent of Catalan respondents reported negative perception. Catalonia maintains a more negative perception. Around 2010, an additional 20 percent of the Catalans declared their negative perception in comparison to the Basque region.

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<sup>13</sup>The question does not appear in all the CIS's surveys. Tables A3 and A4 in Appendix B provide a detailed description of what surveys contain the economic question (which we refer to as "econ"), with 20,712 responses in the Basque region and 13,706 responses in Catalonia.



**Figure 3:** Percentage of respondents with negative perception about their regional economy

In sum, our comparative analysis shows similar party systems and similar divisions of the population in terms of identity in the regions. Identities have been stable over time and only the Catalan identity has shifted in the last decade (see also Molina and Quiroga, 2017). The main differences are the larger fraction of the population that speaks Catalan (about 80 percent) in comparison to Euskera (about 50 percent) and the Catalans’ economy perception that is more negative. Interestingly, we show that language is much more divisive in Catalonia; speaking Catalan multiplies by 10 the probability of self-reporting Catalan identity and speaking Euskera multiplies by less than three times the probability of self-reporting Basque identity. This division is relevant since there is a higher fraction of Catalan speakers.

### 3 Explaining party-vote

The pre and post electoral CIS’s surveys to the Basque and Catalan Parliamentary Elections ask respondents whether they voted and how. In each election year, we join the pre and post electoral surveys. We focus on five explanatory variables to vote choice or preference – left-right orientation, nationalist orientation, identity, assessment of the economy and population size. Left-right and nationalist orientation capture spatial voting and are measured in the 1 to 10 scale. Identity is an in-group valence that measures how different groups of voters value parties. The assessment of the economy reflects instrumental voting, and population size is included as a control variable.<sup>14</sup>

Tables A3 and A4 in Appendix B describe our data set specifying the variables

<sup>14</sup>The existing literature has noted that there is a correlation between community size and regional party vote (Beck, 2000). We include three categories: 1) for rural areas with less than 10,000 inhabitants; 2) for cities with a number of inhabitants between 10,000 and 100,000; and 3) for the remaining larger cities.

contained in each pre and post electoral surveys, as well as summary statistics.<sup>15</sup> The economy question is not included in all the surveys, and the identity questions is in all but one of the surveys. We observe how average positional issues, left-right and nationalism, as well as identity and population are about the same in both regions. The two relevant differences are the average more negative assessment about the economy in Catalonia with respect to the Basque region (3.1 with respect to 3.8 in the 1 to 5 scale), and the percentage of the sample that reports speaking Euskera (about 40 percent of the Basques) and Catalan (about 80 percent of the Catalans).

We propose a multinomial logit analysis to estimate the probability of voting for every party against the dominant party in the region, PNV in the Basque region and CiU in Catalonia. Regressions are performed in Stata. We use a spatial model of voting that includes identity. The variables on which we base voting decisions are self-reported responses on the left-right and nationalist positions, self-reported identity, the assessment about the economic situation in the region, and population size as a control variable. In Appendix C, we provide a detailed description of the theoretical model that we use to explain individual voting decisions.

Vote choice or preference is the outcome of interest. The surveys branch the voting question, asking people whether they voted (or planned to vote). Of voters (or likely voters), the survey asks for which party or coalition of parties the individual voted. We consider that three factors can have an impact in voting decisions. These factors are:

First, *positional-voting*, which measures how voters opt for those parties that are closer to the voters' own ideal positional issues. On this respect, we explain whether the left-right and the nationalist dimensions have any impact.

Second, *identity voting*, which is tied to the culture and the feelings for the region. It captures how voters move toward the parties that align with their identity (see [Sorens, 2005](#); [Ansolabehere and Puy, 2016](#)). Above the traditional spatial model of voting, identity emerges as a new dimension and we analyze how this within group variable affects voting patterns.

Third, *instrumental voting*, which captures how voters care about the policy they get (see, e.g., [Fiorina, 1976](#)). We explore whether perceptions about the economic situation in the region has an impact on voting decisions.

We start by comparing the multinomial regression coefficients of each of the dependent variables that explain vote-choice in the Basque Country and Catalonia. Tables 3 and 4 describe the estimated coefficients.<sup>16</sup>

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<sup>15</sup>The language questions, whether Euskera and Catalan can also capture identity. Language, however, is only present in half of the surveys and we, therefore, do not include it in the regression analysis.

<sup>16</sup>All the questions of interest include a "don't know" or/and "don't reply" answer that we consider as missing observations in our analysis.

Year Choice	Independent Variables					Obs Ps.R <sup>2</sup>
	Left-Right $k_1$ (SE)	Nationalism $k_2$ (SE)	Identity $k_2$ (SE)	Popul b (SE)	Econ b (SE)	
2016						1,226
PSE v PNV	-.49***(.09)	-.63***(.06)	-.55***(.15)	.22(.17)	-.1(.16)	.38
PP v PNV	.74***(.13)	-.62***(.09)	-.76***(.22)	.54*(.32)	-.02(.25)	
Bildu v PNV	-1.05***(.08)	-.04(.05)	1.57***(.15)	.05(.12)	.45***(.13)	
Pod v PNV	-.93***(.08)	-.4***(.05)	-.11(.14)	.3**(.14)	.24*(.13)	
C's v PNV	.18(.2)	-.6***(.15)	-.83**(.33)	.7(.6)	-.14(.4)	
2012						2,104
PSE v PNV	-.89***(.07)	-.55***(.04)	-1.09***(.11)	-.11(.1)	-.11(.11)	.47
PP v PNV	.93***(.12)	-.67***(.07)	-1.05***(.18)	.17(.2)	.12(.19)	
EH v PNV	-1.21***(.06)	.07*(.04)	.78***(.11)	.07(.09)	.1(.1)	
IU v PNV	-1.33***(.13)	-.52***(.07)	-.59***(.18)	.11(.19)	-.28(.18)	
2009						1,993
PSE v PNV	-.66***(.07)	-.6***(.04)	-1.31***(.13)	.25**(.1)	-.07(.1)	.39
PP v PNV	1.23***(.13)	-.76***(.07)	-1.65***(.19)	.44**(.2)	.19(.17)	
Aral v PNV	-.6***(.07)	-.02(.05)	.53***(.16)	-.14(.11)	-.07(.12)	
IU v PNV	-1.1***(.1)	-.46***(.06)	-.38**(.18)	.34**(.16)	.06(.14)	
2005						1,845
PSE v PNV	-.48***(.08)	-.8***(.06)	-1.55***(.14)	.07(.12)	.42***(.14)	.46
PP v PNV	.98***(.13)	-1.1***(.09)	-1.74***(.22)	.36*(.21)	.45**(.2)	
PCTV v PNV	-1.43***(.1)	.00(.07)	.92***(.19)	.34**(.14)	.58***(.14)	
IU v PNV	-1.01***(.09)	-.62***(.06)	-.37**(.15)	.08(.14)	.39**(.15)	
2001						1,052
PSE v PNV	-.57***(.1)	-.73***(.07)	-1.47***(.19)	.51***(.19)	.14(.19)	.53
PP v PNV	.73***(.11)	-.84***(.08)	-1.52***(.23)	.66***(.23)	.31(.22)	
EH v PNV	-.94***(.1)	.05(.08)	2.84***(.45)	-.37**(.18)	.59***(.19)	
IU v PNV	-.88***(.13)	-.51***(.09)	-.84***(.23)	.4*(.25)	.21(.22)	
1998						991
PSE v PNV	-.79***(.11)	-.74***(.1)	-.47***(.17)	-.11(.19)	.06(.21)	.41
PP v PNV	.81***(.13)	-.74***(.1)	-.84***(.2)	.53(.26)	-.05*(.28)	
EH v PNV	-1.35***(.11)	-.01(.09)	1.67***(.26)	-.27*(.16)	1.08***(.19)	
IU v PNV	-1.21***(.14)	-.52***(.1)	-.19(.24)	.82**(.32)	.5**(.24)	

Notes: Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 3: Explaining vote for party, Multinomial Logit. Basque Country 1998-2016

Year Choice	Independent Variables					Obs/ Ps.R <sup>2</sup> .
	Left-Right $k_1$ (SE)	Nationalism $k_2$ (SE)	Identity $k_3$ (SE)	Popul b (SE)	Econ b (SE)	
2015						932
PSC v JxSí	-.29***(.11)	-.54***(.07)	-1.9***(.23)	.45**(.22)	.36**(.18)	.41
PP v JxSí	1.46***(.2)	-.97***(.17)	-2.4***(.34)	.49(.41)	.00(.31)	
C's v JxSí	.53***(.12)	-.72***(.08)	-1.83***(.24)	.26(.22)	.17(.19)	
CUP v JxSí	-.89***(.1)	-.22***(.06)	-.15(.19)	.13(.15)	.29*(.14)	
Pot v JxSí	-.76***(.12)	-.53***(.07)	-1.41***(.23)	.31(.22)	.33*(.19)	
2012						2,950
PSC v CiU	-.74***(.05)	-.38***(.04)	-1.28***(.11)	.36***(.1)	.04(.09)	.33
PP v CiU	.49***(.06)	-.59***(.05)	-1.38***(.14)	.29**(.13)	-.04(.12)	
ERC v CiU	-.84***(.04)	.01(.04)	.34***(.1)	.00(.07)	.04(.07)	
ICV v CiU	-1.15***(.06)	-.29***(.04)	-.64***(.12)	.35***(.1)	.06(.1)	
C's v CiU	-.01(.06)	-.54***(.05)	-.99***(.14)	.37***(.14)	.4***(.14)	
CUP v CiU	-1.33***(.11)	-.29***(.07)	.77***(.24)	.09(.16)	.6***(.19)	
2010						2,961
PSC v CiU	-.76***(.04)	-.24***(.03)	-.5***(.08)	.14*(.08)	-.53***(.07)	.27
PP v CiU	.48***(.05)	-.36***(.04)	-.73***(.11)	.4***(.12)	.28***(.11)	
ERC v CiU	-.84***(.05)	.08*(.04)	.72***(.11)	-.22**(.09)	-.24***(.09)	
ICV v CiU	-1.06***(.06)	-.16***(.04)	-.22**(.1)	.43***(.1)	-.19**(.09)	
C's v CiU	-.119*(.07)	-.43***(.06)	-.5***(.13)	.42***(.15)	.28**(.13)	
2006						903
PSC v CiU	-1.08***(.1)	-.37***(.06)	-.46***(.16)	-.02(.14)		.34
PP v CiU	.46***(.14)	-.42***(.11)	-1.12***(.26)	.49*(.29)		
ERC v CiU	-1.42***(.11)	.02(.08)	.62***(.21)	-.11(.16)		
ICV v CiU	-1.64***(.12)	-.34***(.07)	.08(.21)	.09(.18)		
C's v CiU	-.44***(.15)	-.68***(.12)	-.42(.26)	.86**(.34)		
2003						2,309
PSC v CiU	-.98***(.05)	-.17***(.04)	-.67***(.09)	.08(.08)		.29
PP v CiU	.43***(.06)	-.3***(.04)	-.9***(.11)	.22*(.11)		
ERC v CiU	-1.14***(.06)	.09*(.04)	.56***(.11)	-.19**(.09)		
ICV v CiU	-1.43***(.08)	-.18***(.05)	-.2(.13)	.16(.12)		
1999						2,968
PSC v CiU	-.88***(.04)	-.16***(.03)	-.64***(.07)	.26***(.06)		.30
PP v CiU	.55***(.06)	-.36***(.05)	-.67***(.1)	.29**(.11)		
ERC v CiU	-.97***(.06)	.07(.04)	.85***(.12)	-.07(.09)		
ICV v CiU	-1.28***(.09)	-.2***(.05)	-.25*(.14)	.44***(.15)		

Notes: Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4: [Explaining vote for party, Multinomial Logit. Catalonia 1999-2015](#)



When exploring what variables exert a significant effect on voting decisions, we observe how positional and identity voting are the driving forces that determine voting decisions, both in the Basque Country and Catalonia. Population size and the economy do not exert systematic effect on voting patterns.

Several comments are in order:

First, we find evidence of positional voting. Voters self-located to the right are less likely to vote for left-wing parties (PSE, PSC, Podemos and other minor left-wing parties) against PNV or CiU, but more likely to vote for PP and C's. The opposite holds for respondents self-located to the left. In the nationalist dimension, more nationalist self-declared respondents are less likely to vote for non-nationalist parties against PNV, CiU and JxSí. The opposite holds for less-nationalist self-located respondents. In the comparisons Bildu v PNV, EH v PNV, or ERC v CiU, the estimated coefficient of the self-located nationalist position is very low. This occurs because the nationalist parties, PNV and CiU, and the most extreme left-nationalist parties, EH and ERC, hold an almost indistinguishable nationalist position. A similar effect is produced between CUP v CiU in the 2012 election.

Second, regarding identity voting we observe how, in most of the comparisons, the sign is negative. We interpret that, on average, more intense regional identity, Basque or Catalan, implies higher probability of voting for the dominant party in the regions, PNV and CiU (or JxSí in 2015), against other options, and some less intense regional identity decreases the probability of voting for the PNV and CiU against other parties. Only in those comparisons between the dominant party and the most extreme left-nationalist parties in the regions Bildu/EH/Aralar/PCTV in the Basque region and ERC in Catalonia, we find that, on average, the coefficients are positive. This means that stronger regional identity decreases the probability of voting for the two dominant parties in the regions (in comparison to more extremist nationalist parties), and weaker regional identity increases this probability. In the Basque Country, the identity variable is the one that captures the perceived heterogeneity among nationalist parties (see the high identity coefficient in the comparisons Bildu v PNV or EH v PNV). We can interpret that for the Basque region, the stronger the Basque identity (with respect to the weaker), the more likely (the less likely) it is for voters to opt for EH/Bildu in comparison to PNV. Due to the high correlation (about .6 tau-c value on a range of plus one minus one) between nationalist self-positions and identity, we expected that these two variables could not simultaneously have a significant effect on voting patterns. Both variables, however, explain vote choices and capture different voting incentives.

Finally, the remaining variables, population size and the assessment about the economy, have certain unstable impact on voting decisions. Higher values of the economy variable indicate a more negative perception of the regional economy. In the Basque Country and for the 2005 electoral year, we observe how the economy

has significant effect on voting decisions, and a positive economic perception increases the probability of voting for the PNV against every other party. This effect can be interpreted as retrospective voting since the PNV held office just before the 2005 election. In Catalonia, the analysis reveals that the perception about the economic situation had a significant effect in the 2010 election. Up to 2010, the PSC held the Catalan presidency, and we can interpret that the economic recession exerted a negative impact over the PSC but positive impact over CiU and PP (that is, the parties holding a right-wing policy position). In 2015, a positive economic perception benefited JxSí against PSC, CUP and Podemos, and similarly in 2016, positive economic perception increased the voting probability of PNV against Bildu (and negative economic perception increased the probability of voting for Bildu). The regional elections in 2015 and 2016 coincide with a period of economic recovery, we interpret that the economic variable provided certain electoral advantage to the incumbent parties in these two regions. Regarding population size, we find that, for the Basque Country, there is no systematic effect of this variable on voting probabilities. The 2001 election is an exception where respondents of big cities, in contrast to small cities or the rural area, showed higher probability of voting for the PSE or PP against the PNV. In the comparison between PNV and HB, we find that respondents of big cities showed higher probability of voting PNV against EH (or, in other terms, respondents of rural areas showed higher probability of voting EH). A similar pattern is followed by Catalan respondents in the 2010 elections, respondents in big cities showed higher probability of voting for nationwide parties (such as PSC, PP, ICV or C's) against CiU. When comparing CiU and ERC, respondents of big cities showed higher probability of voting CiU against nationwide parties or ERC (and those in rural areas showed higher probability of voting ERC against CiU).<sup>17</sup>

In sum, the proposed multinomial logit analysis reveals that voting decisions in the two regions do not possess a one-dimensional explanation. Positional voting, with the left-right and the nationalist issues, together with identity, explain voting patterns in these regions. The perception about the economic situation, however, does not have a systematic effect on vote choice. We find, importantly, that identity has a persistent clear effect and its impact is much higher (about three times higher) when secessionism became a key issue for the regions, the 2015 election in Catalonia, and the 2001 election in the Basque region.

The two following sections explore how the weights of positional and identity issues in voters' preferences manifest differently around those years where regional governments tried to proclaim the independence of their regions.

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<sup>17</sup>Maza, Villaverde and Hierro (2019) in an analysis of the 2017 Catalan Elections at the county level show how geographical location matters for the independence vote. The younger, more educated and the lower share of migrants increase the independence vote.

## 4 Measuring issue-salience

We want to know if individual nationalist positions have varied its relevance in voters' preferences during the analyzed years. For that, we measure how relevant is the left-right dimension over the nationalist dimension in voters' preferences. This exercise requires information about parties' positions over the period of analysis, and subsequent calculations of salience according to the underlying spatial model of voting.

We analyze the average reported responses for each election year to the post-electoral CIS's surveys concerning perceived parties' position for the period 1998-2016. The dynamics of parties' positions in the left-right and nationalist dimensions in the Basque region are described in Table 5. The parties represented in the table add more than 90 percent of the votes. Note that for the 2001 election year, the survey does not include the left-right positioning question. The table includes information about the average position of respondents.

Party	Dimension	1998	2001	2005	2009	2012	2016	Average
PNV	Left-right	6.2		6.5	6.4	6.4	6.5	6.4
	Nationalism	8	8.4	8.4	8.1	7.9	7.9	8.1
PSE	Left-right	4.7		4.5	4.5	4.4	5	4.6
	Nationalism	3.3	3.1	3.5	3.7	3.3	3.2	3.4
PP	Left-right	8.4		8.7	8.5	8.9	8.9	8.7
	Nationalism	2.1	2	1.7	2	1.6	1.6	1.8
EH*	Left-right	2.1		2.3		2.2	2.1	2.2
	Nationalism	8.9	8.4	8.6		9	8.7	8.7
IU	Left-right	3.1		2.9	3.1	2.9		3
	Nationalism	4	4.5	4.9	4.8	4.2		4.5
Pod.	Left-right						2.8	2.8
	Nationalism						4.6	4.6
C's	Left-right						8.2	8.2
	Nationalism						1.7	1.7
Voter	Left-right	4.2	4.2	4.1	4.1	4	3.9	4.1
	Nationalism	6.2	5.9	5.3	5.6	5.4	5.5	5.7

\* This party was banned in 2003, for 2005 the position corresponds to PCTV, for 2012 and 2016 corresponds to Bildu.

Table 5: [Perceived positions of parties and average voter in the Basque Country](#)

We observe how, on average, the Basque population has become more moderate in its nationalist position, moving from 6.2 in 1998 to 5.5 in 2016.<sup>18</sup> However, for

<sup>18</sup>The post-electoral 1994 CIS's survey provides an average self-reported position of respondents in the nationalist issue of 6.3, which reinforces our argument.

the last two decades, respondents have kept very stable left-right positions, and importantly, there is no relevant shift in the parties' political positions.

Parties' positions in the Catalan region are described in Table 6. The parties represented in the table add about 87 percent of the votes. Up to 2012, we observe how party positions have kept very stable. Notably, in the 2015 election year, Junts pel Sí (the coalition composed by former leaders of Convergència, ERC and other minor parties such as Demócratas de Catalunya and Moviment d'Esquerre), was perceived about one point and a half more nationalist with respect to the former CiU party. For the same year, the nationwide parties, PSC and PP were perceived as more extremist in the opposite nationalist direction. We observe how for the 2015 election, parties showed more polarized positions in the nationalist issue, with the JxSí coalition located at 8.6 and PSC and PP located at 3.5 and 1.3 respectively.

Party	Dimension	1999	2003	2006	2010	2012	2015	Average
CiU	Left-right	6.9	6.4	6.5	6.2	6.6	5*	6.3
	Nationalism	7.5	7.1	7.1	7.2	7.5	8.6*	7.5
PSC	Left-right	4.3	4.2	4.2	4.2	4.5	4.7	4.4
	Nationalism	4.6	5	4.9	4.7	4.3	3.5	4.5
PP	Left-right	8.5	8.6	8.7	8.8	9.1	9.2	8.8
	Nationalism	2.2	2	2.2	1.8	1.6	1.3	1.9
ERC	Left-right	3.1	2.8	3	3	3.2	3.3	3.1
	Nationalism	8.6	8.8	8.5	8.4	9	8.9	8.7
ICV+EUiA	Left-right	2.9	2.9	3	3.1	3.3	3.1	3.1
	Nationalism	5.5	6.1	5.5	5.6	5.6	4.4	5.5
C's	Left-right			6.8	6.8	7.4	7.5	7.1
	Nationalism			2.8	3.3	2.5	2.1	2.7
CUP	Left-right					2.2	1.8	2
	Nationalism					8.3	8.8	8.6
Podemos	Left-right						3.6	3.6
	Nationalism						3.4	3.4
Voter	Left-right	4.6	4.5	4.3	4.4	4.1	3.9	4.3
	Nationalism	5.4	5.4	5.3	5.4	6.2	5.4	5.5

\*This value corresponds to Junts pel Sí (JxSí), the coalition of Convergència, ERC, Demócratas de Catalunya and Moviment d'Esquerre.

Table 6: [Perceived positions of parties and averag voter in Catalonia](#)

Catalan respondents have become more leftist for the 2010 election (with average position of 3.9) and, on average, their nationalist position has kept stable except for the 2012 election where there is a relevant shift in the nationalist dimension, from 5.4 to 6.2. We observe how the shift in Catalan identity (represented in

Figure 2) coincides with the shift in self-reported nationalist position of Catalan respondents.<sup>19</sup>

In sum, the average respondent in the Basque region has become less nationalist. In contrast, we find that for the 2012 election year in Catalonia, the average respondent has become more nationalist. Political parties in the Basque region has kept very stable, whereas since 2010, both nationalist and non-nationalist parties in Catalonia are perceived as more polarized in the two positional issues.

According to our proposed model, we can estimate the average salience of each positional issue, and the Relative Issue Salience (RIS), that measured the number of distance units in the nationalist dimension that are equivalent to a unit distance in the left-right dimension. We only describe the RIS parameters for those comparisons where positional issues have significant effect on the probability of voting and the issue-salience parameters are both positive.<sup>20</sup>

The estimated RIS values are described in Tables 7 and 8, The second and third columns of each comparison describe the salience of the left-right dimension (LR) and the salience of the nationalist dimension (N) respectively.

Year	LR	N		Year	LR	N	
Choice	salience	salience	RIS	Choice	salience	salience	RIS
2016				2005			
PSE v PNV	.16	.07	1.56	PSE v PNV	.12	.08	1.21
PP v PNV	.15	.05	1.77	PP v PNV	.22	.08	1.65
Bildu v PNV	.12			PCTV v PNV	.17	.01	
Pod v PNV	.13	.06	1.43	IU v PNV	.14	.09	1.26
C's v PNV	.05	.05	1.06	2001			
2012				PSE v PNV		.07	
PSE v PNV	.22	.06	1.94	PP v PNV		.07	
PP v PNV	.21	.05	2	EH v PNV			
EH v PNV	.14	.04	1.89	IU v PNV		.07	
IU v PNV	.17	.07	1.56	1998			
2009				PSE v PNV	.26	.08	1.8
PSE v PNV	.16	.06	1.53	PP v PNV	.18	.06	1.73
PP v PNV	.27	.08	2.09	EH v PNV	.16		
Aral v PNV	.1	.08		IU v PNV	.19	.06	1.78
IU v PNV	.18	.07	1.64				

Table 7: Issue-salience in the Basque Country 1998-2016

<sup>19</sup>We find a strong correlation of .65 in the tau-c test between identity and nationalist positions during the 2012 election year. We use the tau-c test because the variables are categorical and their contingent table is rectangular.

<sup>20</sup>If  $\alpha$  is the salience of the left-right issue and  $\beta$  the salience of the Nationalist issue, then  $RIS = [\frac{\alpha}{\beta}]^{\frac{1}{2}}$ . See Appendix C for the mathematical details used to estimate these parameters.

Year Choice	LR salience	N salience	RIS	Year Choice	LR salience	N salience	RIS
2015				2006			
PSC v JxSí	.49	.05	3.04	PSC v CiU	.23	.08	1.66
PP v JxSí	.17	.07	1.62	PP v CiU	.1	.04	1.59
Pot v JxSí	.27	.07	1.91	ERC v CiU	.2	.01	
C's v JxSí	.11	.05	1.39	ICV v CiU	.23	.1	1.53
CUP v JxSí	.14			C's v CiU		.07	
2012				2003			
PSC v CiU	.19	.06	1.82	PSC v CiU	.22	.04	2.32
PP v CiU	.19	.05	1.44	PP v CiU	.1	.03	1.82
ERC v CiU	.12	.01		ERC v CiU	.16	.03	2.47
ICV v CiU	.17	.08	1.45	ICV v CiU	.2	.09	1.49
C's v CiU		.05		1999			
CUP v CiU	.15			PSC v CiU	.17	.03	2.45
2010				PP v CiU	.17	.03	2.25
PSC v CiU	.19	.05	1.92	ERC v CiU	.13	.03	2.03
PP v CiU	.09	.03	1.67	ICV v CiU	.16	.05	1.82
ERC v CiU	.13	.04	1.9				
ICV v CiU	.17	.05	1.8				
C's v CiU		.05					

Table 8: Issue-salience in Catalonia 1999-2015

Our analysis reveals that in the Basque region, the left-right issue is about one and a half times more salient than the nationalist issue in all the comparisons (the RIS value is close to 1.5). The PSE v PNV comparison in the 2005 election year shows that nationalism and the left-right issue became about equal (the RIS value is 1.26).<sup>21</sup>

The relation between the two positional issues in Catalonia is higher. The left-right dimension is, in some of the comparisons about two times or even three times more salient than the nationalist issue (the RIS values are closer to 2, and even equal to 3 in the 2015 election). The 2015 election year shows certain disparity. The comparison between PSC and JxSí indicates that, among those that declared that they voted PSC and JxSí, each left-right unit distance is, on average, about equal to three-unit distance in the nationalist issue (the RIS value is 3.04). Note, however, that the distance between PSC and JxSí in the nationalist issue from 2012 to 2015 increased by 60 percent (from 3.2 to 5.1), and at the same time, the relative salience

<sup>21</sup>In 2005, the Basque President (Juan José Ibarretxe), presented to the Spanish Parliament his proposal of auto-determination for the Basque region.

assigned to each unit distance in the left-right dimension increased by 67 percent (from 1.82 to 3.04). The simultaneous shifts in relative issue salience and parties' policy positions neutralize to each other with no consequence on respondents' preferences over political parties. Electoral results corroborate our finding since neither PSC nor JxSí (the CiU and ERC coalition) show an increase in vote share from 2012 to 2015.

Our analysis in this section reveals two relevant observations:

First, both regions showed a polarized average nationalist position just before the subsequent plebiscite elections in their regions. We find that an average nationalist position around 6.2, has been followed by an electoral confrontation between the pro-independence and constitutionalists.

Second, there is no evidence that nationalism as a positional issue in comparison to the left-right issue becomes more relevant in voters' preferences when nationalist parties exert stronger efforts to secede.

## 5 Identity Voting

In this section, we explore the effect of identity and show that when secessionism is not in the agenda of the regional parties, identity voting shows smaller impact, and when included, the identity coefficients multiply their impact (in detriment of nationalism as a positional issue).

We compare how the identity coefficients have changed over time. In addition to the regression analysis in Tables 3 and 4, with the PNV and CiU as base parties, we estimate similar multinomial logistic regressions with the socialist parties (the PSE in the Basque region and the PSC in Catalonia) as base parties.<sup>22</sup> The dynamics of the identity coefficients over our period of analysis in Figure 4 reveals interesting facts:

First, the comparison between the Basque region (right panel) and Catalonia (left panel) show different paths. Identity has been a more relevant variable to explain vote decisions in the Basque region and, in particular, the EH/Bildu v PSE coefficients have always been above the ERC v PSC coefficients. This is because, traditionally, the Catalan socialist party (the PSC) has been close to the Catalan identity (Serrano, 2013).

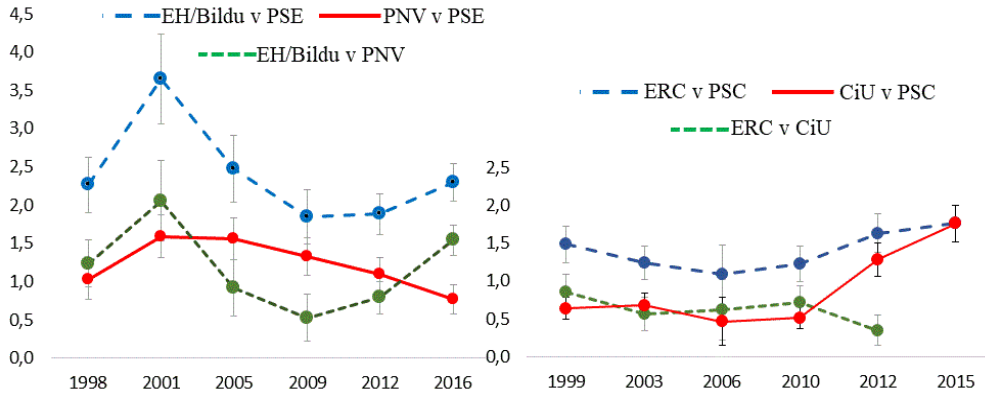
Second, the 2001 Basque election shows how identity becomes more relevant to explain voting decisions in this region. In Catalonia, however, the relevance of identity to explain voting decisions diminishes up to 2012 in most of the compar-

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<sup>22</sup>To maximize our sample size, we do not include the economic variable in the regressions. Note that the economic variable is not included in the surveys of 2016, 2001 and 1998 for the Basque Country, and in 2015 for Catalonia. Thus, we analyze a total of 13,214 responses for the Basque region and 14,993 responses for Catalonia.

isons. In this same year, the identity divide between the two nationalist parties, CiU and ERC, and the socialist party shows an increasing trend, the socialist party increasingly differentiates from the nationalist parties, and the two nationalist parties, ERC and CiU, become very alike, with a coefficient close to 0. Thus, CiU and ERC, are similarly evaluated by voters in terms of identity during the 2012 election.

Third, the low relevance of identity in Catalonia up to 2010 contrast with the extremely high relevance of identity in the Basque region up to 2005. The EH v PSE and, especially the PNV v PSE comparisons reflect the effort of nationalist parties to achieve independence, with a maximum in the 2001 election and a decreasing effect afterward. Similarly, for the Catalonia region, the ERC v PSC and the CiU v PSC comparisons reflect the higher impact of identity in the last election years, a clear reflect of the pro-independence efforts made by the nationalist parties in the 2012 and 2015 elections.



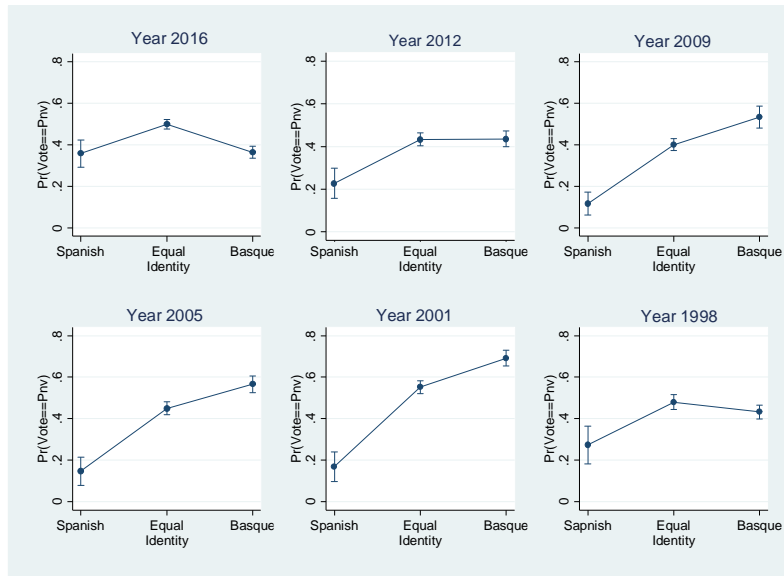
**Figure 4:** Estimated identity coefficients for the Basque region (left panel) and Catalonia (right panel)

Finally, we analyze the effect of self-reported identities (Spanish, Equal and Catalan or Basque) on the estimated probability of voting for the dominant party in the regions, PNV and CiU. Estimated probabilities are evaluated at the means of every other independent variable: left-right position, nationalist position and population size. Our results are represented in Figures 5 and 6. Several comments are in order:

First, Figure 5 shows predicted probabilities of voting PNV in the Basque region. We observe how the Basque identity is associated with a higher probability of voting PNV with two exceptions, the 1998 and the 2016 elections. For the 2016 election, an average voter with Basque identity shows a probability of 35 percent of voting PNV. However, an average voter with Equal identity shows a probability of



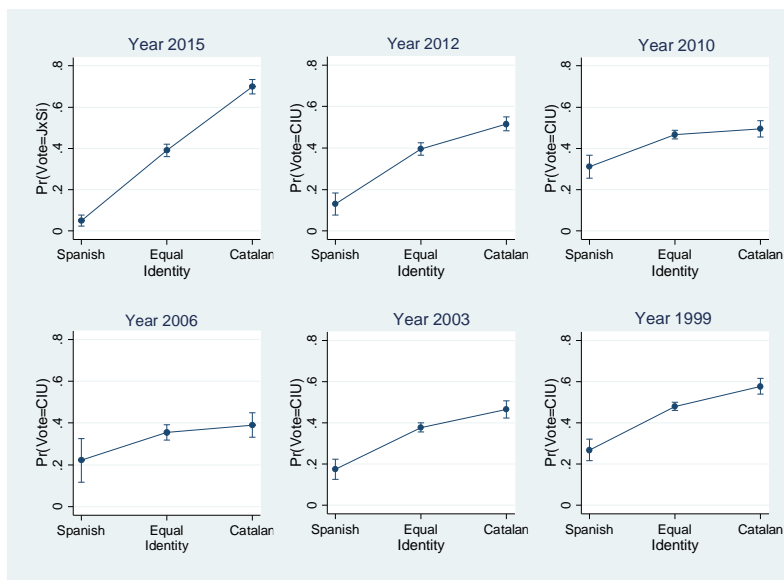
50 percent of voting PNV. This decreasing trend explains how Bildu and Podemos together captured about 36 percent of the votes in the 2016 election (in contrast to the 28 percent of votes obtained by Bildu and IU in the previous 2012-election year). Interestingly, PNV did not reduced its vote share in the 2016 election, and derived about 38 percent of votes due to the high probability of voting PNV among those with Equal identity. The 2001 election is the year where those respondents with Basque identity showed the highest percentage, about 70 percent, of voting PNV against every other party. The 2001 election year is characterized by the highest gap between Spanish and Basque identity, with a differential probability of 50 percentage points of voting PNV (against every other option). This gap captures the strong polarization among different identity groups in the 2001 election year.



**Figure 5:** Predicted probability of voting PNV as a function of identity

Second, Figure 6 represents predicted probabilities of voting CiU in Catalonia. We find that for an average voter with Catalan identity (over Equal or Spanish identities), the probability of voting CiU or the JxSí coalition is always higher. From 2006 to 2010, every category (Spanish, Equal and Catalan), increases about ten percentage points its probability of voting CiU. In 2012 and 2015, the probability gap between Spanish and Catalan identities increases. For example, in 2015, an average voter with Spanish identity shows a probability of voting JxSí around 0, while an average voter with Catalan identity shows a probability of

voting the JxSí coalition close to 70 percent. Thus, the 2015 election shows the greatest probability gap between Spanish and Catalan identities. This observation contrasts with the decreasing or narrowed gap showed for the same period in the Basque elections.



**Figure 6:** Predicted probability of voting CiU as a function of identity

In sum, secessionist efforts around the 2001 Basque elections and the 2015 Catalan elections had an effect on voting patterns. These efforts translated into stronger polarization between the two extremes of the identity scale: Spanish and Basque in the Basque region, and Spanish and Catalans in Catalonia. An average voter with Spanish identity showed a probability of voting PNV or CiU below 5 percent, and, in the other extreme, an average voter with Basque or Catalan identity showed a probability of voting PNV or CiU above 60 percent. Notably, the secessionist efforts in the Basque region and Catalonia have not coincided in time and we find how, the recent 2016 Basque election shows a new trend where an average voter with Basque identity is more likely to vote to other political alternatives (such as Bildu or Podemos), against the PNV.

## 6 Conclusion

Two regions comparable in their histories, identity, economies, and political systems, yet the Catalans are moving to leave Spain while the Basques pushed to

leave Spain in the early 2000s, and stopped afterwards. We analyze what values are activated within these regions that increase electoral support for secessionist parties and leaders. Our comparative strategy exploits the fact that separatist efforts in these regions have not coincided in time. During our period of analysis, 1998-2016, the main confrontations between the pro-independence and constitutionalist blocks manifested in the 2001 Basque Autonomous Elections and the 2015 Catalan Autonomous Elections.

We show, through a careful, analytical comparison of the Catalan and Basque regions that secessionist efforts in Catalonia and the Basque region have been reflected as a rise in language-based identity politics. We find that identity, as a variable that affects voting decisions, achieves its maximum impact in the above-mentioned plebiscite elections. In this regard, we find strong evidence supporting that secession and separatism is rooted in identity politics, rather than economic interests or political ideologies such as left-right policies or centralized versus decentralized decision-making. Importantly, however, previous to these plebiscite elections on independence, average voters' position in the nationalist dimension showed the most polarized value during the analyzed period 1998-2016.

A relevant question that emerges from our analysis is why the Basques did not followed Catalans in their recent independence efforts. A key part of the answer, our analysis reveals, is the mobilization of identity based on language. First, there is greater capacity for political mobilization based on language-identity in Catalonia than in the Basque region. Four out of five people in Catalonia speak Catalan, but only half of the population in the Basque region speak Euskera. Hence, mobilization based on language could appeal to most people in Catalonia without angering large numbers, but in the Basque region, mobilization on language identity might mobilize half the population and alienate the other half. Second, there has been a substantial increase in the activation (increasing weight) on language-based identity in voting in Catalonia, but not in the Basque region.

These two factors – higher capacity and greater activation of language identity in politics – have allowed the Catalan separatist parties to maintain high electoral support, even in the face of a withering political response from Madrid. This has allowed those parties to steer a course toward independence without losing their majority in the Catalan regional parliament. In the Basque region, by contrast, the leadership efforts to enact a pro-independence agenda (the Plan Ibarretxe) did not activate higher support for the nationalist parties based on identity, and at the next election, the Basque National Party failed to form a government for the first time in the history of the modern Spanish state (post-Franco).

Importantly, we do not find evidence that other possible models – including economic disillusionment or ideological shifts among voters and parties – can explain the differential shifts in the two regions. While ideology is important to

voters in these regions, there was almost no change in the party systems and distribution of voters' ideologies over time in the two regions. And, the economy does not appear to matter substantially to individual voters.

The Catalan and Basque comparison provides an instructive case, and adds to the evidence for the importance of identity politics in shaping modern nations. What has occurred in Catalonia (but not in the Basque region) is a rising cultural division, not increased ideological polarization or economic discontent.

The Catalan and Basque situations can also carry important lessons for understanding discontent in other democracies in the 21st Century. Much contemporary writing about the rise and decline of nation-states (Acemoglu and Robinson, 2012) focuses on economic groups and classes, ideologies, economic collapse and specifically, on the rise of populism (Voss, 2018). At least in the Spanish regions, those explanations do not appear to have the leverage to explain the recent events in Catalonia and the Basque Country. Rather, the mobilization of language-based identity creates divisions in both regions, but those divisions have greater capacity to sustain a separatist effort in Catalonia, and the Catalan identity has become a greater factor in voters' thinking in the years since the Spanish Court voided efforts to renegotiate the constitutional arrangements of 1978. Old cultures are roots for contemporary discontents.

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## APPENDIX A: Electoral results

Year	PNV	PSE	PP	IU	Bildu	EA	Aralar	Pod	others	Presi
2016	37.6%	11.9%	10.2%		21.3%			14.9%	4.2%	PNV
	28	9	9		18			11	0	
2012	34.6%	19.1%	11.7%		25%				9.5%	PNV
	27	16	10		21				1	
2009	38.6%	30.7%	14.1%	3.5%		3.6%	6%		3.5%	PSE
	30	25	13	1		1	4		1	
2005	38.7%	22.7%	17.4%	5.4%	12.4%		2.3%		1.1%	PNV
	29	18	15	3	9		1		0	
2001	42.7%	17.9%	23.1%	5.6%	10.1%				0.6%	PNV
	33	13	19	3	7				0	
1998	28%	17.6%	20.1%	5.7%	17.9%	8.7%			2%	PNV
	21	14	16	2	14	6			2	

**Table A1:** Basque Autonomous Election results, 1998-2016

Year	CiU/JxSí	PSC	PP	ICV	ERC	C's	CUP	Pot	Others	Presi
2015	39.5%	12.7%	8.5%			17.9%	8.2%	8.9%	4.3%	JpSI
	62	16	11			25	10	11	0	
2012	30.7%	14.4%	13%	9.9%	13.7%	7.6%	3.5%		7.2%	CiU
	50	20	19	13	21	9	3		0	
2010	38.5%	18.3%	12.3%	7.4%	7%	3.4%			13.1%	CiU
	62	28	18	10	10	3			4	
2006	31.5%	26.8%	10.7%	9.5%	14%	3%			4.5%	PSC
	48	37	14	12	21	3			0	
2003	30.9%	31.2%	11.9%	7.3%	16.4%				2.3%	PSC
	46	42	15	9	23				0	
1999	37.6%	37.8%	9.5%	2.5%	8.7%				3.9%	CiU
	56	52	12	3	12				0	

**Table A2:** Catalan Autonomous Election results, 1999-2015

## APPENDIX B: Data set

	1998 Pr / Pt	2001 Pr / Pt	2005 Pr / Pt	2009 Pr / Pt	2012 Pr / Pt	2016 Pr / Pt	mean	sd	min- max
econ	x -	x -	x x	x x	x x	- x	3.1	.9	1-5
eusk	- -	- -	- x	x x	x -	x x	.4	.5	0-1
iden	x x	x x	x x	x x	x x	x x	3.6	1.1	1-5
lrself	x x	x x	x x	x x	x x	x x	4.1	1.7	1-10
nself	x x	x x	x x	x x	x x	x x	5.6	2.8	1-10
pop	x x	x x	x x	x x	x x	x x	2.3	.8	1-3
vote	x x	x x	x x	x x	x x	x x			
Obs.	2,097/ 2,099	2,487/ 2,489	1,495/ 2,466	2,459/ 2,471	2,898/ 1,898	3,007/ 2,470			

**Table A3:** Survey variables. Basque Elections:1998-2016

	1999 Pr / Pt	2003 Pr / Pt	2006 Pr / Pt	2010 Pr / Pt	2012 Pr / Pt	2015 Pr / Pt	mean	sd	min- max
econ	- -	- -	x -	x x	x x	- x	3.8	.9	1-5
cata	x -	- x	- -	- x	- x	- x	.8	.4	0-1
iden	x x	- x	x x	x x	x x	x x	3.4	1.1	1-5
lrself	x x	x x	x x	x x	x x	x x	4.3	1.9	1-10
nself	x x	x x	- x	x x	x x	x x	5.7	2.8	1-10
popu	x x	x x	x x	x x	x x	x x	2.1	.8	1-3
vote	x x	x x	x x	x x	x x	x x			
Obs.	3,590/ 1,368	3,571/ 1,373	1,986/ 1,965	2,949/ 2,523	2,983/ 1,873	2,999/ 1,392			

**Table A4:** CIS's survey variables. Catalan Elections: 1999-2015

## APPENDIX C: A spatial model of voting with identity

We present a theoretical model of positional and identity voting. Consider that issues  $X$  and  $Y$  are two positional issues (such as left-right and nationalism), and that  $Z$  is an identity issue. The positional issues are such that political parties can select and defend particular stands, the identity issue is more of a valence issue attached to the cultural roots of voters. In contrast to standard valence issues, which are assumed to be equal across voters, identity is equal within a group of voters, but different across groups of voters (see Ansolabehere and Puy, 2016). For example, voters with Spanish identity equally value political parties on the identity issue, however, their valuation differ from that of the voters who share a Catalan identity.

Each political party  $j$  offers a policy platform in each of the positional issues, denoted by  $(x_j, y_j)$ , and each voter  $i$  has an ideal policy in the two positional issues denoted by  $(x_i, y_i)$ . Besides, each voter is characterized by certain identity denoted by  $z_i$ .

The preferences of the voters over political parties are represented by the negative quadratic distance between the position of the party and the ideal policy of the voter on the left-right and nationalist issues, plus the reward (or cost) derived from identity. Let  $u_i(j)$  be the utility function representing the preferences of voter  $i$  over party  $j$ , then,

$$u_i(j) = -\alpha_i(x_j - x_i)^2 - \delta_i(y_j - y_i)^2 + \beta_{ij}z_i, \quad (1)$$

where  $\alpha_i, \delta_i > 0$  measure the weights assigned by voter  $i$  to each unit distance in the left-right and the nationalist dimensions respectively, and  $\beta_{ij}$  measures the weight assigned by voter  $i$  to identity when evaluating party  $j$ . Identity can provide certain reward or cost: if  $\beta_{ij} > 0$ , an individual with identity  $z_i$  experience an extra reward when evaluating party  $j$ , meaning that the individual finds party  $j$  within the orbit of his/her personal identity. On the contrary, when  $\beta_{ij} < 0$ , the individual with identity  $z_i$  evaluates that party  $j$  is far from his/her orbit and assigns an extra cost to this party.

Suppose that a voter compares two parties,  $j$  and  $l$ . We measure the differential utility of voting  $j$  over  $l$  which, simplifying yields:

$$\begin{aligned} \Delta u_i &= u_i(j) - u_i(l) = -\alpha_i(x_j^2 - x_l^2) - \delta_i(y_j^2 - y_l^2) + \\ &\quad + 2\alpha_i(x_j - x_l)x_i + 2\delta_i(y_j - y_l)y_i + \Delta\beta_i z_i, \end{aligned} \quad (2)$$

where  $\Delta\beta_i = \beta_{ij} - \beta_{il}$ . In this deterministic model, note how an individual is indifferent between voting  $j$  and  $l$  when  $\Delta u_i = 0$ , he/she votes for  $j$  over  $l$  when  $\Delta u_i > 0$ , and he/she votes for  $l$  over  $j$  when  $\Delta u_i < 0$ .

We transform the proposed deterministic voting model into a probabilistic voting model by introducing a random variable  $\mu \in (-\infty, \infty)$  to the preferences of voters that captures all those other motives that affect voting decisions and that are not captured by the proposed deterministic model. The parameters of the proposed random utility model can be then estimated using a multinomial regression model.

According to Expression (2),

$$\Delta u_i = u_i(j) - u_i(l) = k_0 + k_1 x_i + k_2 y_i + k_3 z_i \quad (3)$$

where  $k_0 = -\alpha_i(x_j^2 - x_l^2) - \delta_i(y_j^2 - y_l^2)$ ,  $k_1 = 2\alpha_i(x_j - x_l)$ ,  $k_2 = 2\delta_i(y_j - y_l)$  and  $k_3 = \Delta\beta_i$ . Let  $\mu_i$  denote the individual realization of the random variable  $\mu$ . Hence, if  $\Delta u_i + \mu_i > 0$ , the individual votes for party  $j$  and if  $\Delta u_i + \mu_i < 0$ , the individual votes for party  $l$ . The probability with which an individual, randomly drawn from the population, votes for party  $j$  over party  $l$  is measured by the probability  $Pr(\Delta u_i > -\mu)$  where substituting the value of  $\Delta u_i$  yields

$$Pr(\Delta u_i > -\mu) = Pr(k_0 + k_1 x_i + k_2 y_i + k_3 z_i > -\mu). \quad (4)$$

The dependent variable is a discrete choice between voting for party  $j$  or party  $l$ . We can then estimate the above probability with a binomial logit model with  $x_i$ ,  $y_i$  and  $z_i$  as independent variables. In a logistic model, it is assumed that  $\mu$  is distributed according to a logistic distribution. Thus,

$$Pr(\Delta u_i > -\mu) = Pr(\mu > -(k_0 + k_1 x_i + k_2 y_i + k_3 z_i)) = \frac{e^{k_0 + k_1 x_i + k_2 y_i + k_3 z_i}}{1 + e^{k_0 + k_1 x_i + k_2 y_i + k_3 z_i}}.$$

In the Basque and Catalan elections there are more than two political parties and we therefore use a multinomial logistic model to estimate the probability of voting for party  $l$  against every other party (see, e.g., [Mc Fadden, 1973](#)).<sup>23</sup> We take the PNV in the Basque region and CiU in Catalonia as the base party that is compared to each other in the multinomial regression (party  $l$  in the proposed model). The method of maximum likelihood provides an estimate of the logit coefficients  $\hat{k}_0$ ,  $\hat{k}_1$ ,  $\hat{k}_2$  and  $\hat{k}_3$  that we use to measure the average salience of each issue dimension in voters' preferences and the average effect of identity on voting decisions.<sup>24</sup> When estimating the model, every observation is equally weighted in

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<sup>23</sup>For that, we need to assume that in each pairwise comparison between political parties, the corresponding unobservable random variables are independent and identically distributed according to a Weibull distribution. As shown by Dow and Endersby (2004), this assumption is not particularly restrictive in models of vote choice.

<sup>24</sup>In order to measure issue-salience, we use the methodology proposed by [Ansolabehere and Puy \(2018\)](#).

the likelihood function and regression coefficients are interpreted as the average concern among those individuals that respond to the survey questions.

According to this model, we provide an estimate of the average salience of the positional issues in voters' preferences  $\alpha$  and  $\beta$  where

$$\alpha = \frac{k_1}{2(x_j - x_i)} \text{ and } \delta = \frac{k_2}{2(y_j - y_i)}$$

and the Relative Issue Salience,  $\text{RIS} = \left[\frac{\alpha}{\delta}\right]^{\frac{1}{2}}$ , which measured the number of distance units in the nationalist dimension that are equivalent to a unit distance in the left-right dimension.