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

Supplementary online Appendix

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A: Political positions of parties and the electorate

The perceived position of the political parties in the Basque region and Catalonia are represented in Table A1 and Table A2 respectively. The parties represented in Table A1 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 parties represented in Table A2 add about 87 percent of the votes. In Catalonia, up to 2012, party positions have kept very stable. Notably, in the 2015 election year, Junts pel Sí (the coalition composed of former leaders of Convergencia, ERC and other minor parties such as Demócratas de Cataluña and Moviment d'Esquerre) is perceived about one point and a half more nationalist concerning the former CiU party. For the same year, the nationwide parties, PSC and PP are perceived as more extremist in the opposite nationalist direction. We observe how for the 2015 election, parties in Catalonia showed more polarization 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	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 A1: Perceived positions of parties and average voter in the Basque Country

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 Convergencia, ERC, Demócratas de Cataluña and Moviment d'Esquerre.

Table A2: Perceived positions of parties and average voter in Catalonia

Tables A1 and A2 reveal that there is no relevant shift in the locations of the Basque parties during the two analyzed decades and slight changes in the position of the new coalition JxSí that, in comparison to CiU, was perceived as more nationalist (moving from 7.5 in 2012 to 8.6 in 2015). However, the average position of voters in the nationalist dimension shows a slight movement over time; the Basque electorate became more moderate, moving from 6.2 in 1998 to 5.5 in 2016 and, by contrast, Catalan respondents kept a stable nationalist position up to 2012 when the average placement moved from 5.4 to 6.2. Regarding the left-right positioning of the electorate, we find that the Basques have kept their average position stable around 4.1, whereas the Catalans have become slightly more leftist since 2010, moving from 4.4 to 3.9.

B: Electoral results

In the Basque region, five political parties divide 95 percent of the votes over the period 1998-2016. On average, the vote share of these parties are

35 percent for PNV, 22 percent for PSE, 18 percent for the left nationalist party renamed as EH/PCTV/Bildu, 17 percent for PP and 4 percent for IU. Similarly, in Catalonia five parties divide the electorate 85 percent of the votes with an average vote share of 35 percent for CiU, 23 percent for PSC, 12 percent for ERC, 10 percent for PP and 5 percent for ICV.

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	

Notes: The table shows the percentage of votes and number of seats below. The total number of seats is 75.

Table A3: 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%	JxSí
	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	

Notes: The table shows the percentage of votes and number of seats below. The total number of seats is 135.

Table A4: Catalan Autonomous Election results, 1999-2015

C: Data set

	1998 Pr / Pt		2001 Pr / Pt		2005 Pr / Pt		2009 Pr / Pt		2012 Pr / Pt		2016 Pr / Pt		mean	sd	min-max
economy	x	-	x	-	x	x	x	x	x	x	-	x	3.1	.9	1-5
Euskera	-	-	-	-	-	x	x	x	x	-	x	x	.4	.5	0-1
identity	x	x	x	x	x	x	x	x	x	x	x	x	3.6	1.1	1-5
left-right	x	x	x	x	x	x	x	x	x	x	x	x	4.1	1.7	1-10
nationalism	x	x	x	x	x	x	x	x	x	x	x	x	5.6	2.8	1-10
population	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. Pr/Pt	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 A5: Pre (Pr) and Post (Pt), x indicates that the variable is included. Electoral 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
economy	-	-	-	-	x	-	x	x	x	x	-	x	3.8	.9	1-5
Catalan	x	-	-	x	-	-	-	x	-	x	-	x	.8	.4	0-1
identity	x	x	x	-	x	x	x	x	x	x	x	x	3.4	1.1	1-5
left-right	x	x	x	x	x	x	x	x	x	x	x	x	4.3	1.9	1-10
nationalism	x	x	x	x	-	x	x	x	x	x	x	x	5.7	2.8	1-10
population	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 Pr/Pt	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 A6: Pre (Pr) and Post (Pt), x indicates that the variable is included. Electoral Survey Variables. Catalan Elections: 1999-2015

D: National identities and language

For expositional clarity, in this Appendix we group the responses of the identity questions in three categories: Spanish, Equal and Basque or Catalan. The Spanish category includes those responding 1 or 2, the Equal category contains those responding 3, and the Basque or Catalan categories include those responding 4 or 5. We join pre and post-electoral survey responses to

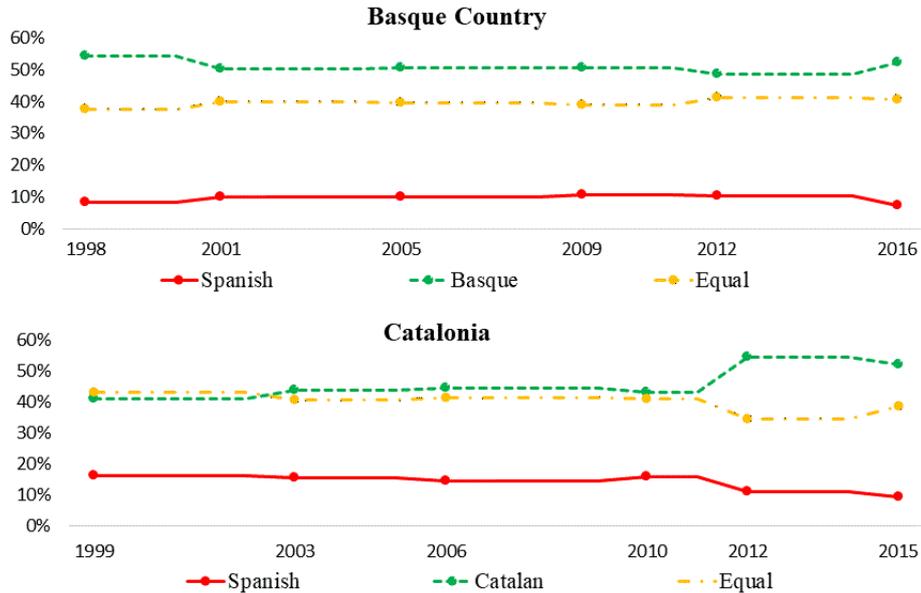elaborate the following plots that measure the percentage of the citizens in each category.[1]

Figure A1: Comparing self-reported national identities of Basques and Catalans

In the Basque Country, the Spanish identity represents about 10 percent of the respondents, and meanwhile, the Basque identity captures about 50 percent. Responses have kept very stable over time, and the highest self-reported Basque identity corresponds to the 1998 election year when 54 percent of the interviewed reported their Basque identity.

In Catalonia, up to 2012, the Spanish identity represented about 15 percent of the responses, whilst the Catalan identity captured about 40 percent.[2] We note a noticeable shift in 2012, the percentage of Catalan responses raised by 12 percentage points. This raise coincides with the decision in 2010 of the Spanish Constitutional Court of rejecting the Catalan Statute (Molina and

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[1]Figure 4 measures a total of 26,527 responses for Catalonia and 24,575 responses for the Basque Country, with around 4,000 responses per election year. There is no such question previous to the 1998 election survey.

[2]In the overall sample, there are some differences among provinces. Less than 40 percent of respondents in Barcelona feel more Catalan than Spanish compared to the 60 percent and 57 percent of Gerona and Lleida, respectively. In Tarragona, this figure equals 50 percent.

Quiroga, 2017). We observe how the shift in Catalan identity coincides with the increment in self-reported nationalist positions of Catalan respondents.[3]

Previous studies by De La Calle and Miley (2008), Criado et al. (2015) show that in Catalonia, the central identity feature is the Catalan language, whereas, in the Basque Country, the geographical origin is the prominent feature in the identity debate (see also, Molina and Tormos, 2015). We study the relation between identity and the local language: Euskera and Catalan.

The Euskera language spoken in the Basque region has unknown linguistic roots, whereas the Catalan language has Latin 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 Catalan, 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). These measures reveal how Euskera, in comparison to Catalan, is more difficult to learn. Several studies (Aspachs-Bracons et al., 2008; Clots-Figueras and Masella, 2013) show that compulsory Catalan language policy implemented in Catalonia had a significant effect on identity.[4]

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 A7: Language spoken in the Basque and Catalonia regions

Table A7 describes percentages of the population speaking Euskera in the Basque Country and Catalan in Catalonia. The statistics for the Basque Country come from the Sociolinguistic survey carried out every six years by the Basque Government. The analysis comprises 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 popu-

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[3]We find a strong correlation of .65 in the tau-c test between identity and nationalist positions during the 2012 election year. The tau-c test is used because the variables are categorical, and their contingent table is rectangular.

[4]Besides, a study on Catalonia shows increasing expected earnings among individuals who are proficient in Catalan and those who are not (Paolo and Raymond, 2012).

lation that can speak Euskera.[5] Regarding Catalonia, all the post-electoral CIS's surveys, except for 2006, ask respondents whether they speak fluent Catalan. We calculate the percentages over samples of around 1,500 respondents.

We deduce a broad fraction of the population that speaks Catalan (about 80 percent) in comparison to Euskera (about 50 percent).

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 (measured by the analyzed identity question). 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.[6]

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 A8: Percentage of identity by language

We deduce two interesting observations. 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, whilst 6 out of 10 Catalan speakers self-identify as Catalans during the 2012-2015 term. Among non-Catalan speakers, less than 1 out of 10 self-identifies as Catalan, with no relevant shift over the analyzed years.

We deduce that language is much more divisive in Catalonia where for the last analyzed period, speaking Catalan, compared to not speaking, multiplies by 10 the probability of self-reporting Catalan identity, while speaking

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[5]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.

[6]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.

Euskera compared to not speaking, multiplies by two and a half the likelihood of self-reporting Basque identity. Still, the association between language and identity is strongest 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 can be principally 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. These figures reveal that Catalonia over the Basque Country has a higher margin to activate the Catalan identity.

E: Issue-salience

The following tables estimate the average salience of both the left-right and the nationalist dimensions. We only describe the estimates for those comparisons where positional issues have significant effect on the probability of voting and where we obtain positive issue-salience parameters.

Year	Choice	Left-Right salience (α)	Nationalism salience (δ)
2016	PSE v PNV	.16	.07
2016	PP v PNV	.15	.05
2016	Bildu v PNV	.12	
2016	Pod v PNV	.13	.06
2016	C's v PNV	.05	.05
2012	PSE v PNV	.22	.06
2012	PP v PNV	.21	.05
2012	EH v PNV	.14	.04
2012	IU v PNV	.17	.07
2009	PSE v PNV	.17	.07
2009	PP v PNV	.27	.08
2009	Aral v PNV	.1	.08
2009	IU v PNV	.18	.07
2009	PSE v PNV	.12	.08
2009	PP v PNV	.22	.08
2009	PCTV v PNV	.17	.01
2009	IU v PNV	.14	.09
2001	PSE v PNV		.07
2001	PP v PNV		.07
2001	EH v PNV		
2001	IU v PNV		.07
1998	PSE v PNV	.26	.08
1998	PP v PNV	.18	.06
1998	EH v PNV	.16	
1998	IU v PNV	.19	.06

Table A9: Issue-salience in the Basque Country 1998-2016

Year	Choice	Left-Right salience (α)	Nationalism salience (δ)
2015	PSC v JxSí	.49	.05
2015	PP v JxSí	.17	.07
2015	Pot v JxSí	.27	.07
2015	C's v JxSí	.11	.05
2015	CUP v JxSí	.14	
2012	PSC v CiU	.18	.06
2012	PP v CiU	.19	.05
2012	ERC v CiU	.12	.01
2012	ICV v CiU	.17	.08
2012	C's v CiU		.05
2012	CUP v CiU	.15	
2010	PSC v CiU	.19	.05
2010	PP v CiU	.09	.03
2010	ERC v CiU	.13	.04
2010	ICV v CiU	.17	.05
2010	C's v CiU		.05
2006	PSC v CiU	.23	.08
2006	PP v CiU	.1	.04
2006	ERC v CiU	.2	.01
2006	ICV v CiU	.23	.1
2006	C's v CiU		.07
2003	PSC v CiU	.22	.04
2003	PP v CiU	.1	.03
2003	ERC v CiU	.16	.03
2003	ICV v CiU	.2	.09
1999	PSC v CiU	.17	.03
1999	PP v CiU	.17	.03
1999	ERC v CiU	.13	.03
1999	ICV v CiU	.16	.05

Table A10: Issue-salience in Catalonia 1999-2015

F: Predicted probabilities of voting as a function of identity

A final question is how identity, as a determinant of vote choice affected the probability of voting for the dominant regionally-based parties in these regions. Identity has five categories and, for the sake of interpretation, we group the variable into three categories: more Spanish than Basque or Catalan, equally Spanish and Basque or Catalan, and more Catalan or Basque than Spanish. After running the multinomial regressions with this variable, we estimate, for each election year, the probability of voting for the PNV and CiU as a function of the three proposed identity categories. Figures A2 and A3 show the obtained results.

We observe how the Basque identity is associated with a higher probability of voting PNV with two exceptions, the 1998 and the 2016 elections. Importantly, in the 2001 election, those respondents with Basque identity showed the highest percentage, about 70 percent, of voting PNV against every other party. Besides, this election is characterized by the highest gap between Spanish and Basque identities, with a differential probability of 50 percentage points of voting PNV (against every other option). This effect captures deep polarization among identity groups in the 2001 election. Notably, around the same period, in the 2003 Catalan Elections, the differential probability is about half the one in the Basque Country.

In Catalonia, an average voter with Catalan identity shows a higher probability of voting CiU or JxSí compared to an average voter with an Equal or Spanish identity. Similar to what we observed in the Basque region, in the 2015 election, the probability gap between Spanish and Catalan identities increased. For example, an average voter with a Spanish identity showed a probability of voting JxSí around 0. In contrast, an average voter with Catalan identity showed a likelihood of voting the JxSí coalition close to 70 percent. Thus, the 2015 election shows the highest probability gap between Spanish and Catalan identities. This observation contrasts with the decreasing and almost null gap exhibited for the same period in the Basque elections.

The analysis on predicted probabilities reveals that, in terms of vote decisions, secessionist efforts translated into intense polarization between two opposite identity groups, Spanish and Basques or Spanish and Catalans. The division in vote decisions through the identity lines characterizes the 2001 Basque and 2015 Catalan Elections. Most voters with strong nationalist sentiment voted for the dominant nationalist party, while most voters with Spanish sentiment avoided voting for the dominant nationalist party in the region.
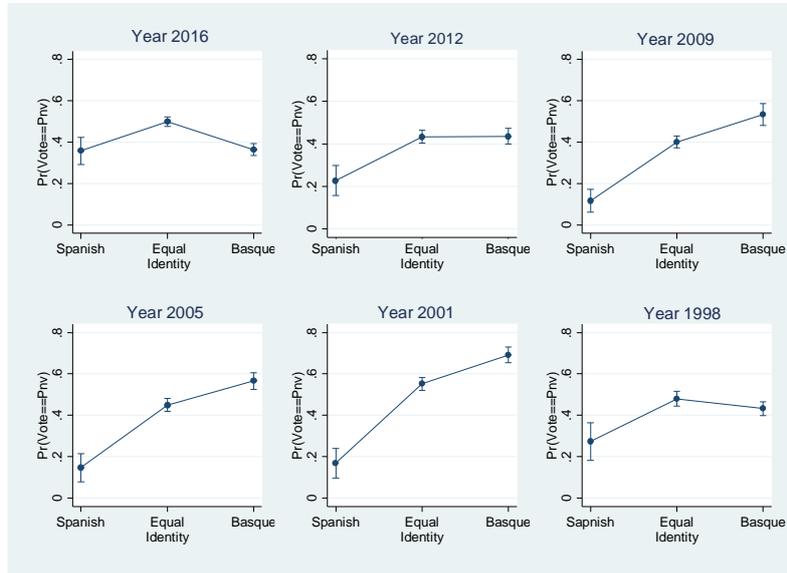
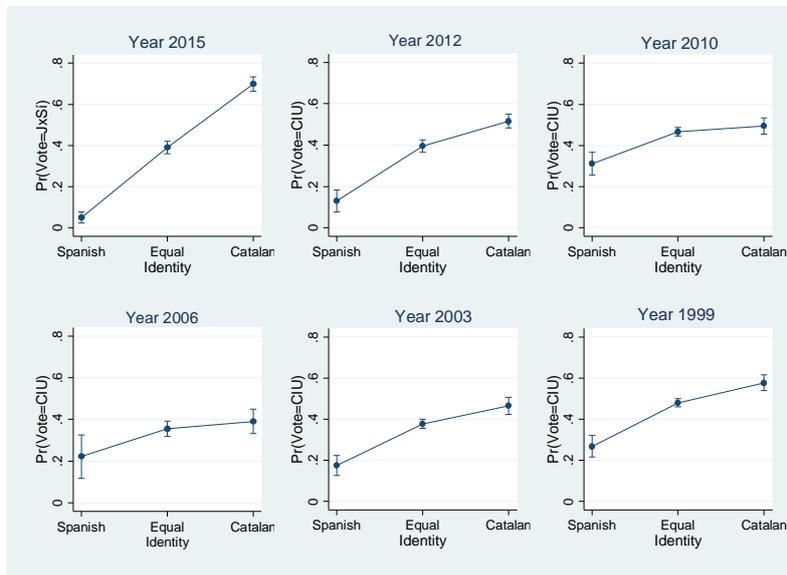**Figure A2**: Predicted probability of voting PNV as a function of identity

Figure A3: Predicted probability of voting CiU as a function of identity

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G: Regression analysis with language

	Independent Variables					
Year	Left-Right	Nationalism	Language	Popul	Econ	Obs
Choice	$\hat{k}_1$(SE)	$\hat{k}_2$(SE)	$\hat{k}_3$(SE)	$\hat{k}_4$ (SE)	$\hat{k}_5$ (SE)	Ps.R^2
2016						1,288
PSE v PNV	-.48***(.08)	-.61***(.05)	-.47*(.27)	.32**(.16)	-.09(.15)	.33
2012						1,265
PSE v PNV	-.79***(.09)	-.58***(.05)	-.76***(.26)	-.05 (.14)	.02 (.13)	.43
2009						2,041
PSE v PNV	-.58***(.06)	-.82***(.04)	-.66***(.18)	.32***(.1)	-.15*(.09)	.36
2005						1,214
PSE v PNV	-.3***(.09)	-1.09***(.07)	-.8***(.25)	.18(.15)	.21(.16)	.45

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

Table A11: Explaining vote for party, Multinomial Logit with language. Basque Country 1998-2016

	Independent Variables					
Year	Left-Right	Nationalism	Language	Popul	Econ	Obs/
Choice	$\hat{k}_1$(SE)	$\hat{k}_2$(SE)	$\hat{k}_3$(SE)	$\hat{k}_4$ (SE)	$\hat{k}_5$ (SE)	Ps.R^2.
2015						953
PSC v JxSí	-.19*(.1)	-.75***(.06)	-2.66***(.52)	.37*(.2)	.24(.17)	.39
2012						1,266
PSC v CiU	-.67***(.08)	-.59***(.05)	-1.7***(.39)	.28*(.15)	.2(.17)	.32
2010						1,413
PSC v CiU	-.79***(.07)	-.38***(.04)	-.55**(.22)	.3**(.12)	-.67***(.11)	.29
2003						817
PSC v CiU	-1.1***(.1)	-.26***(.05)	-.73**(.31)	.5***(.14)		.31
1999						708
PSC v CiU	-1.02***(.1)	-.34***(.05)	-2.05***(.4)	.15(.14)		.35

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

Table A12: Explaining vote for party, Multinomial Logit with language. Catalonia 1999-2015

H: Pre-electoral and postelectoral analyses

The following tables conduct our analysis using the two samples, the pre and the post-electoral surveys for each election year.

			Independent Variables			
Year	Left-Right	Nationalism	Identity	Popul	Econ	Obs
Choice	$\hat{k}_1$	$\hat{k}_2$	$\hat{k}_3$	$\hat{k}_4$	$\hat{k}_5$	Ps.R^2
2016						1,853
PSE v PNV	-.5***	-.43***	-.89***	.15		.32
PP v PNV	.6***	-.57***	-.78***	.96***		
Bildu v PNV	-.69***	-.12***	1.58***	.06		
Pod v PNV	-.7***	-.34***	-.16	1.15***		
C's v PNV	.02	-.55***	-.825**	.7		
2012						1,222
PSE v PNV	-.94***	-.49***	-1.09***	-.18	-.01	.47
PP v PNV	.92***	-.64***	-1.13***	.3	.12	
EH v PNV	-1.22***	.1**	.77***	.09	-.06	
IU v PNV	-1.33***	-.43***	-.56***	.13	-.16	
2009						924
PSE v PNV	-.87***	-.61***	-1.32***	.27*	.01	.43
PP v PNV	1.15***	-.62***	-1.52***	.53*	.11	
Aral v PNV	-1.14***	.05	.71**	-.42*	.21	
IU v PNV	-1.46***	-.43***	-.09	.32	.35	
2005						658
PSE v PNV	-.57***	-.6***	-1.87***	-.03	.67***	.45
PP v PNV	.58***	-.92***	-1.99***	.27	.68**	
PCTV v PNV	-1.27***	.09	.02	-.34	.23	
IU v PNV	-1.16***	-.58***	-.47*	-.11	.55**	
2001						1,052
PSE v PNV	-.57***	-.73***	-1.47***	.51***	.14	.53
PP v PNV	.73***	-.84***	-1.52***	.66***	.31	
EH v PNV	-.94***	.05	2.84***	-.37**	.59***	
IU v PNV	-.88***	-.51***	-.84***	.4*	.21	
1998						991
PSE v PNV	-.79***	-.74***	-.47***	-.11	.06	.41
PP v PNV	.81***	-.74***	-.84***	.53	-.05*	
EH v PNV	-1.35***	-.01	1.67***	-.27*	1.08***	
IU v PNV	-1.21***	-.52***	-.19	.82**	.5**	

Notes: *** p<0.01, ** p<0.05, * p<0.1

Table A13: Explaining vote for party, Multinomial Logit. Basque Country. Pre-electoral surveys 1998-2016

	Independent Variables					
Year	Left-Right	Nationalism	Identity	Popul	Econ	Obs
Choice	$\hat{k}_1$	$\hat{k}_2$	$\hat{k}_3$	$\hat{k}_4$	$\hat{k}_5$	Ps.R^2
2016						1,226
PSE v PNV	-.49***	-.63***	-.55***	.22	-.1	.38
PP v PNV	.74***	-.62***	-.76***	.54*	-.02	
Bildu v PNV	-1.05***	-.04	1.57***	.05	.45***	
Pod v PNV	-.93***	-.4***	-.11	.3**	.24*	
C's v PNV	.18	-.6***	-.83**	.7	-.14	
2012						882
PSE v PNV	-.85***	-.69***	-1.16***	-.06	-.24	.51
PP v PNV	1.01***	-.8***	-1.03***	.19	.01	
EH v PNV	-1.22***	.04	.79***	-.04	.41**	
IU v PNV						
2009						1,069
PSE v PNV	-.5***	-.62***	-1.28***	.26*	-.13	.37
PP v PNV	1.36***	-.92***	-1.77***	.34	.25	
Aral v PNV	-.4***	-.07	.5***	.02	-.23*	
IU v PNV	-.89***	-.48***	-.68**	.35	-.17	
2005						1,187
PSE v PNV	-.4***	-.93***	-1.43***	.13	.27	.48
PP v PNV	1.38***	-1.31***	-1.53***	.44	.33	
PCTV v PNV	-1.43***	.01	.88***	.36**	.46***	
IU v PNV	-.93***	-.68***	-.31*	.17	.27	
2001						1,160
PSE v PNV	-.61***	-.73***	-1.82***	.17		.45
PP v PNV	.73***	-.8***	-1.43***	.14		
EH v PNV	-1.07***	.18*	1.38***	-.32*		
IU v PNV	-1.0***	-.42***	-.66***	.32*		
1998						926
PSE v PNV	-.78***	-.59***	-1.71***	.02		.40
PP v PNV	.56***	-.83***	-1.08***	.34		
EH v PNV	-1.36***	-.01	1.09***	-.22		
IU v PNV	-1.23***	-.47***	-.57**	.5**		

Notes: *** p<0.01, ** p<0.05, * p<0.1

Table A14: Explaining vote for party, Multinomial Logit. Basque Country. Postelectoral surveys 1998-2016

	Independent Variables					
Year	Left-Right	Nationalism	Identity	Popul	Econ	Obs/
Choice	$\hat{k}_1$	$\hat{k}_2$	$\hat{k}_3$	$\hat{k}_4$	$\hat{k}_5$	Ps.R^2.
2015						1,942
PSC v JxSí	-.19***	-.48***	-1.69***	.36**		.35
PP v JxSí	.71.***	-.68***	-1.89***	-.03		
C's v JxSí	.25***	-.73***	-1.76***	.36***		
CUP v JxSí	-.53***	-.21***	-.1	.27**		
Pot v JxSí	-.35***	-.39***	-1.54***	.64***		
2012						1,712
PSC v CiU	-.71***	-.40***	-1.08***	.42***	-.05	.34
PP v CiU	.58***	-.53***	-1.23***	.27	-.04	
ERC v CiU	-.90***	-.01	.36***	.01	-.03	
ICV v CiU	-1.18***	-.26***	-.55***	.39***	-.04	
C's v CiU	.03	-.54***	-.76***	.33*	.45**	
2010						1,549
PSC v CiU	-.73***	-.17***	-.59***	.1	-.43***	.26
PP v CiU	.42***	-.28***	-.87***	.33**	.35***	
ERC v CiU	-.77***	.06	.66***	-.15	-.19	
ICV v CiU	-.96***	-.15***	-.36**	.24*	-.14	
C's v CiU	-.1	-.32***	-.51***	.72***	.34**	
2006						1,164
PSC v CiU	-.92***		-1.0***	.26	-.04	.32
PP v CiU	.64***		-1.22***	.08*	.27**	
ERC v CiU	-1.23***		.89***	-.16	.14	
ICV v CiU	-1.33***		.1	.25	.0	
C's v CiU						
2003						2,309
PSC v CiU	-.98***	-.17***	-.67***	.08		.29
PP v CiU	.43***	-.3***	-.9***	.22*		
ERC v CiU	-1.14***	.09*	.56***	-.19**		
ICV v CiU	-1.43***	-.18***	-.2	.16		
1999						2,270
PSC v CiU	-.84***	-.15***	-.59***	.26***		.29
PP v CiU	.52***	-.35***	-.57***	.29**		
ERC v CiU	-.98***	.04	.91***	-.18		
ICV v CiU	-1.2***	-.17***	-.27*	.52***		

Notes: *** p<0.01, ** p<0.05, * p<0.1

Table A15: Explaining vote for party, Multinomial Logit. Catalonia. Pre-electoral surveys 1999-2015

| | Independent Variables | | | | | |
| Year | Left-Right | Nationalism | Identity | Popul | Econ | Obs/ |
Choice	$\hat{k}_1$	$\hat{k}_2$	$\hat{k}_3$	$\hat{k}_4$	$\hat{k}_5$	Ps.R^2.
2015						932
PSC v JxSí	-.29***	-.54***	-1.9***	.45**	.36**	.41
PP v JxSí	1.46***	-.97***	-2.4***	.49	.00	
C's v JxSí	.53***	-.72***	-1.83***	.26	.17	
CUP v JxSí	-.89***	-.22***	-.15	.13	.29*	
Pot v JxSí	-.76***	-.53***	-1.41***	.31	.33*	
2012						1,238
PSC v CiU	-.82***	-.35***	-1.69***	.27*	.23	.35
PP v CiU	.31***	-.72***	-1.80***	.26	.02	
ERC v CiU	-.78***	.04	.31***	-.02	.06	
ICV v CiU	-1.13***	-.33***	-.82***	.29*	.2	
C's v CiU	-.09	-.54***	-1.41***	.37*	.32	
CUP v CiU	-1.32***	-.33***	.79***	.07	.66***	
2010						1,412
PSC v CiU	-.82***	-.34***	-.37***	.3**	-.65***	.29
PP v CiU	.55***	-.47***	-.52***	.6***	.15	
ERC v CiU	-1.0***	.18**	.77***	-.19	-.30*	
ICV v CiU	-1.21***	-.19***	-.05	.65***	-.26*	
C's v CiU	-.17*	-.57***	-.53***	.13	.18	
2006						903
PSC v CiU	-1.08***	-.37***	-.46***	-.02		.34
PP v CiU	.46***	-.42***	-1.12***	.49*		
ERC v CiU	-1.42***	.02	.62***	-.11		
ICV v CiU	-1.64***	-.34***	.08	.09		
C's v CiU	-.44***	-.68***	-.42	.86**		
2003						829
PSC v CiU	-1.1***	-.3***		.52***		.30
PP v CiU	.76***	-.74***		.28		
ERC v CiU	-1.19***	.33*		-.13		
ICV v CiU	-1.63***	-.22***		.51**		
1999						698
PSC v CiU	-1.07***	-.23***	-.81***	.09		.37
PP v CiU	.69***	-.4***	-1.02.***	.31		
ERC v CiU	-.99***	.15*	.74***	.14		
ICV v CiU	-1.91***	-.5***	-.01	-.19		

Notes: *** p<0.01, ** p<0.05, * p<0.1

Table A16: Multinomial Logit. Catalonia. Postelectoral survey 1999-2015

The results in each region are very similar. Positional and identity issues always are the important determinants of vote choice. The magnitude of the identity coefficients is higher in times of secession both in the pre and post-electoral analyses. Interestingly, we observe how the effect of population size in times of secession is stronger in the pre-electoral surveys compared to the post-electoral surveys. Possibly, citizens, when more exposed to the election campaign, strongly respond to territorial divides.[7]

I: Analysis by provinces

We explore the differences among provinces when running separate regressions. The Basque Country has three provinces, Gipuzkoa, Biscay, and Alava. For the 2016 elections, we compare the multinomial regression coefficients for the three variables with higher explanatory power: the left-right and nationalist orientation of respondents and their national identity (we omit in the table population size and the perception of the economy variables).

	Independent Variables			
Year	Left-Right	Nationalism	Identity	Obs.
Choice	$\hat{k}_1$	$\hat{k}_2$	$\hat{k}_3$	Ps.R^2.
2016 Gipuzkoa				473
PSE v PNV	-.51***	-.56***	-.90***	.43
PP v PNV	.41*	-.46***	-.96**	
EH v PNV	-1.34***	.02	1.72***	
2016 Biscay				430
PSE v PNV	-.72***	-.81***	-.48*	.39
PP v PNV	.7***	-.64***	-.4	
EH v PNV	-1.17***	-.02	1.22***	
2016 Alava				323
PSE v PNV	-.35**	-.54***	-.44*	.37
PP v PNV	1.30***	-.75***	-.75*	
EH v PNV	-.93***	.08	1.21***	

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

Table A17: Multinomial Logit. Explaining vote for party by province in the Basque Country. Electoral surveys 2015

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[7]This is an interesting question that we leave for further research.

Table A17 describes the results for the four most relevant parties in the Basque region. The table reveals that identity has a higher significant effect in Gipuzkoa than Biscay and Alava. Thus, national identity is more divisive in Gipuzkoa. More than 60 percent of respondents feel more Basque than Spanish in this province than the 50 percent in Biscay and 40 percent in Alava.

We run a similar exercise for Catalonia in the 2015 elections. The number of observations when including all the independent variables becomes too small in Lleida and Girona. We then remove the perception about the economy as an independent variable to explain vote choice and run a separate regression for each province. The following table shows the regression coefficients for the three more relevant explanatory variables and the comparison between the JxSí coalition and the two most significant national parties. As a variable that explains vote choice, we find that identity has a similar impact in the four provinces. In 2015, more than 60 percent of respondents in Lleida and Girona expressed their more Catalan than Spanish feeling, and only 6 percent of the population reported stronger Spanish over Catalan feeling. In Barcelona and Tarragona about 50 percent of respondents feell more Catalan than Spanish compared to the 10 percent who feel more Spanish than Catalan.

	Independent Variables			
Year	Left-Right	Nationalism	Identity	Obs.
Choice	$\hat{k}_1$	$\hat{k}_2$	$\hat{k}_3$	Ps.R^2.
2015 Barcelona				1,467
PSC v JxSí	-.28***	-.51***	-1.9***	.37
PP v JxSí	.83***	-.78***	-2.11***	
2015 Tarragona				453
PSC v JxSí	-.24*	-.53***	-1.75***	.39
PP v JxSí	.84***	-.58***	-2.56***	
2015 Lleida				459
PSC v JxSí	-.42***	-.64***	-2.04***	.37
PP v JxSí	.96***	-.83***	-2.34***	
2015 Girona				497
PSC v JxSí	-.08	-.36***	-1.49***	.34
PP v JxSí	.78***	-.77***	-1.47***	

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

Table A18: Multinomial Logit.Explaining vote for party by province in Catalonia. Electoral surveys 2015