Online Appendix
Checks and Balances and Nation Building: The Spanish Constitutional Court and Catalonia

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A Description of the variables and additional data

A.1 List of dependent variables

We here provide the detailed list and description of the dependent variables from CEO used in the estimations in the paper.

- Preferred relationship between Spain and Catalonia
  - *More autonomy / More aut.*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively.
  - *Independence*: dummy reflecting the respondent's preference for Catalonia to become an independent state.
- Trust to democratic institutions
  - *Trust: X*: variables reporting how much the interviewed trusts the following institutions from 1 to 10:
    - Courts (*Courts*)
    - Spanish Government (*Gvt Esp*)
    - Spanish Parliament (*Parl Esp*)
    - Catalan Government (*Gvt Cat*)
    - Catalan Parliament (*Parl Cat*)
    - Political parties (*Parties*)
  - *Insatisf. democr.*: dummy taking 1 if the interviewed has small or no satisfaction with the functioning of the democracy, and taking 0 if the interviewed is enough or very satisfied.
- National identity
  - *Feeling Catalan / Feel Cat.*: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish (*Only Esp*), 2 if the interviewed feels more Spanish than Catalan (*+Esp that Cat*), 3 if the interviewed feels as Spanish as Catalan (*As Esp As Cat*), 4 if the interviewed feels more Catalan than Spanish (*-Esp than Cat*), and 5 if the interviewed feels only Catalan (*Only Cat*).
- Perceived problems
  - *Most important problems / Probl (Most) X*: dummy taking 1 if the interviewed mentions as the most important problem of Catalonia one of the following topics:
    - The relationship between Spain and Catalonia (*Cat-Esp*)
    - The Catalan Statute of Autonomy (*estatut*). This category is a subcategory of *Cat-Esp*
    - Unemployment, job insecurity, the functioning of the economy, or the low level of wages (*eco-lab*)
    - The Catalan financing system (*financing*)

- Intention to vote or past vote to Catalan parties
  - *Vote*: dummy taking 1 if the interviewed has the intention to vote for Convergència i Unió (CiU) or Esquerra Republicana de Catalunya (ERC) at the next elections for the Catalan Parliament, and taking 0 if the interviewed intends to vote for another party (if the interviewed cannot vote, intends not to vote, or to conduct a blank or null vote this variable is coded as missing.).
  - *Past vote*: dummy taking 1 if the interviewed voted for Convergència i Unió (CiU) or Esquerra Republicana de Catalunya (ERC) at the Catalan Parliament elections of 2006, and taking 0 if the interviewed voted for another party (if the interviewed cannot vote, did not vote, or conducted a blank or null vote this variable is coded as missing.).

A.2 Additional summary statistics: dependent variables

Summary statistics for all the variables that we use as dependent variables in our regressions are reported in Table A.1. In column (1) we report the mean of the variables and in column (2) we report the mean of the variables for the sample of people interviewed before 19pm in the first seven days of the survey.

Table A.1: Summary statistics of the variables used as dependent variables

Variable	**Mean**	**Mean sample**
Preference for independence	0.26	0.26
Preference for federal state	0.33	0.30
Preference for autonomous communities	0.35	0.37
Preference for regions	0.06	0.07
Trust in tribunals (0-10)	3.96	3.89
Trust in Spanish government (0-10)	3.60	3.66
Trust in Spanish parliament (0-10)	4.05	4.04
Trust in Catalan government (0-10)	4.62	4.70
Trust in Catalan parliament (0-10)	4.90	4.91
Trust in parties (0-10)	3.57	3.57
Few or no satisfaction with democracy	0.60	0.61
Intend to vote for ERC in Catalan elections	0.10	0.10
Intend to vote for CiU in Catalan elections	0.44	0.43
Voted for ERC in past Catalan elections	0.15	0.13
Voted for CiU in past Catalan elections	0.32	0.32
Proximity to ERC	2.41	2.40
Proximity to CiU	2.90	2.88
Feeling Catalan (1-5)	3.50	3.46
Feel only Spanish	0.07	0.08
Feel more Spanish than Catalan	0.05	0.05
Feel as Spanish as Catalan	0.40	0.41
Feel less Spanish than Catalan	0.29	0.27
Feel only Catalan	0.20	0.19
Think relationship between Spain and Catalonia is a problem	0.22	0.22
Think Estatut is a problem	0.16	0.16
Think financing system is a problem	0.04	0.03
Think economic situations, working conditions or low wages are a problem	0.80	0.81
Think relationship between Spain and Catalonia is most important problem	0.08	0.09
Think Estatut is most important problem	0.06	0.07
Think financing system is most important problem	0.01	0.01
Think economic situations, working conditions or low wages are most important problem	0.64	0.64

All variables are dummy variables that take value 1, unless the indexes, for which the minimum and maximum are stated in parenthesis. *Mean*: mean of the reported variable. *Mean sample*: mean of the reported variable in the sample of people interviewed before 19 and in the first seven days of interview. Probability weights used.

Preferences for the different relationships between Spain and Catalonia in previous survey waves dissagreggated by past political vote are reported in Table A.2.

Table A.2: Summary statistics of the preferred relationship between Catalonia and Spain by past vote in previous waves

Variable	**Mean**	**Mean CiU**	**Mean ERC**	**Mean PSC**	**Mean ICV-EUiA**	**Mean PPC**	**Mean Cs**
Preference for independence	0.19	0.21	0.52	0.07	0.12	0.03	0.01
Preference for federal state	0.35	0.40	0.39	0.38	0.61	0.10	0.13
Preference for autonomous communities	0.39	0.35	0.08	0.49	0.25	0.65	0.71
Preference for regions	0.06	0.03	0.01	0.06	0.02	0.22	0.14

Mean: mean of the reported variable in the CEO surveys between March 2007 and April 2010. The other columns report the mean of the corresponding variables for people who voted at the Catalan Parliament elections of 2006 for Convergència i Unió (CiU), Esquerra Republicana de Catalunya (ERC), Partido de los Socialistas de Cataluña (PSC), or Iniciativa per Catalunya Verds-Esquerra Unida i Alternativa (ICV-EUiA), Partido Popular Catalán (PPC) and Ciudadanos (Cs) respectively. Probability weights used.

A.3 List of control variables

We here provide the detailed list of controls used in the estimations in the paper.

A.3.1 Control variables in the within-survey baseline estimation strategy

The controls included in the estimation of Equation 1 using CEO data are:

- Socio-demographic controls
  - dummy reflecting the respondent's sex
  - dummy reflecting whether the respondent was married
  - continuous variables for the age of the respondent and its square
- Socio-economic controls
  - dummies for respondent's education: education lower than ESO (12th grade), ESO (12th grade), bachillerato (high school) diploma, and university education
  - dummies for respondent's household net income per month: lower than 1,000 Euros, between 1,001 and 2,000 Euros, between 2,001 and 3,000 Euros, and more than 3,001 Euros
  - dummies for respondent's employment situation: self-employed, paid employee, and unemployed, inactive or retired
- Language controls
  - dummy reflecting whether Catalan was the language of interview
  - dummy reflecting whether the respondent usually spoke Catalan with family
  - dummy reflecting whether the respondent usually spoke Catalan at work
  - dummy reflecting whether the respondent usually spoke Catalan with friends
- Heritage controls
  - dummies reflecting whether the respondent was born in Catalonia, the rest of Spain or outside Spain
  - dummies reflecting whether the respondent's father was born in Catalonia, the rest of Spain or outside Spain
  - dummies reflecting whether the respondent's mother was born in Catalonia, the rest of Spain or outside Spain
- Geographical controls
  - dummies for respondent's city of residence population: lower 2,000 inhabitants, between 2,001 and 10,000 inhabitants, between 10,001 and 50,000 inhabitants, between 50,001 and 150,000 inhabitants, between 150,001 and 1 million inhabitants, and more than 1 million inhabitants
  - 42 dummies for respondent's comarca of residence: Alt CAmp, Alt Empordà, Alt Penedès, Alt Urgell, Alta Ribargoça, Anoia, Bages, Baix Camp, Baix Ebre, Baix Empodrà, Baix Llobregat, Baix Penedés, Barcelonès, Berguedà, Cerdanya, Conca de Barberà, Garrf, Garrigues, Garrotxa, Gironès, Maresme, Noguera, Osona, Pallars Jussà, Pla d'Urgell, Pla de l'Estany, Priorat, Ribera d'Ebre, Ripollès, Segarra, Segrià, Selva, Solsonés, Tarragonés, Terra Alta, Urgell, Val d'Aran, Vallès Occidental, Vallès Oriental

A.3.2 Control variables in the CEO survey strategies based on several waves

The controls included in the estimation of models using CEO data using different waves, without considering the polarization according to Catalan heritage are identical to the list of controls in Appendix A.3.1 with the only difference that age controls are not continuous but instead they are dummies reflecting the respondent's age: between 18 and 34 years old, between 35 and 49 years old, between 50 and 64 years old, and more than 64 years old.

A.3.3 Control variables in the within-survey estimation strategy of the polarization according to Catalan heritage

The list controls included in the estimation of the following model using CEO data are:

$$Y_i = \alpha_2 + \beta_2 Ruling_i + \tau_2 CatalanHeritage_i + + \chi_2 CatalanHeritage \times Ruling_i + \gamma_2 X_{2,i} + GEO_i + \epsilon_i, \tag{A.1}$$

- Socio-demographic controls
  - dummy reflecting the respondent's sex
  - dummy reflecting whether the respondent was married
  - dummies reflecting the respondent's age: between 18 and 34 years old, between 35 and 49 years old, between 50 and 64 years old, and more than 64 years old
- Socio-economic controls
  - dummies for respondent's education: education lower than ESO (12th grade), ESO (12th grade), bachillerato (high school) diploma, and university education
  - dummies for respondent's household net income per month: lower than 1,000 Euros, between 1,001 and 2,000 Euros, between 2,001 and 3,000 Euros, and more than 3,001 Euros
  - dummies for respondent's employment situation: self-employed, paid employee, and unemployed, inactive or retired
- Heritage controls
  - dummies reflecting whether the respondent was born in Catalonia, the rest of Spain or outside Spain
- Geographical controls
  - dummies for respondent's city of residence population: lower 2,000 inhabitants, between 2,001 and 10,000 inhabitants, between 10,001 and 50,000 inhabitants, between 50,001 and 150,000 inhabitants, between 150,001 and 1 million inhabitants, and more than 1 million inhabitants
  - 42 dummies for respondent's comarca of residence: Alt CAmp, Alt Empordà, Alt Penedès, Alt Urgell, Alta Ribargoça, Anoia, Bages, Baix Camp, Baix Ebre, Baix Empodrà, Baix Llobregat, Baix Penedés, Barcelonès, Berguedà, Cerdanya, Conca de Barberà, Garrf, Garrigues, Garrotxa, Gironès, Maresme, Noguera, Osona, Pallars Jussà, Pla d'Urgell, Pla de l'Estany, Priorat, Ribera d'Ebre, Ripollès, Segarra, Segrià, Selva, Solsonés, Tarragonés, Terra Alta, Urgell, Val d'Aran, Vallès Occidental, Vallès Oriental

A.3.4 Control variables in the within-Catalonia differences-in-differences estimation strategy using ICPS data

The controls included in the estimation of Equation A.2 using ICPS data are:

- Socio-demographic controls
  - dummy reflecting the respondent's sex
  - dummies reflecting the respondent's age: between 18 and 34 years old, between 35 and 49 years old, between 50 and 64 years old, and more than 64 years old
- Socio-economic controls
  - dummies for respondent's education: education lower than ESO (12th grade), ESO (12th grade), bachillerato (high school) diploma, and university education
  - dummies for respondent's employment situation: self-employed, paid employee, and unemployed, inactive or retired
- Heritage controls
  - dummies reflecting whether the respondent was born in Catalonia, the rest of Spain or outside Spain
- Geographical controls
  - dummies for respondent's city of residence population: lower 2,000 inhabitants, between 2,001 and 10,000 inhabitants, between 10,001 and 50,000 inhabitants, between 50,001 and 150,000 inhabitants, between 150,001 and 1 million inhabitants, and more than 1 million inhabitants
  - dummies for respondent's province of residence: Barcelona, Girona, Lleida, Tarragona

A.3.5 Control variables in the within-Spain differences-in-differences estimation strategy using CIS data

The controls included in the estimation of Equation A.3 using ICPS data are:

- Socio-demographic controls
  - dummy reflecting the respondent's sex
  - continuous variables for the age of the respondent
- Socio-economic controls
  - dummies for respondent's education: no schooling, education lower than ESO (12th grade), bachillerato (high school) diploma, basic professional training, advanaced professional training, and university education
  - dummies for respondent's employment situation: employed, retired and formerly working, retired and formely not working, unemployed and formerly working, unemployed and looking for the first occupation, student, and non-paid domestic worker
- Geographical controls

- dummies for respondent's city of residence population: lower 2,000 inhabitants, between 2,001 and 10,000 inhabitants, between 10,001 and 50,000 inhabitants, between 50,001 and 100,000 inhabitants, between 100,001 and 400,000 inhabitants, between 400,001 and 1 million inhabitants, and more than 1 million inhabitants
- 52 dummies for respondent's province of residence in Spain

A.4 Data from CIS

To investigate how the Ruling differently impacted citizens from Catalonia and citizens from the rest of Spain, we rely on similar surveys from the Center for Sociological Research (CIS), a public Spanish research institute. Specifically, we collected data from all the monthly Barometer and the yearly Survey on Public Opinion and Fiscal Policy between 2005 and 2012.[1] We end up with a database with information that spans several years in every Autonomous Community of Spain about their preferred institutional relationship between their Autonomous Community and Spain (level of autonomy), Spanish versus regional identity, tax preferences, and political participation.

First, the answers to the CIS question about the preference for more autonomy are slightly different from the CEO in terms of the words used and the presence of an additional category. However, they are very comparable because they have several options ranging from lower to higher autonomy of the Autonomous Community, with the eventual possibility of independence.[2]

Second, the variable about Spanish versus regional identity has the same structure as this variable in the CEO data. The respondents can choose one among the following five categories: they feel (i) only Spanish; (ii) more Spanish than from their Autonomous Community; (iii) Spanish and from their Autonomous Community alike; (iv) more from their Autonomous Community; and (v) only from their Autonomous Community.

Third, the CIS database includes a question about preferences for economic policies by asking the respondents if they believe that the fiscal pressure in Spain is high, average or low. Note that this question is not identical to the question in the ICPS data; thus, the

[1]The questions included in the Barometer change every month, so the same variable might not be present every month. To increase frequency of the questions about the preferred relationship between each Autonomous Community and Spain and the self-identification between regional and Spanish identity we complement the previous surveys with the Autonomic Barometer (December 2005), Survey on National Identity in Spain (December 2006), Survey on Internet and Political Participation (October 2007), Survey on 2008 Postelectoral National Elections and the Parliament of Andalucía (March and April 2008), Survey on Spatial Models of Political Preferences (April 2009), Survey on Preelectoral National Elections (October 2011), Survey on 2011 Postelectoral National Elections (November 2011 and January 2012), Survey on Ideological Congruence between Voters and Political Representatives (January and February 2012).

To increase frequency of the questions about political participation we complement the previous surveys with the Survey on Citizenship and Participation (January and February 2006), Internet and Political Participation (October and November 2007), and Effects of the Questions' Format Module A (November and December 2007).

[2]Before 2008, CIS was providing the four answers. That is, 4 options about whether the respondent prefers its Autonomous Community to have no autonomy, have autonomy as the status quo, more autonomy than the status-quo, or have the possibility to become independent states. On the other hand, from 2009 onwards, CIS provides the following additional option to the question about the preferred relationship between an Autonomous Community and Spain: the respondent prefers Autonomous Community to have lower autonomy than status quo. We further discuss the details of the CIS question about territorial preferences in Appendix D.13.4. In that Appendix, we also conduct an exercise harmonizing the variable of the CIS Survey to be similar to the CEO variable and show robustness of our results.

within-Spain and within-Catalonia evidence on economic preferences is not immediately comparable.

Fourth, the CIS database asks questions about different form of political participation. The forms of participation and the format of the question changed through time. CIS constantly ask about whether respondents participate in three forms of political participation: demonstration, strike, and signing of a petition. We have data on these political participation for every year from 2006 onwards. CIS also asked in a less frequent way information about three three political forms of political participation: whether respondents boycott certain products for political, ethical or environmental reasons, or they buycott a product (i.e., the intentional purchase of certain products for political, ethical or environmental reasons), or they donate or fundraise a political or social activity. We have information for these variables in 2006, 2007, 2009, and 2011. We do not consider other forms of political participation asked by CIS that are recorded for fewer points in time.

The format of the questions about political participation is similar but not exactly identical through the surveys. In the big majority of the cases, the questions were asked as whether respondent participate to a political action giving them the possibility to answer that they participate in the last year, during a more distant past, never participate but they could do it, or never participate and will never do. Sometimes the respondents were not given the last two options separately but instead they giving the unique option of responding that they never participate. We hence consider the options "never participate but they could do it", or "never participate and will never do" as identical. In other years, respondents were asked two different questions: one in which they were asked whether they participate to the political action in the last year (with the possibility to answer yes or no) and a sector one about whether they participated in a more distant past. We construct a single answer with the three options "participate in the last year", "participate in a more distant past", "never participate" from the two questions to have a similar format as in other years.

B Additional details of the institutional background

B.1 Form of government

After thirty-nine years of dictatorship under Francisco Franco's rule, a new Constitution was signed in Spain three years after the dictator's death. This Constitution, signed in 1978, establishes that the political form of the Kingdom of Spain is a parliamentary monarchy.

The monarch is the head of state; however, in practical terms, his duties are ceremonial, and the president holds executive power. Regarding the legislative branch, Spain has a bicameral parliamentary system composed of the Congress of Deputies and the Senate. Deputies and Senators representing the provinces are elected by universal suffrage for a maximum of four years. Deputies elect the president for the duration of their mandate.[3]

Since the return of democracy, the Spanish Government has alternated between two main national parties. Although both parties are moderate in economic and social terms, the Socialist Party (or *PSOE*) is center left while the Popular Party (or *PP*) is center right. From 1978 to 2010, these two parties dominated the Congress of Deputies and the Senate almost exclusively. After the 2008 Great Recession, which substantially affected Spain, two other parties emerged: *Podemos* and *Ciudadanos*. While the former has been a left-wing party since its inception, the latter is usually placed between PSOE and PP – according to the placement of political parties' surveys (done by the Spanish *Centro de Investigaciones Sociológicas*). In addition to national parties, regional parties have enjoyed a sizable presence in both chambers, which has occasionally allowed them to shift the majority of congress towards one of the main national parties.

In the case of Catalonia, the form of government closely mirrors the national one. The president of Catalonia is elected by the Catalan Parliament, whose members are elected in representation of the provinces with a mandate of four years.

B.2 The Spanish Constitutional Court

The maximum authority of the judiciary branch is the Supreme Court, except for cases that refer to national and regional constitutions, which are handled by the Constitutional Court. The Constitutional Court is composed of twelve members. Formally appointed by the King, four members are nominated by the Congress, four by the Senate, two by the Government and two by the Judiciary branch.[4] No appeal may be brought against rulings of the Constitutional Court.

The process of reform of the regional constitutions differs across regions. In Catalonia, reform requires a qualified majority of two-thirds of the Catalan Parliament, an absolute majority in the Spanish Congress and Senate and ratification by a majority of Catalan voters in a referendum. In addition to this process, as with any other Spanish law, the reform is subject to rulings of the Constitutional Court regarding its constitutionality.[5]

[3] The names and attributes of the elected politicians do not coincide with other democracies: in Spain, Deputies have attributes that are similar to those of Senators in other countries (i.e., the U.S.), and in most parliamentary democracies, the president is typically referred to as the Prime Minister.

[4] Members appointed by the Congress and the Senate must have sixty percent approval. Constitutional Court members are formally appointed for a period of nine years and can be renewed by thirds every three years. More details about the composition of the Court's members who rule upon the Catalan Constitution are provided in the Appendix D.11.

[5] According to the Spanish Constitution, the following subjects can lodge an appeal of unconstitutionality: the President of the Government, the Defender of the People, fifty Members of Congress, fifty Senators, the Executive body of a self-governing community and, where applicable, its Assembly.

B.3 The rise of Catalan secessionism (2010-2019)

Since the Great Recession, Spain was immersed in a severe economic recession. The unemployment rate, which was below 10% at the beginning of 2008, reached 26.3% in 2013. This figure was 55.3% among the youth, more than twice of the European average. The ruling party (PP) imposed austerity measures and the accompanying political discontent was manifested nationally by the Indignados movement – also known as 15M (Barreiro and Sánchez-Cuenca, 2012). Amidst the Spanish economic crises, the growth of the support for independence (see Figure 1 in Section 2 of the paper)

On November 2010, the Catalan regional election was held and CIU,[6] led by Artur Mas, won the election and formed a minority government. In a context of a severe economic recession and political discontent led by the Indignados movement, CIU introduced its proposal of greater fiscal autonomy in the agenda while they were implemented austerity measures. During these months support for secession increased gradually and in March 2012, CDC[7] held a Congress titled "the national transition" where the party supported for the first time in its history the creation of a new Catalan state.[8]

On September 11, 2012, during Catalonia's national day, a massive secessionist demonstration under the slogan "Catalonia, new state in Europe" took place. Until that year, the national day was characterized by some institutional events and minoritary demonstrations.[9] After the demonstration, Artur Mas (the president of Catalonia) called for snap elections with the promise of holding a self-determination referendum in the following term if he was re-elected president.[10] Mas was re-elected and a non-binding referendum was held in November 9th 2014. Although the referendum was prohibited according to the Constitutional Court, it took place without incidents with an 80% support for independence.[11]

Given the impossibility of holding a legal and binding self-determination referendum, Mas announced that the 2015 regional elections would be a *de facto* plebiscite for independence. Parties announced their position for/against secession and a pro-independence candidate, Carles Puigdemont, was elected president by a coalition of his party, ERC and the Popular Unity Candidacy (CUP), another seccesionist party. Months later, given the difficulty to pass relevant laws and the regional budget, Puigdemont obtained a confidence vote conditional on celebrating an unilateral and binding referendum of self-determination during that term. Contrary to the referendum of 2014, the preparation of this referendum included laws to ensure that the result of the referendum would be implemented and a proper census. Both these laws and the referendum itself were declared illegal by the Spanish Constitutional Court. The referendum was finally held in October 1st 2017 in an extremely polarized environment.

This time police did intervene and there were acts of repression and violence before and during the election. According to the Catalan Government, 43% of eligible voters

[6] The right-wing Catalan nationalist coalition that governed the region from 1980 to 2003.

[7] CDC is the majoritarian party of CIU.

[8] While ERC unambiguously supported secession since 1989 (Serrano and Bonillo, 2017), CDC had never endorsed it before.

[9] According the the Municipal Police of Barcelona, the number of participants increased from 8.000 in 2011 to 1.500.000 in 2012.

[10] In spite that during this period (2010-2015) the support for independence increased from 26% in June 2010 to 48% in June 2012 (see Figure 1 in Section 2), none of the political parties of the government coalition had promised a secession attempt in their respective electoral manifestos.

[11] 2.3 millions of Catalans participated and near 80% of the participants voted for independence. However, there was no official census in the referendum and, thus there is not an official number of eligible voters.

participated in the vote and more than 90% of them voted in favour of independence. One month after the celebration of the referendum, the majority of members of the Parliament of Catalonia declared the independence of Catalonia. The Spanish Congress and Senate intervened Catalonia, suspending its autonomy through the article 155 of the Spanish Constitution, the Spanish government appointed an interim Catalan government and called for elections in December 2017. As a consequence of the referendum, six members of the Catalan Government, the president of the Catalan Parliament and the two main leaders of the secessionist movement were sentenced to prison for the crimes of sedition and misuse of public funds.

C Detailed results on the effect of the Ruling

C.1 Effect of controls on the institutional preferences

Table A.3 reports the same estimations presented in Table 2 of the manuscript including all the controls estimates. The same estimates of column (2) are reported graphically in Figure A.1.

Figure A.1 summarizes how individual characteristics correlate with support for the preferred level of political autonomy of Catalonia. Notably, in addition to the Ruling, the main variables with a significant effect on support for more autonomy are related to cultural factors, i.e., the respondents speak Catalan with friends or their mother was not born in another part of Spain. In addition to the cultural factors, we also find a positive statistically significant coefficient of being between 50 and 64 years old and being male.

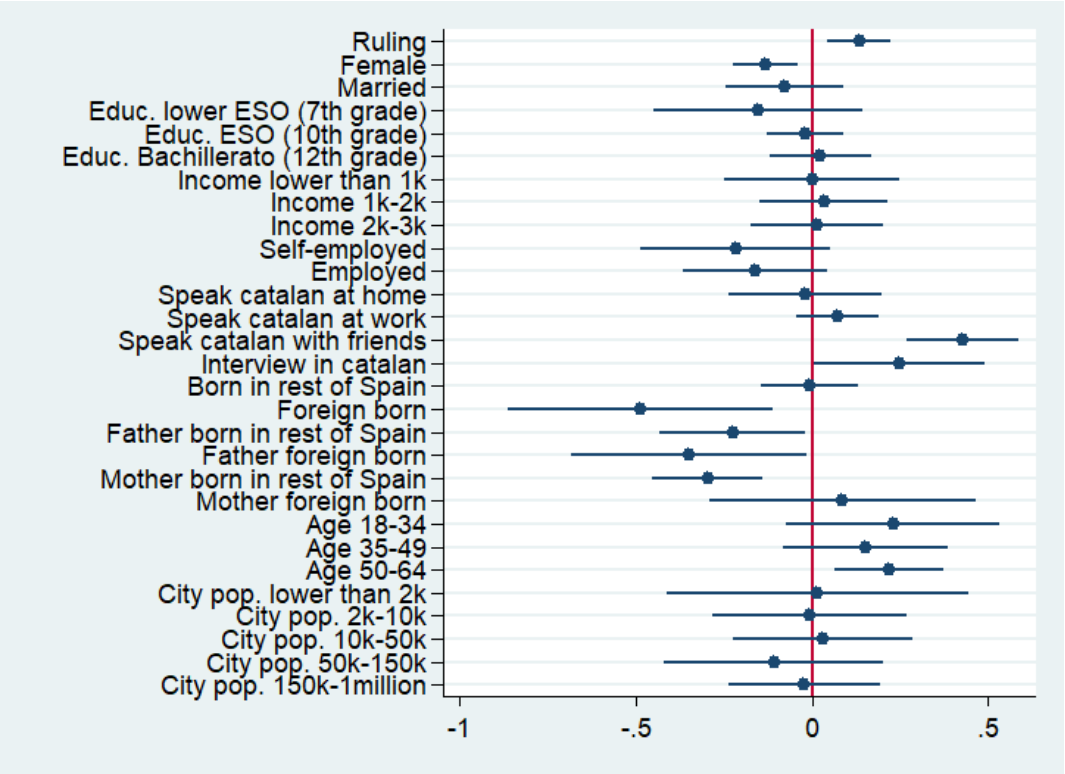


Figure A.1: Effect of the controls on the preferred relationship between Spain and Catalonia

This figure plots all the coefficients of the controls included in column (2) in Table 2. Each point refers to the estimated coefficient of each control and each line refers to the 95% confidence interval. OLS estimates obtained after regressing *More autonomy* on *Ruling*, all the controls and comarca fixed effects. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors are clustered at the province-day of the interview level.

Table A.3: Effect of the Ruling and the controls on preferred relationship between Spain and Catalonia

VARIABLES	(1) More autonomy	(2) More autonomy	(3) More autonomy	(4) Independence
Ruling	0.153**	0.133***	0.211***	0.0518**
	(0.0577)	(0.0431)	(0.0723)	(0.0207)
Female		-0.133***	-0.204***	-0.00352
		(0.0441)	(0.0679)	(0.0195)
Married		-0.0785	-0.121	-0.0188
		(0.0807)	(0.117)	(0.0464)
Educ. lower ESO (7th grade)		-0.153	-0.255	0.0119
		(0.145)	(0.199)	(0.0439)
Educ. ESO (10th grade)		-0.0214	-0.0457	0.0466
		(0.0529)	(0.0834)	(0.0308)
Educ. Bachillerato (12th grade)		0.0226	0.0362	0.0226
		(0.0700)	(0.102)	(0.0327)
Income lower than 1k		0.000257	0.00687	0.0750*
		(0.121)	(0.173)	(0.0385)
Income 1k-2k		0.0327	0.0634	0.0343
		(0.0890)	(0.127)	(0.0579)
Income 2k-3k		0.0124	0.0246	-0.0331
		(0.0915)	(0.122)	(0.0423)
Self-employed		-0.218	-0.326*	-0.109*
		(0.131)	(0.186)	(0.0638)
Employed		-0.162	-0.249*	-0.0337
		(0.100)	(0.142)	(0.0329)
Speak catalan at home		-0.0197	-0.0421	0.00989
		(0.105)	(0.150)	(0.0378)
Speak catalan at work		0.0718	0.0996	-0.0248
		(0.0575)	(0.0828)	(0.0366)
Speak catalan with friends		0.428***	0.632***	0.190***
		(0.0770)	(0.125)	(0.0568)
Interview in catalan		0.247**	0.348**	0.0295
		(0.118)	(0.170)	(0.0489)
Born in rest of Spain		-0.00600	0.00502	0.0218
		(0.0675)	(0.0976)	(0.0331)
Foreign born		-0.488**	-0.711**	-0.203*
		(0.183)	(0.294)	(0.102)
Father born in rest of Spain		-0.225**	-0.334**	-0.0869
		(0.101)	(0.142)	(0.0569)
Father foreign born		-0.349**	-0.537**	-0.107
		(0.163)	(0.246)	(0.144)
Mother born in rest of Spain		-0.297***	-0.428***	-0.152***
		(0.0765)	(0.116)	(0.0351)
Mother foreign born		0.0856	0.116	0.0177
		(0.184)	(0.264)	(0.102)
Age 18-34		0.230	0.362	0.152*
		(0.147)	(0.223)	(0.0775)
Age 35-49		0.151	0.234	0.126*
		(0.114)	(0.166)	(0.0735)
Age 50-64		0.219***	0.359***	0.0710*
		(0.0759)	(0.118)	(0.0414)
City pop. lower than 2k		0.0159	0.0884	-0.0843
		(0.208)	(0.276)	(0.100)
City pop. 2k-10k		-0.00676	0.0249	-0.114
		(0.133)	(0.186)	(0.0761)
City pop. 10k-50k		0.0292	0.0923	-0.0947
		(0.124)	(0.173)	(0.0888)
City pop. 50k-150k		-0.108	-0.132	-0.0870
		(0.151)	(0.213)	(0.0716)
City pop. 150k-1million		-0.0229	0.00488	-0.0387
		(0.105)	(0.155)	(0.0660)
Observations	1,199	960	960	960
R-squared	0.004	0.339		0.241
Comarca FE	NO	YES	YES	YES
Estimation	OLS	OLS	O-Probit	OLS

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Independence*: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Educ.*: years of education. *City pop.*: city population. *Income*: net monthly income in Euros. *Comarca FE*: comarca fixed effects. *Average y*: mean of dependent variable. *O-probit*: ordered probit estimation. The table reports the coefficient estimates of the ordered probit regression. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

C.2 Heterogeneity of the effect of the Ruling on the institutional preference

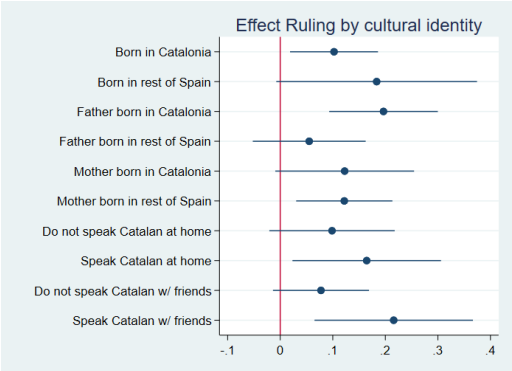
We explore the heterogeneous effects of the Ruling on other individual characteristics. We consider additional identity signs such as the use of the Catalan language socially and other socio-demographic and socio-economic characteristics. The results are shown in Figure A.2.

Panel A.2a presents the heterogeneity results along cultural variables. While the regions of birth of the respondent and his or her mother marginally affect the reaction to the Ruling, the father's place of birth appears to be more relevant. If the father was born in Catalonia, preference for more autonomy increases 0.53 points after the sentence while if he was born in another part of Spain, the Ruling has no effect. The effect of the Ruling among those speaking Catalan socially is 0.14 points larger than among those who do not (for which it increases by 0.08 points).

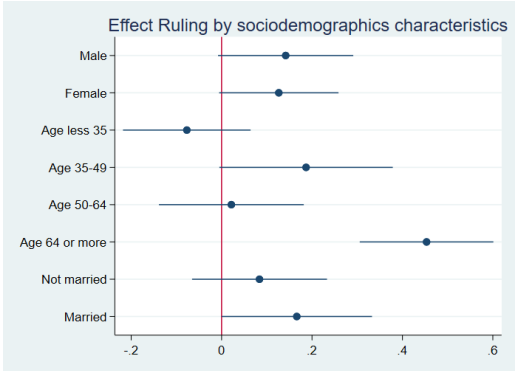
While cultural identity is a large determinant of the change in support for more autonomy, socio-demographic and socio-economic characteristics are also relevant. Panel A.2b shows the heterogeneity results along socio-demographic variables. A differential effect is observed for older individuals (more than 64 years old) whose support for more autonomy changes by 0.5 points more than that of younger individuals. Panel A.2c shows the heterogeneity results along socio-economic variables. The effect of the Ruling depends on income and education but not on employment status. For instance, those earning less than 1,000 euros and those without secondary education changed their attitudes toward independence the most: approximately 0.4 points. Despite being in a crisis period, whether the respondent is unemployed, self-employed or employed does not introduce heterogeneity into the effect of the Ruling.

Table A.4 reports in a table format the same estimations presented graphically in Figure A.2 of the manuscript.

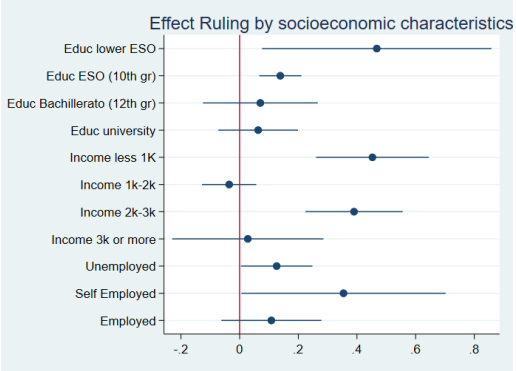
Panel A.2a of the paper reports the heterogeneity along cultural identity variables. We do not report the coefficients of respondents, fathers and mothers born abroad in Panel A.2a as they are imprecisely estimated. These estimates can be found in Table A.4 and graphically in Figure A.3.



(a) Heterogeneity with respect to cultural identity variables.



(b) Heterogeneity with respect to socio-demographic variables.



(c) Heterogeneity with respect to socio-economic variables.

Figure A.2: Heterogeneity of the effect of the Ruling on preferred relationship between Spain and Catalonia according to cultural, socio-demographic and socio-economic variables

The figure reports the coefficients in Table A.4 of Appendix C.2. Each point refers to the estimated coefficient of the interaction between *Ruling* and the corresponding variable and each line refers to the 95% confidence interval. OLS estimates obtained after regressing *More autonomy* on *Ruling*, interaction of *Ruling* and the variables under consideration, all the controls and comarca fixed effects. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. Probability weights used. All unanswered or unknown answers coded as missing values. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. The interaction coefficient of the omitted category is the estimate of the effect of *Ruling* in Table A.4.

Panel A.2a refers to the coefficients in columns (1) to (5) of Table A.4. Heterogeneity with respect to *Born in Catalonia* and *Born in rest of Spain* corresponds to column (1) of Table A.4. *Father born in Catalonia* and *Father born in rest of Spain* corresponds to column (2). *Mother born in Catalonia* and *Mother born in rest of Spain* corresponds to column (3). *Do not speak Catalan at home* and *Speak Catalan at home* corresponds to column (4). *Do not speak Catalan w/ friends* and *Speak Catalan w/ friends* corresponds to column (5). We do not report the coefficients of respondents, fathers and mothers born abroad in Panel A.2a as they are imprecisely estimated. These estimates can be found in Table A.4 and Figure A.3 in Appendix C.2.

Panel A.2b refers to the coefficients in columns (6) to (8) of Table A.4. Heterogeneity with respect to *Male* and *Female* corresponds to column (6) of Table A.4. *Age less 35*, *Age 36-49*, *Age 50-64*, and *Age 64 or more* corresponds to column (7). *Not married* and *Married* corresponds to column (8).

Panel A.2c refers to the coefficients in columns (9) to (11) of Table A.4. Heterogeneity with respect to *Educ lower ESO*, *Educ ESO (10th gr)*, *Educ Bachillerato (12th gr)*, and *Educ university* corresponds to column (9) of Table A.4. *Income less 1k*, *Income 1k-2k*, *Income 2k-3k*, and *Income 3k or more* corresponds to column (10). *Unemployed*, *Self Employed*, and *Employed* corresponds to column (11). .

Table A.4: Heterogeneities of the main result according to cultural, socio-demographic and socio-economic variables

VARIABLES	(1) More aut.	(2) More aut.	(3) More aut.	(4) More aut.	(5) More aut.	(6) More aut.	(7) More aut.	(8) More aut.	(9) More aut.	(10) More aut.	(11) More aut.
Ruling	0.102**	0.196***	0.123*	0.0986	0.0776*	0.142*	-0.0769	0.0839	0.467**	0.453***	0.126**
	(0.0408)	(0.0504)	(0.0643)	(0.0581)	(0.0445)	(0.0729)	(0.0688)	(0.0727)	(0.190)	(0.0936)	(0.0594)
Ruling x born in rest of Spain	0.0811										
	(0.0972)										
Ruling x foreign born	0.433*										
	(0.252)										
Ruling x father born in rest of Spain		-0.141**									
		(0.0586)									
Ruling x father foreign born		0.307									
		(0.272)									
Ruling x mother born in rest of Spain			-0.000706								
			(0.0739)								
Ruling x mother foreign born			0.412*								
			(0.232)								
Ruling x speak catalan at home				0.0660							
				(0.0941)							
Ruling x speak catalan with friends					0.138*						
					(0.0752)						
Ruling x female						-0.0152					
						(0.107)					
Ruling x age 3549							0.264*				
							(0.132)				
Ruling x age 50-64							0.0986				
							(0.0830)				
Ruling x age 64 or more							0.530***				
							(0.0983)				
Ruling x married								0.0825			
								(0.132)			
Ruling x educ. ESO (10th grade)									-0.329*		
									(0.191)		
Ruling x educ. Bachillerato (12th grade)									-0.397**		
									(0.177)		
Ruling x educ. university									-0.404**		
									(0.166)		
Ruling x income 1k-2k										-0.488***	
										(0.0898)	
Ruling x income 2k-3k										-0.0625	
										(0.132)	
Ruling x income 3k or more										-0.425***	
										(0.145)	
Ruling x self-employed											0.228
											(0.174)
Ruling x employed											-0.0182
											(0.120)
Observations	960	960	960	960	960	960	960	960	960	960	960
R-squared	0.340	0.341	0.340	0.339	0.340	0.339	0.345	0.339	0.342	0.346	0.340
Comarca FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Omitted	Born Cat	Born Cat	Born Cat	.	.	.	18-34	.	lower ESO	1k or lower	Unempl.
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

More aut.: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; and dummies for respondent's employment situation; dummies for respondent's city population. *Omitted*: omitted category. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. All the reported estimates are also presented in Figure A.2. *** p<0.01, ** p<0.05, * p<0.1

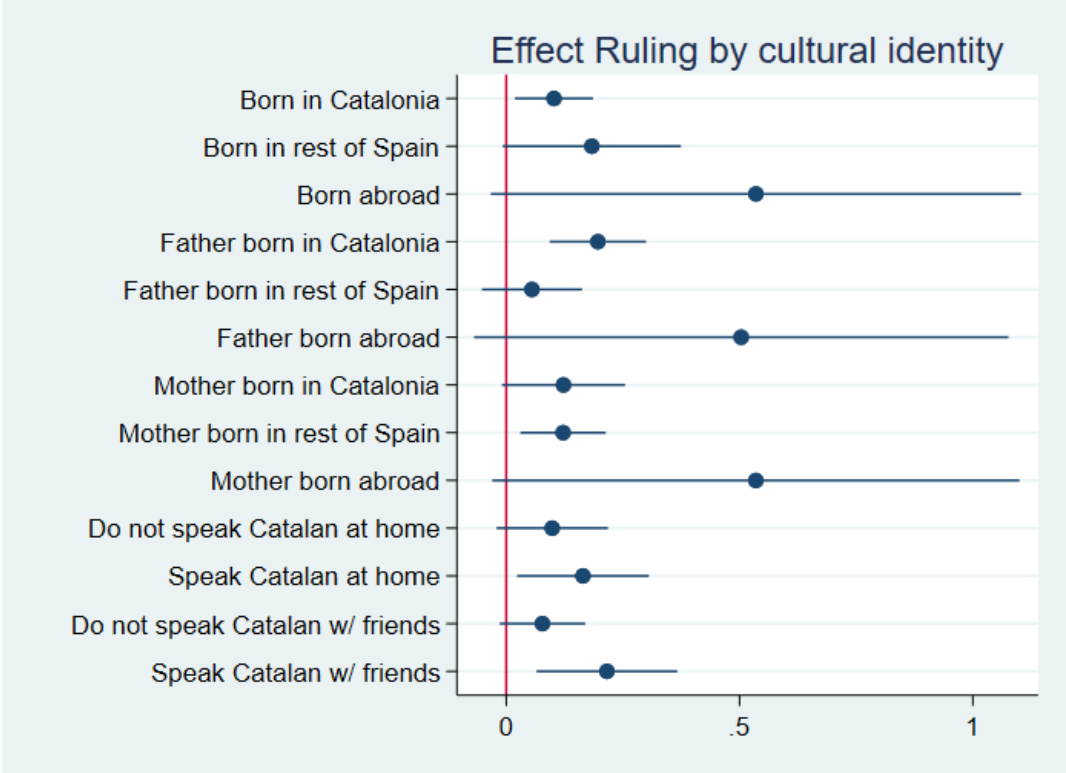


Figure A.3: Heterogeneity of the effect of the Ruling on the preferred relationship between Spain and Catalonia with respect to cultural identity variables

The figure reports the coefficients in in columns (1) to (5) of Table A.4 of Appendix C.2. Each point refers to the estimated coefficient of the interaction between *Ruling* and the corresponding variable and each line refers to the 95% confidence interval. OLS estimates obtained after regressing *More autonomy* on *Ruling*, interaction of *Ruling* and the variables under consideration, all the controls and comarca fixed effects. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. The interaction coefficient of the omitted category is the estimate of the effect of *Ruling* in Table A.4. Heterogeneity with respect to *Born in Catalonia*, *Born in rest of Spain*, and *Born abroad* corresponds to column (1) of Table A.4. *Father born in Catalonia*, *Father born in rest of Spain*, and *Father born abroad* corresponds to column (2). *Mother born in Catalonia*, *Mother born in rest of Spain*, and *Mother born abroad* corresponds to column (3). *Do not speak Catalan at home* and *Speak Catalan at home* corresponds to column (4). *Do not speak Catalan w/ friends* and *Speak Catalan w/ friends* corresponds to column (5).

C.3 Heterogeneous effects of the Ruling on the institutional preference by previous vote

Heterogenous effects according to past vote: We have shown in Section 5 that, contrary to the rest of Catalan citizens, the Ruling made voters of the Popular party more supportive of further centralization. Given that the Popular party was already the party less supportive of decentralizing the State,[12] thus this heterogeneous result can be interpreted as an increase in the polarization between supporters of different political parties. We show this result graphically in Figure 4 of the paper. The same result is shown in columns (1) and (2) Table A.5. Column (1) presents the OLS estimate of the heterogenous effect of the Ruling according to the past vote for the Popular Party. Column (2) presents the ordered probit estimation which is used for computing the marginal effects of Figure A.4.

In this section we want to explore how voters of each of the remaining relevant political parties in Catalonia reacted to the Ruling. Figure A.4 reports heterogeneity of the effect with respect to past vote of the Ruling, on preferences for Catalonia to be independent, federal state, Autonomous Community, and region. We can see that the increase in support for secession comes precisely from voters of PSC, CiU and ICV, that is, from voters of parties who supported the Estatut in the referendum. Voters of ERC do not increase their support for secession. Ceiling effect might explain this phenomenon given that voters of ERC were already supporting secession before the Ruling.[13] The increase in support for secession among voters of PSC, CIU and ICV seems to be driven by the same cascade effect that we observed in the whole population: support for region (the more centralized option) and Autonomous Community decreases and support for autonomous community and federal state does not change.

Balancing according to past vote: The previous results rely on the assumption that past vote was not affected by the Ruling. To show that this is the case in Figure A.5 we show the estimation of the effect of the Ruling on separate dummies representing whether a citizen voted for a specific party in the previous Catalan elections (held in 2006). We do not find any change in past vote recall for people interviewed before and after the Ruling.

[12] See Table A.2.

[13] In Table A.2 we can see that 52% of ERC voters were already supporting secession before the Ruling.

Table A.5: Heterogeneities according to past vote

VARIABLES	(1) More autonomy	(2) More autonomy	(3) More autonomy	(4) More autonomy
Ruling	0.216***	0.334***	-0.631	-1.091*
	(0.0497)	(0.0734)	(0.388)	(0.581)
Ruling X Past vote PPC	-0.947**	-1.546***		
	(0.421)	(0.588)		
Past vote PPC	0.408	0.688		
	(0.315)	(0.433)		
Past vote CiU			-0.347	-0.601
			(0.274)	(0.411)
Past vote ERC			0.572**	1.815***
			(0.256)	(0.388)
Past vote PSC			-0.417	-0.700
			(0.313)	(0.465)
Past vote ICV			-0.255	-0.464
			(0.309)	(0.456)
Ruling X Past vote CiU			0.941**	1.578**
			(0.426)	(0.651)
Ruling X Past vote ERC			0.508	0.0933
			(0.386)	(0.559)
Ruling X Past vote PSC			0.795*	1.331**
			(0.432)	(0.642)
Ruling X Past vote ICV			1.169***	1.970***
			(0.399)	(0.608)
Observations	640	640	640	640
R-squared	0.407		0.471	
Comarca FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES
Estimation	OLS	O-Probit	OLS	O-Probit

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Past Vote PPC*: dummy taking 1 if the interviewed voted for Partido Popular Catalán (PPC) at the Catalan Parliament elections of 2006, and taking 0 if the interviewed voted for Convergència i Unió (CiU), Esquerra Republicana de Catalunya (ERC), Partido de los Socialistas de Cataluña (PSC), or Iniciativa per Catalunya Verds-Esquerra Unida i Alternativa (ICV-EUiA) (if the interviewed cannot vote, did not vote, conducted a blank or null vote, or voted another party this variable is coded as missing.). *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.1. *O-probit*: ordered probit estimation. The table reports the coefficient estimates of the ordered probit regression. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

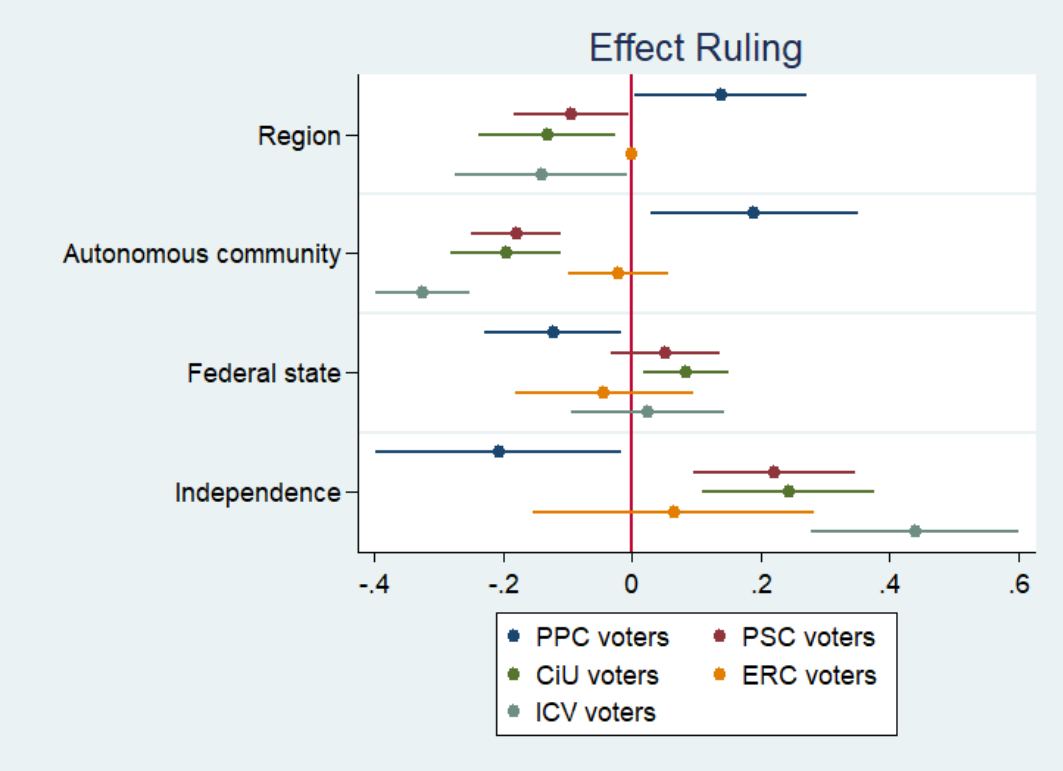


Figure A.4: Heterogeneity according to past vote for all main parties

This figure plots the marginal effects of *Ruling* on the four options for the preferred relationship between Spain and Catalonia, estimated in column (4) of Table A.5. For each specific category of voter, each point refers to the estimated coefficient of the effect of *Ruling* on specific value of the variable *More autonomy* and each line refers to the 95% confidence interval. The marginal effects are estimated after regressing, by Ordered Probit, *More autonomy* on *Ruling*, a dummy indicating whether the interviewed voted for the reported party at the Catalan election of 2006, and their interaction, all the controls and comarca fixed effects. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. We consider the heterogeneity of the effect of Ruling with respect to past vote for Partido Popular Catalán (PPC), Convergència i Unió (CiU), Esquerra Republicana de Catalunya (ERC), Partido de los Socialistas de Cataluña (PSC), or Iniciativa per Catalunya Verds-Esquerra Unida i Alternativa (ICV-EUiA), respectively (if the interviewed cannot vote, did not vote, conducted a blank or null vote, or voted another party this variable is coded as missing.). The list of *Controls* is reported in Appendix A.3.1. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors are clustered at the province-day of the interview level.

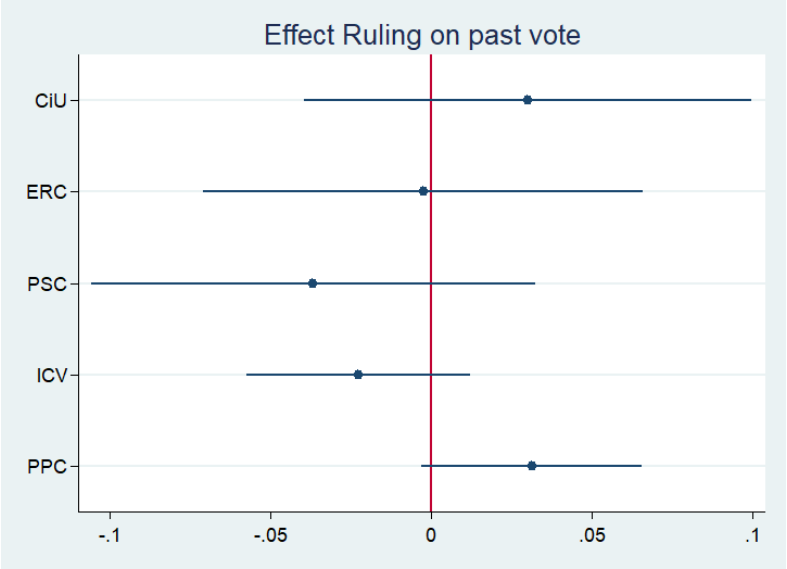


Figure A.5: Effect of the Ruling on past vote for all main parties

This figure plots the effects of *Ruling* on past vote for any specific party or alternative at the previous elections for the Catalan Parliament in 2006. For each specific party or option, each point refers to the estimated coefficient of the effect of *Ruling* on the intention to vote for that party and each line refers to the 95% confidence interval. Each effects are estimated after regressing, by OLS, a dummy for past vote to a specific party on *Ruling* all the controls and comarca fixed effects. We consider the following dependent variables: past to vote for the Popular Catalán (PPC), Convergència i Unió (CiU), Esquerra Republicana de Catalunya (ERC), Partido de los Socialistas de Cataluña (PSC), Iniciativa per Catalunya Verds-Esquerra Unida i Alternativa (ICV-EUiA). Dependent variables have missing values when voters said to vote for another party, not vote or make an invalid vote, or unknown vote. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Average y*: mean of dependent variable. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level.

C.4 Identity Politics, Catalan heritage and polarization

C.4.1 Additional results on the effect of the Ruling on Catalan identity

Table A.6 shows in details the estimation of the effect of the Ruling on national identity. In the survey under consideration, the respondents can choose one among the following categories: they feel (i) only Spanish, (ii) more Spanish than Catalan, (iii) Spanish and Catalan alike, (iv) more Catalan and (v) only Catalan. Coded from 1 to 5, we call this variable "Feeling Catalan". The average effect of the Ruling on this variable is 8 percentage points, as reported in column (1) of Table A.6. The effect is statistically significant, but only at 10% significance level. Column (2) repeats the regression of column (1) using an ordered probit estimation. The table reports the estimated coefficient of the effect of the Ruling, while the corresponding marginal effects for each possible choice are shown in Figure 3 of the paper.

Table A.6: Effect of the Ruling on national identity

	(1)	(2)
VARIABLES	Feeling Catalan	Feeling Catalan
Ruling	0.0936**	0.121**
	(0.0434)	(0.0522)
Observations	987	987
R-squared	0.424	
Comarca FE	YES	YES
Controls	YES	YES
Estimation	OLS	O-Probit
Average y	3.50	3.50

Feeling Catalan: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish (*Only Esp*), 2 if the interviewed feels more Spanish than Catalan (*+Esp that Cat*), 3 if the interviewed feels as Spanish as Catalan (*As Esp As Cat*), 4 if the interviewed feels more Catalan than Spanish (*-Esp than Cat*), and 5 if the interviewed feels only Catalan (*Only Cat*). *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.1. *Average y*: mean of dependent variable. *M.E. X*: marginal effect of the Ruling on the value X of the dependent variable, obtained after an Ordered Probit (*O-Probit*) estimation. *s.e. X*: standard error of the estimate of *M.E. X*. These marginal effects are also reported in Figure 3. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors are clustered at the province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

C.4.2 Catalan heritage

In continuation with the previous subsection, we consider Catalan heritage, defined as whether respondents have both parents born in Catalonia, as a proxy for the exogenous category representing national identity. Besides the theoretical reasons discussed in the paper, this proxy is sustained empirically. First, this is an exogenous definition as it is not affected by the Ruling. We show this in column (1) of Table A.7. After the Ruling,

respondents do not untruthfully change the reported origin of their parents.[14] In the survey wave we exploit in our paper, 38% of the sample had both Catalan parents.

Table A.7: Relationship of Catalan heritage with identity and preferred relationship between Catalonia and Spain

VARIABLES	(1) Catalan heritage	(2) Feeling Catalan	(3) Feeling Catalan	(4) More autonomy
Ruling	-0.0167			
	(0.0373)			
Catalan heritage			0.629***	0.607***
			(0.0701)	(0.0810)
Born in Catalonia			0.577***	0.228***
			(0.0399)	(0.0539)
Observations	1,274	987	987	960
R-squared	0.000	0.287	0.337	0.258
Comarca FE	NO	YES	YES	YES
Controls	NO	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS
Average y	0.38	3.50	3.50	2.79

Catalan heritage: dummy taking 1 if the respondent's parents were both born in Catalonia, and 0 otherwise. *Feeling Catalan*: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish, 2 if the interviewed feels more Spanish than Catalan, 3 if the interviewed feels as Spanish as Catalan, 4 if the interviewed feels more Catalan than Spanish, and 5 if the interviewed feels only Catalan. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 if the respondent is interviewed after June 28th, 2010, at 19:00 or in a survey wave posterior to the Ruling, and 0 otherwise. *Born in Catalonia*: dummy taking 1 if the respondent was both born in Catalonia, and 0 otherwise. *Comarca FE*: comarca fixed effects. The list of controls is reported in Appendix A.3.3. *Average y*: mean of dependent variable. All unanswered or unknown answers coded as missing values. Sample of people interviewed before 19:00 and in the first seven days of interviews. Probability weights used. Standard errors clustered at province-day of the interview level in parentheses in all other specifications. *** p<0.01, ** p<0.05, * p<0.1

Second, this is a variable that explains a significant part of the variation of the self-identification with Spanish and Catalan identities. The change in the R-squared from a model with controls (column 2 of Table A.7) and a model that on top of controls also include the dummy for Catalan heritage (column 3) is around 17%. Similarly, it also presents a strong magnitude in explaining both self-identification and preferences for more autonomy (columns 3 and 4, respectively). The coefficient of having both Catalan parents is one of the strongest between the coefficients of the controls considered.[15] The coefficient of having both Catalan parents is even stronger than the coefficient about whether the respondent was born him/herself in Catalonia in explaining preferences for

[14] An alternative, but still econometrically useful, interpretation of this is that treatment and control groups are balanced along this category.

[15] The effect of the the controls on the preference for more autonomy is reported in Table A.3 in Appendix C.1. We make a small variation in the empirical specification when estimating the effect of Catalan heritage in column (3) of Table A.7. As the Catalan origin of parents predict in a crucial way the language spoken at home, we do not include in the control variables the proxies for the language spoken by the respondents. The interpretation of the magnitudes in Table A.7 is confirmed if we use standardized coefficients.

more autonomy.

C.4.3 Differences-in-differences

The baseline empirical strategy and data used in the paper are particularly suited for studying the short-term effects of the Ruling. However, they are not ideal for obtaining additional insights on two important aspects, namely, the long-term effects of the Ruling outside the survey and polarization in other important dimensions different from institutional preferences (such as economic attitudes). For this reason, we rely in the following strategy.

The event study estimate of the changes in territorial preferences by each CEO wave in Figure A.13a already shows that the individuals interviewed in the posterior months to the wave in which the Ruling happened maintained a similar preference for more autonomy as the respondents in our baseline treatment group. The strong identification assumption behind this result is that no other event happened after the Ruling that can explain the rise of the preference for more autonomy of Catalonia.

Following from the analysis of the immediate polarization effects of the Ruling through Catalan heritage (which is reported in Section 5.2.2), we can refine the study of the long-term polarization effects within Catalonia, by exploiting the presence of these heterogenous effects. That is, we estimate the effects of the Ruling among people with different Catalan heritage in a differences-in-differences setting. This allows us to obtain estimates that rely on weaker identification assumptions. By combining our data with previous and posterior waves of the CEO survey (from 2006 to one year after the Ruling), we can estimate the following Model A.2:

$$Y_{it} = \tau_1 CatalanHeritage_i + \delta_{1t} + \chi_1 CatalanHeritage \times Ruling_{i(t)} + \lambda_1 X_i + GEO_i + e_{1it}, \tag{A.2}$$

where i represents each respondent, and t denotes the survey wave. δ_{1t} are wave fixed effects. *Ruling* is a dummy variable that takes 1 for all respondents interviewed in the waves posterior to the Ruling. We divide the third wave of 2010 (where the Ruling took place) between the wave before and after the Ruling (where the wave before the ruling is the omitted category).[16] We also control for the same vector of individual characteristics X by using the baseline CEO analysis.[17] We are interested in estimating the χ_1 coefficient that tells us the differential change in $MoreAutonomy$ (Y_{it}) before and after the Ruling for people with different Catalan heritage. This result allows us to understand whether institutional polarization was maintained even in the year after the Ruling.

To address questions about economic polarization (which are not included in the CEO surveys), we replicate the differences-in-differences estimation of Model A.2 by using ICPS data. We include as a vector of controls all ICPS variables that are also covered in the CEO surveys with a comparable definition.[18] We use this to study the effects of the Ruling on economic polarization within Catalonia in the immediate aftermath of the Ruling and in the posterior year.

[16] We use the suffix $i(t)$ to indicate that each respondent have a different value of Ruling according to the survey wave in which they have been interviewed.

[17] As reported in Section 4.1, we do not include in the control variables the proxies for the language spoken by the respondents and the two separate dummies for the birth place of the mother and father. As shown in Model A.2, we instead control for $CatalanHeritage_i$, the dummy representing whether both respondent's parents were born in Catalonia.

[18] Unfortunately, some variables are either not present or suffer some change in their definition and therefore are not included.

The main identification assumption behind the differences-in-differences strategy is that in the absence of the Ruling, the treated and control units (people with different Catalan heritage in Model A.2 would have similar trends in their institutional and economic preferences. The first requirement in favor of this assumption is the presence of previous parallel trends. As we show in Figure A.13a people interviewed in the waves before the Ruling did not exhibit any trend in the increase in preferences for more autonomy. This previous graphical evidence refers to within-Catalonia observations from the CEO. Moreover, when we present the differences-in-differences results in Section 5.2, we show evidence for parallel trends for every estimation considered regarding the effect of the Ruling on the institutional and economic polarization estimated within Catalonia. For this purpose, we construct placebo treatments and show that these variables reject the presence of differential trends between the treated and control groups in the pre-treatment periods.[19]

The second requirement to attribute the estimated differences-in-differences effect to the Ruling is that no other event influenced differentially political and economic attitudes according to Catalan heritage (Model A.2). Although the short-span of our main CEO data and the corresponding empirical strategy are particularly attractive for assuming that the main treatment is the Ruling, this is less the case when using observations from different survey waves. Therefore, for the differences-in-differences estimates we first restrict the number of waves after the Ruling to limit the potential presence of alternative confounders. That is, we assume that the main event that may affect political and economic attitudes differently between the previous wave and the posterior wave after the Ruling is the Ruling itself.

The exact time location of these waves depends on the data and question under consideration. Related to the pre-treatment waves, Figure A.13a shows that the events that happened right before the Ruling were not important in explaining changes in political attitudes. Thus, the differential time location of the pre-treatment waves is less of a concern.[20] For the ICPS data the first post-treatment wave was instead September 2010. Therefore, the assumption behind the interpretation of the short term effects of the Ruling on economic preferences is that no other event between July and September 2010 can differentially affect people with different Catalan heritage.[21]

We estimate the immediate effect of the Ruling on institutional and economic polarization but we also estimate if the effect persists in the following year. For the first estimation, we uniquely use the survey wave after the Ruling as the post-treatment period, while for the second estimation, we also include the survey waves in the year after the Ruling as post-treatment observations. For long-term evidence about the persistence of the effect of the Ruling, we cannot claim that the estimated effect is entirely due to the Ruling, as other events could be important in explaining the heterogenous reaction of people with different Catalan heritage. Thus, we estimate the effect of the Ruling and possibly other related events, such as political propaganda. Still, this suggestive evidence is useful to show that after the Ruling polarization maintained as in the short time span after the verdict.

[19] The placebo is defined as if the treatment took place on the last wave before the Ruling, where people were not treated yet.

[20] CEO pre-treatment wave, used for studying within-Catalonia institutional polarization, was April 2010. ICPS pre-treatment wave, used for within-Catalonia economic polarization, was September and October 2009.

[21] Spanish victory of the 2010 World Cup happened in July 2010, but we shown in Appendix D.3 that this event is not biasing our results.

C.4.4 Catalan heritage on self-identification

We present heterogenous effects of the effect of the Ruling on Catalan self-identification with respect to Catalan heritage in Figure A.6. This is estimated by ordered probit, as the main identity results reported in Figure 3 of the paper, including an interaction term between the Ruling and the dummy for Catalan heritage. The results indicate no significant change in identity among people with no Catalan heritage, and a significant increase in Catalan identity among people with Catalan heritage–which were already the people with the higher Catalan identification. Still, the sign of the estimated effect on people with no Catalan heritage is negative for the categories in which people feel more Catalan, and positive for categories feeling more Spanish or as Spanish as Catalan. The opposite is true for people with Catalan heritage. The main change among people with Catalan heritage is the decrease in the people that feel as Spanish as Catalan and the contemporaneous increase in the people feeling only Catalan. Unfortunately, it is impossible to estimate the transitions among categories, but these results are consistent with a situation in which national identity issues become central and then people with Catalan heritage starts identifying with the Catalan identity at the expense of the option that might represent no identification in that dimension (feeling equally Spanish and Catalan).[22]

C.5 Perceived problem results

In Section 5.2.3 of the paper we show that after the Ruling respondents increased the report the institutional relationship between Catalonia and Spain as the main problem of Catalonia, and decreased the importance to the economy. In this appendix we analyze whether economic and institutional problems are reported to be a problem at all.

Table A.8 confirms that the economy is unlikely to be the cause of the change in support for independence, as its importance decreases as problem at all after the Ruling (column (1)). The Catalan financing system is more often reported as a problem as a consequence of the Ruling (column (2)), but as we show in Section 5.2.3 the intensity does not change; that is, the likelihood of reporting fiscal federalism as the most important problem does not change.

Figure A.7 gives further evidence that we can discard the interplay between the Ruling and the demand for economic decentralization. In fact, the Ruling occurred at a moment where the Catalan financing system had little saliency.

We confirm that the reported problems with the greatest effects are political: the relationship with Spain and the Catalan Constitution, in particular, the Statute of Autonomy (columns (3) and (4) of Table A.8).

[22] However, results in Figure 3 of the paper suggests also a cascade effect among categories is possible.

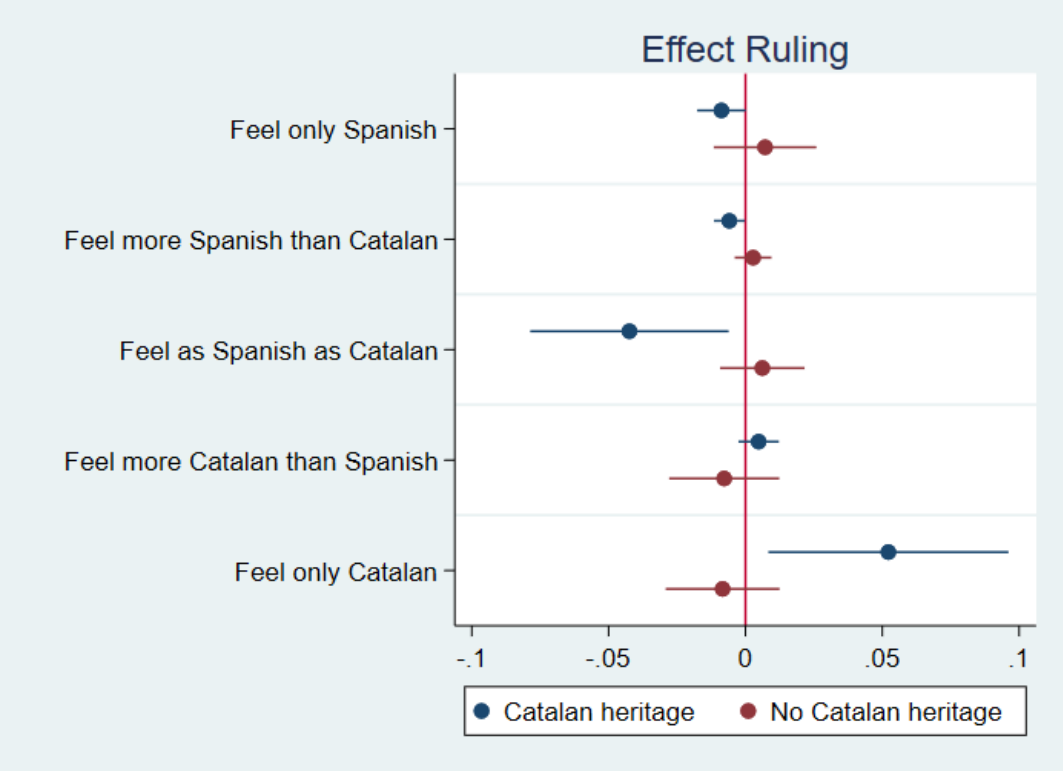


Figure A.6: Heterogeneities of the effect of the Ruling on national identity according to Catalan heritage

This figure plots the marginal effects of *Ruling* on the five options for national identification. Each point refers to the estimated coefficient of the effect of *Ruling* on one specific value of the variable *Feeling Catalan* and each line refers to the 95% confidence interval. Blue points and lines refers to respondents whose parents were both born in Catalonia (*Catalan heritage*), and red points and lines for the other respondents (*No Catalan heritage*). The marginal effects are estimated after regressing, by Ordered Probit, *Feeling Catalan* on *Ruling*, *Catalan heritage*, the interaction between *Ruling* and *Catalan heritage*, controls and comarca fixed effects. The marginal effect for *Catalan heritage* is computed as the sum of the marginal effect of *Ruling* and the marginal effect of *Ruling x Catalan heritage*. *Feeling Catalan*: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish, 2 if the interviewed feels more Spanish than Catalan, 3 if the interviewed feels as Spanish as Catalan, 4 if the interviewed feels more Catalan than Spanish, and 5 if the interviewed feels only Catalan. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. *Catalan heritage*: dummy taking 1 if the respondent's parents were both born in Catalonia, and 0 otherwise. The list of controls is reported in Appendix A.3.3. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors are clustered at the province-day of the interview level.

Table A.8: Effect of the Ruling on perceived problems at all

VARIABLES	(1) Probl: eco-lab	(2) Probl: financing	(3) Probl: Cat-Esp	(4) Probl: estatut
Ruling	-0.0848***	0.0222**	0.125***	0.101***
	(0.0304)	(0.00954)	(0.0188)	(0.0182)
Observations	970	970	970	970
R-squared	0.096	0.103	0.173	0.160
Comarca FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS
Average y	0.80	0.04	0.22	0.16

Probl: eco-lab: dummy taking 1 if the interviewed mentions the unemployment, job insecurity, the functioning of the economy, or the low level of wages as one of the main problems of Catalonia. Probl: financing: dummy taking 1 if the interviewed mentions the Catalan financing system as one of the main problems of Catalonia. *Probl: Cat-Esp*: dummy taking 1 if the interviewed mentions the relationship between Spain and Catalonia as one of the main problems of Catalonia. *Probl: estatut*: dummy taking 1 if the interviewed mentions the Catalan Statute of Autonomy (*estatut*) as one of the main problems of Catalonia. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.1. *Average y*: mean of dependent variable. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

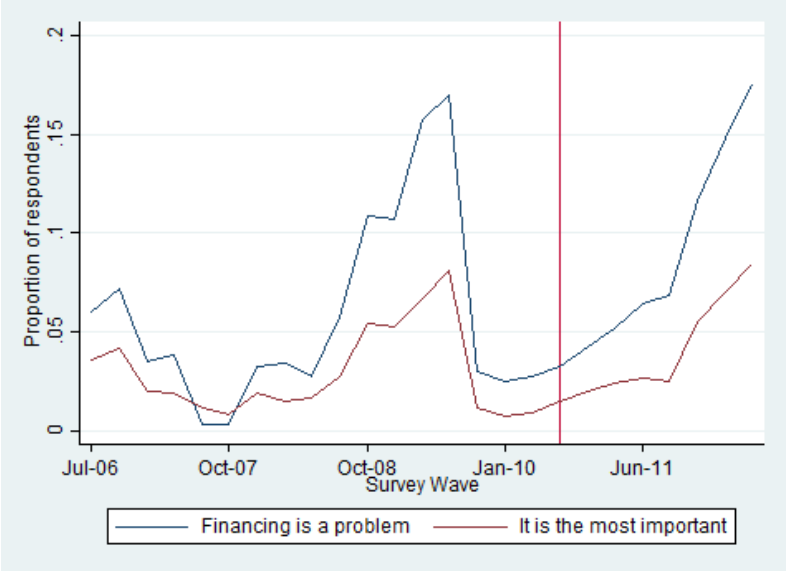


Figure A.7: Time series of respondents reporting financing between Spain and Catalonia as problem

Share of all the interviewed mentioning the Catalan financing system as one of the main problems and mentioning as the most important problem of Catalonia. Data: CEO surveys from July 2006 to October 2012. Red vertical line: June 2010.

C.6 Partisan results

Figure A.8 shows how the Ruling changed intention to vote at the next Catalan elections for all main parties. The increase in the vote for nationalist parties shown in Section 6 is mainly coming from an increase in intention to vote for CiU, even if this effect is has a large confidence interval. The increase in vote for Catalan nationalist parties is mainly coming at the expenses of votes to PSC.

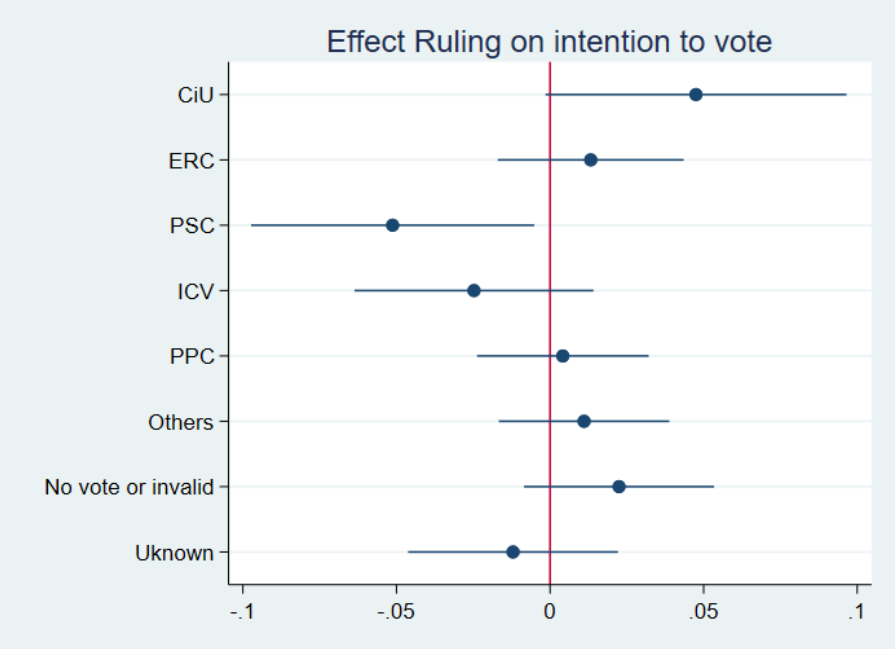


Figure A.8: Effect of the Ruling on intention to vote for all main parties

This figure plots the effects of *Ruling* on the intentention to vote for any specific party or alternative at the next elections for the Catalan Parliament. For each specific party or option, each point refers to the estimated coefficient of the effect of *Ruling* on the intention to vote for that party and each line refers to the 95% confidence interval. Each effects are estimated after regressing, by OLS, the intention to vote on *Ruling* all the controls and comarca fixed effects. We consider the following dependent variables: intention to vote for the Popular Catalán (PPC), Convergència i Unió (CiU), Esquerra Republicana de Catalunya (ERC), Partido de los Socialistas de Cataluña (PSC), Iniciativa per Catalunya Verds-Esquerra Unida i Alternativa (ICV-EUiA), another party, not vote or make an invalid vote, or unknown vote. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Average y*: mean of dependent variable. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level.

C.7 The role of the Catalan television (TV3), internet consumption and social pressure bias

Respondents can be subject to different forms of social pressure bias coming from different sources: television, social media, and peers, among others. Using different proxies, we report here evidence that some of these potential mechanisms do not drive our results.

First, the primary public television channel (TV3) funded by the Catalan Government has played a controversial role in Catalan politics for its alleged support for the Catalan secessionist movement (Durán, 2018). Consistently with these concerns, it could be argued that the Ruling had an effect on the political attitudes of Catalans through the information received by TV3. We do not find evidence of this potential channel when we analyze the interaction between the effect of the Ruling and being informed by TV3. Column (1) of table A.9 shows that Catalans are not more likely to report to be informed by TV3 after the Ruling.[23] In column (2) we first find that TV3 watchers are overall more favourable to more autonomy to Catalonia. However, we do not find that Catalans who report to be informed by TV3 react to the Ruling differently than the rest of Catalans.

Second, in our database we also have one variable that can be used to see the role of social media. In fact, CEO collects information about which is the main source of information used by respondents. In particular, we know whether internet is the main one. We then perform an estimation of the heterogenous effect of the Ruling according to the variable, and add this result in column (3) of Table A.9. We find that people using internet as main sources of news consumption are not systematically different from other respondents in terms of territorial preferences. Moreover, after the Ruling all respondents increase their preference for more autonomy of Catalonia, independently of this rough proxy of social media consumption.

Third, similarly, CEO contains information about whether respondents use friends as the main source of information. We find in column (4) of Table A.9 that, despite the fact that before the Ruling, people that used more friends as a source of information were more likely to support more autonomy of Catalonia, the Ruling does not have a heterogenous effect according to this proxy. Interpreting that people that use more friends as a source of information the individuals that are more likely to suffer from social pressure bias, this result indicates that this potential channel is not behind the effect of the Ruling on territorial preferences.

[23] In column (1) of Table A.9 we find that the ruling increased by 5.80 percentage points the number of respondents who declared that they were informed through TV3 albeit the coefficient is not statistically significant. Without data of actual audience we cannot disentangle whether there was an actual change in consumption or a change in reporting. An actual increase in consumption could be plausible because TV3 informs more than other TV channels about Catalan politics and the Ruling increased the interest of Catalans on Catalan politics (see Panel B of Table 3) but an increase in reporting could also be motivated by the change in national identity that we found in Table A.6.

Table A.9: The role of Catalan television (TV3), internet consumption and social pressure

VARIABLES	(1) TV3	(2) More autonomy	(3) More autonomy	(4) More autonomy
Ruling	0.0580	0.161***	0.123***	0.138***
	(0.0362)	(0.0490)	(0.0380)	(0.0365)
TV3		0.246***		
		(0.0616)		
Ruling x TV3		0.00976		
		(0.0463)		
Internet for information			-0.0327	
			(0.108)	
Ruling x Internet for information			0.0530	
			(0.114)	
Friends for information				0.208***
				(0.0705)
Ruling x Friends for information				-0.0954
				(0.113)
Observations	843	804	960	960
R-squared	0.410	0.352	0.339	0.341
Comarca FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS

TV3: dummy taking 1 if the interviewed is getting TV information mainly from TV3. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Internet for information*: dummy taking 1 if the interviewed use internet as main source of information. *Friends for information*: dummy taking 1 if the interviewed use friends, acquaintances, or family as main source of information. *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.1. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level.*** p<0.01, ** p<0.05, * p<0.1

C.8 Within Spain evidence: Polarization between Catalonia and Spain

C.8.1 Differences-in-differences

The Ruling may have also activated local identities outside Catalonia. Thus, we investigate whether the effect of the Ruling on polarization through identitarian channels is taking place more broadly. To achieve these goals we use the CIS data concerning all of Spain as described in Appendix A.4.

With this additional data, we can exploit a new source variation: comparing observations within Spain of people living in Catalonia or in the rest of Spain.[24] There is no CIS survey wave in which field work happened when the Ruling was announced. Therefore, we exploit an alternative identification strategy to our baseline strategy, that is, a slight modification of the previous differences-in-differences setting, that permits within-Spain comparisons, as reported in Model A.3.

$$Y_{it} = \tau_2 Catalan_i + \delta_{2t} + \chi_2 Catalan \times Ruling_{i(t)} + \lambda_2 X_i + + GEO_i + e_{2it}, \qquad \text{(A.3)}$$

where i represents each respondent, and t denotes the survey wave. δ_{2t} are wave fixed effects. We also control for the vector of individual characteristics X.[25] $Catalan$ captures whether the individual was surveyed in Catalonia or in the rest of Spain. In order to avoid that part of the controls are also receiving a similar treatment as the people living in Catalonia, we exclude Basque Country, Navarra and Galicia due to previous secessionist movements in those regions. We are interested in estimating χ_2, that is, we compare the observations of the interviewees in the waves before and after the Ruling who were living in Catalonia or in the rest of Spain.

We use this to study the effects of the Ruling on national self-identification, and polarization about both institutional and economic preferences within Spain. We estimate not only the short-term effect of the Ruling but we also if the effect persists in the following year. We also use this model to understand the effect of the Ruling on different forms of political participation.

C.8.2 Self-identification with Spain vs. Region

We first use as dependent variable (Y) the self-identification of each respondent between Spanish and the identity of his/her Autonomous Community.[26] We will estimate the immediate effect of the Ruling but we will also able to estimate if the effect persist in the year after. For the former, we will use uniquely the CIS wave after the Ruling as post-treatment period. The underlying identification assumption is that no other political or social event happened between the last CIS pre-treatment wave and July 2010 that could differentially affect national self-identification of Catalans vs the rest of Spain. For the latter, we also include CIS waves in the year after the Ruling as post-treatment observations.

[24] CIS data do not ask about parents' place of birth. Hence, the variation between people with different Catalan heritage exploited in Model A.2 cannot be used.

[25] We include as vector of controls as many variables as possible as the ones used with the CEO data. Unfortunately, some variables are either not present or suffer some change in their definition and therefore are not included.

[26] This variable has the same structure has the one in CEO data. Respondents can choose one among the following five categories: they feel (i) only Spanish, (ii) more Spanish than from their Autonomous Community, (iii) Spanish and from their Autonomous Community alike, (iv) more from their Autonomous Community and (v) only from their Autonomous Community.

Results are reported in Table A.10. From column (1) it emerges that Catalans had already a stronger feeling of identity tied to their Autonomous Community with respect to respondents in the rest of Spain. Using uniquely the CIS wave after the Ruling as post-treatment period,[27], we find that this feeling increased in a positive and significant way between Catalans and the rest of Spain after the Ruling. This difference persists in the year after the Ruling (column 2). Column (3) provides evidence in favor of the differences-in-differences estimation. It shows evidence of parallel trends using a placebo treatment in the pre-treatment period.[28]

Table A.10: Effect of the Ruling on national identity: Heterogeneity within Catalonia and Spain according to Catalan heritage

	(1)	(2)	(3)
VARIABLES	Feeling Aut. Comm.	Feeling Aut. Comm.	Feeling Aut. Comm.
Catalonia	0.620***	0.587***	0.615***
	(0.0794)	(0.0738)	(0.0621)
Ruling x Catalonia	0.126**	0.0677*	
	(0.0541)	(0.0381)	
Placebo Post x Catalonia			0.0288
			(0.0453)
Observations	17,481	22,254	15,443
R-squared	0.175	0.172	0.179
Province FE	YES	YES	YES
Survey FE	YES	YES	YES
Controls	YES	YES	YES
Years	Dec 05-Jul 10	Dec 05-Nov 11	Dec 05-Apr 09
Data	CIS	CIS	CIS
Estimation	OLS	OLS	OLS
Average y	2.88	2.87	2.89

Feeling Aut. Comm.: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish, 2 if the interviewed feels more Spanish than from his/her Autonomous Community, 3 if the interviewed feels as Spanish as from his/her Autonomous Community, 4 if the interviewed feels more from his/her Autonomous Community than Spanish, and 5 if the interviewed feels only from his/her Autonomous Community. *Ruling*: dummy taking 1 if the respondent is interviewed after June 28th, 2010, at 19:00 or in a survey wave posterior to the Ruling, and 0 otherwise. *Catalonia*: dummy taking 1 if the respondent live in Catalonia and 0 if the respondent live in the rest of Spain (but not in the Basque Country, Navarra or Galicia). *Placebo Post* placebo dummy taking 1 if the respondent is interviewed in the last survey wave before the Ruling. *Province FE*: province fixed effects. *Survey FE*: survey wave fixed effects. *Controls*: age, sex, dummies for the size of city, dummies for educational attainments, and dummies for employment status. *Years*: beginning and end of survey waves used. *Data*: data source used. *Average y*: mean of dependent variable. Probability weights used. Standard errors clustered at province-survey level in parentheses in all specifications. *** p<0.01, ** p<0.05, * p<0.1

The unconditional time-series evolution of the self-identification with the identity associated to the Autonomous Community, reported in Figure A.9, can provide additional insights. From that Figure, it emerges that while Catalans increase their self-identification

[27]This wave is the CIS Barometer of July 2010, whose field work happened very closely to the aftermath of the Ruling. Field work was between July 8th and July 22nd, 2010. Pre-treatment waves are in December 2005, December 2006, March 2008 and April 2009.

[28]The placebo is defined as if the treatment took place on the last wave before the Ruling, where people were not treated yet.

with Catalonia after the Ruling, the rest of Spain do not change their national self-identification. Being this true, the within-Spain results are very similar to the conclusions derived with respect to group identification within-Catalonia using CEO data.

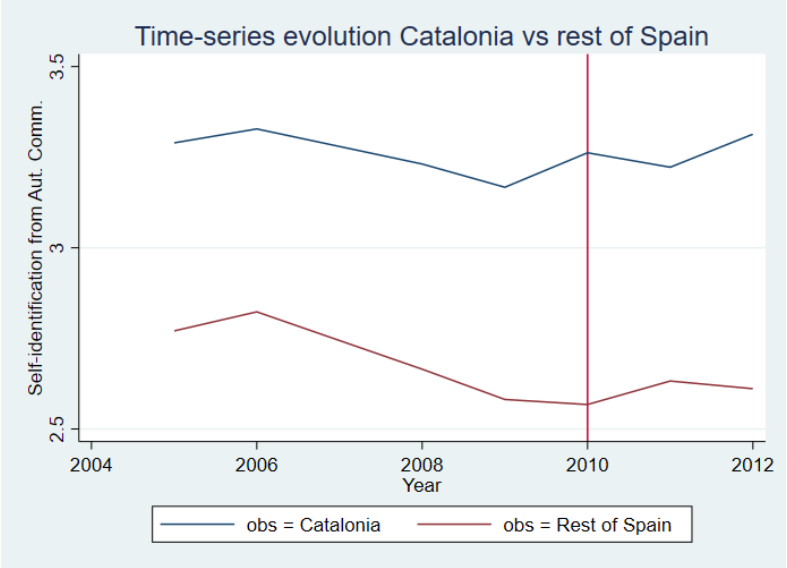


Figure A.9: Time-series evolution of self-identification with the identity of Autonomous Community vs. Spanish

Weighted average of *Feeling Aut. Comm.* estimated for respondents in Catalonia and in the rest of Spain (but not in the Basque Country, Navarra or Galicia) for each year. *Feeling Aut. Comm.*: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish, 2 if the interviewed feels more Spanish than from his/her Autonomous Community, 3 if the interviewed feels as Spanish as from his/her Autonomous Community, 4 if the interviewed feels more from his/her Autonomous Community than Spanish, and 5 if the interviewed feels only from his/her Autonomous Community. Probability weights used.

C.8.3 Polarization

We estimate how the polarization in preferences for more regional autonomy change after the Ruling within-Spain in Panel A of Table A.11. For doing this, CIS data were used to estimate the differences-in-differences coefficients in Equation A.3. To estimate the immediate effects, in Column (1) we use only the CIS wave after the Ruling as the post-treatment period. We find a positive and significant difference in the change in preference for more autonomy between Catalans and the rest of Spain after the Ruling. This difference maintains and the point estimate also increases in the year after the Ruling (column 2). As the respondents in Catalonia already had a higher preference for more autonomy before the Ruling, these results confirm that the Ruling increased polarization about institutional preferences also within Spain. Column (3) shows evidence of parallel trends by using a placebo treatment in the pre-treatment period.[29]

[29]These results are robust to the changes in the answers provided as options for the preference for more autonomy between different CIS waves. Robustness is shown in Appendix D.13.4.

Table A.11: Effect of the Ruling on polarization within Spain

	(1)	(2)	(3)
	Panel A: Preference for more autonomy		
Catalonia	0.702***	0.823***	0.673***
	(0.167)	(0.111)	(0.192)
Ruling x Catalonia	0.135***	0.166***	
	(0.0504)	(0.0417)	
Placebo Post x Catalonia			-0.0468
			(0.0603)
Observations	7979	16532	6011
Sample	Apr 09-Jul 10	Apr 09-Nov 11	Apr 09-Apr 10
Average y	2.90	2.83	2.91
	Panel B: Think that fiscal pressure is low		
Catalonia	-0.0676	-0.0781	-0.0968*
	(0.0580)	(0.0486)	(0.0557)
Ruling x Catalonia	0.0735***	0.0572**	
	(0.0269)	(0.0240)	
Placebo Post x Catalonia			-0.0337
			(0.0337)
Observations	12067	14102	10048
Sample	05-10	05-11	05-09
Average y	1.43	1.44	1.43

Preference for more autonomy: variable that takes values from 1 to 5 if the respondent prefers regions to have no autonomy, have lower autonomy than status quo, have autonomy as the status quo, more autonomy than the status-quo, or have the possibility to become independent states, respectively. *Think that fiscal pressure is low*: variable that takes values from 1 to 3 if the respondent prefers considers that Spanish citizens pay high, average (regular), or low taxes, respectively. *Ruling*: dummy taking 1 if the respondent is interviewed in a survey wave posterior to the Ruling, and 0 otherwise. *Catalonia*: dummy taking 1 if the respondent live in Catalonia and 0 if the respondent live in the rest of Spain (but not in the Basque Country, Navarra or Galicia). *Placebo Post* placebo dummy taking 1 if the respondent is interviewed in the last survey wave before the Ruling. All specifications include individual controls and province and survey wave fixed effects. The list of *Controls* is reported in Appendix A.3.5. *Sample*: beginning and end of survey waves used. *Model*: We estimate by OLS the difference-in-difference (D-D) model (A.3) using CIS data. *Average y*: mean of dependent variable. Probability weights used (when present). Standard errors clustered at province-survey level in parentheses in all specifications. *** p<0.01, ** p<0.05, * p<0.1

C.8.4 Interpretation of the control group for the within-Spain institutional polarization

To understand how the polarization about preferences for more autonomy of an Autonomous Community polarized between Catalonia and Spain, we resort to the differences-in-differences setting described in Model A.3 of the paper using data from CIS and as dependent variable a question about the preference for more autonomy.

To understand what is the relevant counterfactual in this exercise we run the event-study analysis of Model A.2 of the paper, where χ is allowed to change between each wave, and we compute the unconditional evolution of the preferences for more autonomy between the treatment and control groups. This will also make us possible to understand about dynamic effects on polarization, as we can exploit the richness of observations of CIS. We report these graphs in Figure A.10, Panels A.10a and A.10b, respectively.

First, panel A.10a reports the time-series of the unconditional mean of the preference for more autonomy computed each year for the treatment and control groups separately. The level of preference for more autonomy is higher in Catalonia with respect to Spain. In the years after the Ruling, this preference for more autonomy increased. It is important to understand what happened to the rest of Spain to have a sense of the relevant comparison performed by the differences-in-differences. The time-series evolution shows a decrease in the preference for more autonomy in the rest of Spain. Hence, we need to interpret the rest of Spain not as a perfect control group in the sense that do not receive the treatment. It might have been possible that the treatment increased the preferences for integration of the rest of Spain. Hence, we need to interpret that the treatment is affecting both treatment and control groups, in two opposite ways. The estimated differences-in-differences estimate is then the sum of the potential increase in more autonomy from Catalans and the potential decrease from the rest of Spain. Still, given the within-Catalonia evidence, we cannot rule out that the potential increase in more autonomy from Catalans is not present.

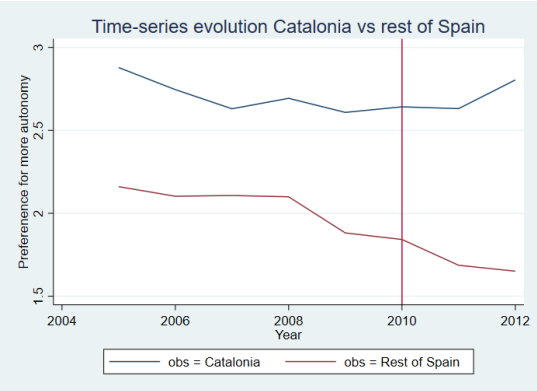
Second, from panel A.10b it emerges that observations in Catalonia and in the rest of Spain had similar pre-trend evolution of their preference for more autonomy before the Ruling. Then, using the CIS wave before the Ruling as omitted category, the preference for more autonomy in Catalonia increased in a statistically significant way with respect to the rest of Spain. The effect maintained in the years after the Ruling, showing evidence in favor of persistence. Moreover, the differences between Catalonia and the rest of Spain increased with time, showing suggestive evidence that new political events in Spain related to the Ruling possibly augment the initial triggering effect of the Ruling.

C.8.5 Depolarization

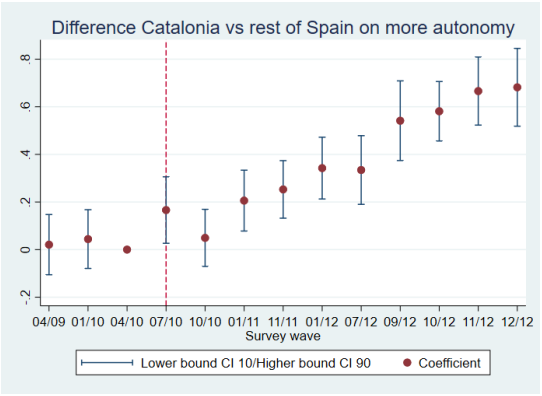
To show economic depolarization as a result of the Ruling, we use variations within Spain and the CIS data. In this data, the main economic variable concerns fiscal pressure. The variable takes a value of 1 if the respondents' assessment is that fiscal pressure is high, 2 if it is average, and 3 if it is low.[30]

We report the results of estimating Model A.3, the within-Spain differences-in-differences, in Panel B of Table A.11. We find milder evidence with respect to the within-Catalonia results, namely, that Catalans thought that fiscal pressure is too high in Spain before the Ruling. However, Catalans increasingly report more that fiscal pressure is low after the Ruling than people from the rest of Spain. This evidence is confirmed by using the

[30] Note that this question is not identical to the question in the ICPS data; thus, the within-Spain and within-Catalonia evidence on economic preferences is not immediately comparable.



(a) Unconditional time-series evolution



(b) Event-study differences-in-differences estimation

Figure A.10: Event-study and time-series evolution of the within-Spain differences in the preferred relationship between an Autonomous Community and Spain

Panel A.10a reports the weighted average of *More autonomy* estimated for respondents in Catalonia and in the rest of Spain (but not in the Basque Country, Navarra or Galicia) for each year. Probability weights used.
Panel A.10b reports the estimated coefficient of the effect of the survey wave interacted by *Catalonia* on *More autonomy* using CIS data from April 2009 to December 2012. Coefficients obtained regressing *More autonomy* on dummies for the survey wave, the interaction between *Catalonia* and the survey wave fixed effect, individual controls and province fixed effects. The omitted category is the last CIS wave before the Ruling (April 2010). Probability weights used. Standard errors clustered at province-survey wave level.
More autonomy in Panel A.10a: variable that takes values from 1 to 4 if the respondent prefers regions to have no autonomy or have lower autonomy than status quo, have autonomy as the status quo, more autonomy than the status-quo, or have the possibility to become independent states, respectively. For the years in which they are asked separately, we consider preference for regions to have no autonomy or have autonomy lower than the status-quo are taken as if they were the same. *More autonomy* in Panel A.10b: variable that takes values from 1 to 5 if the respondent prefers regions to have no autonomy, have lower autonomy than status quo, have autonomy as the status quo, more autonomy than the status-quo, or have the possibility to become independent states, respectively. *Controls*: age, sex, dummies for the size of city, dummies for educational attainments, and dummies for employment status. All unanswered or unknown answers coded as missing values. *Lower-Upper Bound CI 95*: lower and upper bounds of 95% confidence interval.

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survey immediately after the Ruling and one year later (columns 1 and 2, respectively). The magnitude between the two effects is not statistically different, although the one-year effect seems to be somewhat lower. We confirm evidence for parallel trends in column (3).

C.8.6 Political participation

In Section 6 of the paper, we show the event-study changes in participation to demonstrations between Catalans and the rest of Spanish. Column (1) of Table A.12 confirms the event-study evidence with differences-in-differences estimates. Here, the dependent variable is a variable taking three values: 3 if the respondents participate to a political demonstration in the last year, 2 if they do in a more distant past, and 1 if the respondents never participate. In the same table, we also show the effect for other forms of political participation present in the CIS database. Columns (2) and (3) show that Catalans, after the Ruling, are more likely to participate to a strike or to the signing of a petition.

We then observe the effect on political consumerism. Among others, Kam and Deichert (2020) reviewed that boycotting or buycotting (intentionally purchasing) certain products for political reasons are two important forms of political consumerism. Unfortunately, CIS data are less frequent about these forms of participation. We collected data January 2006, October-November 2007, April 2009, and April 2011 about these forms of participation. The time difference between the last pre-treatment and the post-treatment period is about two years, and, hence, it is difficult to attribute the differences-in-differences effect to the Ruling safely. Still, we find that after 2010, Catalans were more likely to boycott (and not boycott) products for political reasons that the rest of Spanish (columns 4 and 5). Finally,

in the same restricted sample, we do not find a differential change in the participation to donations or fundraising to political activities after 2010 (column 6).

Table A.12: Effect of the Ruling on political participation within Spain

VARIABLES	(1) Demonstration	(2) Strike	(3) Petition	(4) Boycotting	(5) Buycotting	(6) Contribution
Ruling x Catalonia	0.140***	0.108***	0.0702*	0.124**	0.130	-0.0108
	(0.0202)	(0.0187)	(0.0358)	(0.0579)	(0.0786)	(0.0645)
Observations	21,548	21,458	21,770	11,432	11,436	11,425
R-squared	0.152	0.104	0.157	0.136	0.159	0.163
Province FE	YES	YES	YES	YES	YES	YES
Survey FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES
Sample	Large	Large	Large	Short	Short	Short
Estimation	OLS	OLS	OLS	OLS	OLS	OLS
Average y	1.64	1.47	1.73	1.46	1.53	1.51

Dependent variables takes values from 1 to 3 if the respondent participate in the last year, participate in a more distant past, or never participate to a demonstration, to a strike, to the signing of a petition, to a boycott of certain products for political, ethical or environmental reasons (*Boycotting*), to the intentional purchase of certain products for political, ethical or environmental reasons (*Buycotting*), or donate or fundraise a political or social activity. *Ruling*: dummy taking 1 if the respondent is interviewed in a survey wave posterior to the Ruling, and 0 otherwise. *Catalonia*: dummy taking 1 if the respondent live in Catalonia and 0 if the respondent live in the rest of Spain (but not in the Basque Country, Navarra or Galicia). *Province FE*: province fixed effects. *Survey FE*: survey wave fixed effects. The list of *Controls* is reported in Appendix A.3.5. *Sample Large*: survey observations from 2006, 2007, 2009, and 2011. *Sample Short*: survey observations from 2006, 2007, 2008, 2009, 2010 and 2011. Estimated model is the difference-in-difference (D-D) model (A.3). *Average y*: mean of dependent variable. Probability weights used (when present). Standard errors clustered at province-survey level in parentheses in all specifications. *** p<0.01, ** p<0.05, * p<0.1

C.9 Mediation analysis

Section 5.2 of the paper shows that the Ruling increased group identification. In a consistent way with identity politics theory, we provide evidence that attitudes polarize after the Ruling between people who identify more as Catalans and people who identify more as Spanish. One caveat for the testability of this prediction is that we cannot conduct exactly this heterogeneity test, as the mediating factor (group identification) is endogenous. Hence, we instead test whether the Ruling polarizes preferences for more autonomy for people with different exogenous categories, i.e., individuals with different Catalan heritage.

It is econometric challenging to assess whether *endogeneous* identity is the primary channel behind the effect of the Ruling on voters' attitudes. However, we here provide three suggestive pieces of evidence that identity is one of the most important mechanisms of the effect of the Ruling. i) We show that national identity is the variable explaining the most statistical variation of the preferred relationship between Spain and Catalonia. ii) We calculate average mediation effects, following Imai, Keele and Tingley (2010), of the possible mechanisms explaining the effect of the Ruling, and we show that national identity has the highest coefficient. iii) We provide additional results on the effect of the Ruling on trust in democratic institutions, an alternative candidate mechanism to identity. We show that polarization on trust in democratic institutions between people of different Catalan heritage is not consistent with polarization on territorial preferences.

C.9.1 Contribution to the variation of the preferred relationship between Spain and Catalonia

We study how much variation in territorial preferences is explained by its association with respondents' self-identification with the Catalan identity. To have a sense of the potential impact of endogenous identity, we compare it with the variation explained by the association between territorial preferences and trust in democratic institutions. To do this, we compare the fit of our main specification, adding and removing these endogenous variables. Specifically, we add the endogenous variables about national identity together with trust in different institutions and satisfaction with democracy as regressors in our main specification, where support for more autonomy is the dependent variable, and compute the R^2. Subsequently, we exclude, one at a time, each of those variables from the regression, and we compute again the R^2. As trust in democratic institutions includes many different variables, we consider the adjusted R-squared.

In Table A.13, we report the percentage change of the R^2 for each of these variables. In the last row of Table A.13 we observe that the R^2 of the specification with all the regressors is 0.424. In the remaining rows of the table, we report the percentage reduction of that R^2 when we remove the correspondent set of variables.

The variable explaining more support for independence is national self-identification. The R^2 decreases by 21 percent when we exclude that variable from the regression. On the contrary, the role of trust in democratic institutions seems very modest since the R^2 only changes 7% percent when we exclude each of these variables from the regression, a variation similar to the one explained by the exogenous controls.

Moreover, this table provides suggestive evidence that a large part of the effect of the Ruling on support for independence could be mediated by the change in identity triggered by the Ruling. As a matter of fact, once we control for the endogenous variable about national identity, removing the Ruling with this endogenous variable reduces the R^2 by a similar amount to when we only exclude identity. When we exclude identity and trust,

the R-squared change is even greater, suggesting a possible complementarity between identity and trust in institutions.

Table A.13: Percentage decrease of the R-squared excluding each group of variables

Excluded Variables	**More autonomy**
Controls	8.89
Ruling	-.17
Feeling Catalan	21.15
Trust	6.82
Ruling & Catalan Feeling	21.06
Ruling & Trust	6.79
Ruling & Catalan Feeling & Trust	33.12
Baseline Adj. R-squared	.424

The table reports the percent change in the R^2 from a model in which *More autonomy* is regressed on on comarca fixed effects, all the controls and *All Mechanisms* and a model in which one or more of the extra variables are excluded. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Trust*: variables reporting how much the interviewed trusts from 1 to 10 the courts, Spanish Government, Spanish Parliament, Catalan Government, Catalan Parliament, and political parties and a dummy taking 1 if the interviewed has small or no satisfaction with the functioning of the democracy, and taking 0 if the interviewed is enough or very satisfied. *Feeling Catalan*: variable taking 5 values according to which national group the interview feel to belong. The variable takes value 1 if the interviewed feels only Spanish, 2 if the interviewed feels more Spanish than Catalan, 3 if the interviewed feels as Spanish as Catalan, 4 if the interviewed feels more Catalan than Spanish, and 5 if the interviewed feels only Catalan. *All Mechanisms*: Trust and Feeling Catalan. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. *Baseline Adj. R-squared* : Adjusted R-squared of the OLS regression of More autonomy on all the controls, Ruling and *All Mechanisms* with comarca fixed effects.

C.9.2 Average mediation effects

We consider how much the Ruling is causing the changes in voters' attitudes toward more autonomy due to the change in identity using the mediation analysis techniques developed by Imai, Keele and Tingley (2010). To do that, we first show in Table A.14 column (2) suggestive evidence that the Ruling effect is no longer statistically significant when we control for endogenous identity. The effect of Ruling also disappears when we control for the alternative role of institutional backlash (column 3). Hence, it is not clear whether the effect of the Ruling is potentially mediated by endogenous identity or, keeping unchanged identity, by the changes in the perception of the institutional framework. In column (4) of Table A.14, we find a significant effect on the preference for more autonomy of national identity and trust in the Spanish government and Catalan parliament. We also interpret that the direct effect of the Ruling on more autonomy not mediated by identity or trust in institutions is statistically not significant and equal to 0.0036.

To separate the role of identity and trust to institutions, we augment the mediation analysis of Imai, Keele and Tingley (2010) considering multiple mediators. For each possible mediator, we can compute the percentage change of the total effect of the Ruling that is mediated by this channel interacting the effect of the mediator on preferences for

Table A.14: Mediation analysis: controlling for different mechanisms

VARIABLES	(1) More aut.	(2) More aut.	(3) More aut.	(4) More aut.
Ruling	0.113***	0.0555	0.0506	0.00356
	(0.0306)	(0.0383)	(0.0383)	(0.0435)
Feeling Catalan		0.359***		0.339***
		(0.0277)		(0.0274)
Trust Courts			-0.0158	-0.0139
			(0.0148)	(0.0140)
Trust Gvt Esp			-0.0805***	-0.0745***
			(0.0138)	(0.0117)
Trust Parl Esp			-0.0297***	0.00441
			(0.0103)	(0.0122)
Trust Gvt Cat			0.0160	-0.00106
			(0.0221)	(0.0201)
Trust Parl Cat			0.119***	0.0794***
			(0.0243)	(0.0170)
Trust Parties			-0.00749	0.00143
			(0.0209)	(0.0220)
Insatisf. Democr.			0.0686	0.0443
			(0.0549)	(0.0714)
Observations	960	943	872	856
R-squared	0.334	0.438	0.390	0.474
Comarca FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS

More aut.: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. Other regressors are described in Appendix A.1. *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.1. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

more autonomy from column (4) of Table A.14 with the change in the mediator explained by the Ruling. For each possible mediator, we estimate the effect of the Ruling on the mediator in Table A.15. From this Table, we see that when we control for alternative mediators, the Ruling still explains the increase in national self-identification. However, when we control for national identity, the effect of the Ruling on trust in democratic institutions vanishes, except for effect on the Catalan government. This ancillary result suggests that the Ruling is probably acting on identity and then trust in institutions potentially react because of this change.

Using the coefficients from Tables A.14 and A.15, we report the estimation of the mediation effects in Table A.16. We compute the total effect of the Ruling as the sum of its direct effect and the mediation effects via all the mechanisms considered. We can derive several suggestions. First, the direct unmediated effect of the Ruling is small, as it explains only 8% of the total effect and is not significant. Second, identity represents the biggest mediation effect, as it constitutes half of the total effect of the Ruling. Third, the only alternative channel with a sizable mediation effect is the effect of the Ruling through the diminished trust in the Spanish government. However, this mediation effect is not statistically significant, and the only significant mediation effect is the effect of the Ruling via endogenous identity.

This mediation analysis should be considered with caution as suggestive evidence uniquely, as the underlying assumption is that the effect of endogenous identity on more autonomy does not interact with other unobservable mechanisms, different from the Ruling and trust on democratic institutions. Still, the results in Table A.16 suggests that endogenous identity is very likely an important mechanism behind the effect of the Ruling on voters' attitudes.

C.9.3 Polarization in trust in institutions

In Section 5.2 we claim that consistent with identity politics theory, changes in identity explain part of the polarization of the preference for more autonomy between people with different Catalan heritage. An alternative possibility is that without any change in identity, the Ruling affected the trust differently in national and regional institutions of people with different Catalan heritage, and as a result, these different groups prefer a different relationship between Catalonia and Spain. This last channel is not confirmed by results in Table A.17 in which we consider the polarizing effect of the Ruling on trust in democratic institutions. In fact, we find that if people *without* Catalan heritage are the ones that principally diminish trust in national institutions (e.g., courts, political parties, and satisfaction with how democracy works). Hence, with these results, it is difficult to explain why these people are not the people that also want a higher level of regional autonomy.

Table A.15: Mediation analysis: the effect of the Ruling on the mediators

VARIABLES	(1) Feel Cat.	(2) Trust: Courts	(3) Trust: Gvt Esp	(4) Trust: Parl Esp	(5) Trust: Gvt Cat	(6) Trust: Parl Cat	(7) Trust: Parties	(8) Insatisf. Democr.
Ruling	0.0678*	-0.181	-0.172	-0.0445	0.104**	0.0323	-0.000141	0.0142
	(0.0390)	(0.125)	(0.124)	(0.0609)	(0.0481)	(0.0400)	(0.0741)	(0.0405)
Observations	855	855	855	855	855	855	855	855
R-squared	0.487	0.399	0.641	0.679	0.715	0.737	0.638	0.242
Comarca FE	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Other Mechanisms	YES	YES	YES	YES	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

The description of the Dependent Variables is reported in Appendix A.1. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Other mechanism*: in each regression we control for all other mechanisms. *All mechanisms*: variables reporting how much the interviewed trusts from 1 to 10 the courts, Spanish Government, Spanish Parliament, Catalan Government, Catalan Parliament, and political parties and a dummy taking 1 if the interviewed has small or no satisfaction with the functioning of the democracy, and taking 0 if the interviewed is enough or very satisfied, and *Feel Cat.*. The list of *Controls* is reported in Appendix A.3.1. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

Table A.16: Mediation analysis: average causal mediation effects

Variable	**Effect**	**s.e.**	**% of Total Effect**
Ruling: Average Total Effect	.0442	.0283	.
Ruling: Average Direct Effect	.0036	.0416	8.1
Catalan identity: Average Mediation Effect	.0225	.012	50.9
Trust Courts: Average Mediation Effect	.0031	.0023	7
Trust Spanish Government: Average Mediation Effect	.0113	.0091	25.6
Trust Spanish Parliament: Average Mediation Effect	-.0001	.0004	.2
Trust Catalan Government: Average Mediation Effect	-.0001	.002	.2
Trust Catalan Parliament: Average Mediation Effect	.0025	.0036	5.7
Trust Parties: Average Mediation Effect	0	.0005	0
Insatisfaction Democracy: Average Mediation Effect	.0009	.0023	2

This table estimates the average total, direct and mediation effects of the Ruling (*Effect*) and its corresponding standard error (*s.e.*) on *More autonomy* as in Imai, Keele and Tingley (2010). The average direct effect of the Ruling comes from Table A.14. Mediation effects are estimated interacting the effect of the mediator on *More autonomy* estimated in Table A.14 and the effect of the Ruling on the mediator estimated in Table A.15. The total effect of the Ruling is the sum of the direct effect and the absolute value of the mediation effects. *% of Total Effect* represents the percentage of the total effect represented by one mediation effect (in absolute value). *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise.

Table A.17: Effect of the Ruling on polarization on the trust to democratic institutions according to Catalan heritage

VARIABLES	(1) Trust: Courts	(2) Trust: Gvt Esp	(3) Trust: Parl Esp	(4) Trust: Gvt Cat	(5) Trust: Parl Cat	(6) Trust: Parties	(7) Insatisf. democr.
Both Catalan parents	-0.922***	-0.375	-0.262	-0.124	-0.436*	-0.0902	0.0405
	(0.224)	(0.274)	(0.173)	(0.255)	(0.220)	(0.152)	(0.0387)
Ruling	-0.522**	-0.175	-0.174	-0.0704	-0.262***	-0.306**	0.0878**
	(0.194)	(0.118)	(0.108)	(0.128)	(0.0855)	(0.123)	(0.0374)
Ruling x Both Catalan parents	0.525**	-0.118	0.0933	0.263	0.636***	0.172	-0.0683
	(0.254)	(0.214)	(0.248)	(0.229)	(0.189)	(0.191)	(0.0626)
Observations	961	991	973	996	971	987	989
R-squared	0.079	0.083	0.076	0.074	0.071	0.060	0.076
Comarca FE	YES	YES	YES	YES	YES	YES	YES
Controls	YEs	YEs	YEs	YEs	YEs	YEs	YEs
Sample	W3-2010	W3-2010	W3-2010	W3-2010	W3-2010	W3-2010	W3-2010
Data	CEO	CEO	CEO	CEO	CEO	CEO	CEO
Model	Within-survey	Within-survey	Within-survey	Within-survey	Within-survey	Within-survey	Within-survey
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS

Trust: X: variable reporting how much the interviewed trusts the following institutions from 1 to 10: courts (*Courts*), Spanish Government (*Gvt Esp*), Spanish Parliament (*Parl Esp*), Catalan Government (*Gvt Cat*), Catalan Parliament (*Parl Cat*), and political parties (*Parties*). *Insatisf. democr.*: dummy taking 1 if the interviewed has small or no satisfaction with the functioning of the democracy, and taking 0 if the interviewed is enough or very satisfied. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.3. Sample of people from the third wave of 2010 interviewed before 19:00 and in the first seven days of interviews (W3 2010). *Model*: estimated model is the within-survey model (Equation 1). All unanswered or unknown answers coded as missing values. Probability weights used. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

D Robustness and potential threats to identification

D.1 Additional evidence about balancing on observables

We show three additional evidence about balancing of our treatment and control group. First, balancing in the predicted preference for independence between the treatment and control groups. Second, we conduct several falsification tests by changing the day of the Ruling. Third, we discuss selection on unobservables.

Predicted preferences for independence: If controls and treated were different according to some characteristics that could potentially explain the preference for independence, then our estimates would be biased. That is, we require that the treatment status is orthogonal to the potential outcomes, conditional on observables. From column (3) of Table 1, we find that there is no clear pattern such that the categories of people over-represented in the interviews after the Ruling are more pro or against independence. We provide additional evidence in favor of the identification assumption in Figure A.11. In this figure, we have predicted the preference for independence using observable characteristics for the people interviewed before and after the Ruling. We find no statistically significant difference in the predicted preference for independence between the treatment and control groups. That is, we accrue the change in the preference for independence that we have found in Section 5 to the Ruling and not to difference in sampling characteristics between treatment and control group.

Falsification tests: We also provide evidence that our estimated effect is not capturing any other unobserved confounding factor with a falsification test in which we randomly assign the timing of the Ruling inside the survey into consideration. Since 227 observations are in the control group, we divide our treated sample in six groups of 227 observations, we randomly assign the treatment to one of those groups, and consider control groups all remaining observations interviewed after the ruling of the Constitutional Court. Table A.18 Columns (1) to (6) find no statistically significant effect of these placebo treatment. We also conduct in Columns (7) and (8) another falsification exercise using the previous and posterior waves of the same survey, in which we assign the treatment on the first day of interviews.[31] In these other waves of the survey, we find no statistically significant effect of being interviewed the first day of the survey on preference for independence. This shows that there is nothing special in the first day of interview and that people who are more pro-independence are not systematically interviewed more in the first day of the survey. This placebo exercise provides additional evidence that the timing of the assignment to treatment and control group does not depend on the potential outcome of the preference for independence. A final falsification treatment we conduct to rule out any calendar effect is to assign the treatment to the fist Monday on the different waves of interviews of the same survey. Columns (8) and (9) rule out any calendar effect associated with Mondays.

Selection on unobservables: In Table 2 of the manuscript we show that the effect of the Ruling on the preferred relationship between Spain and Catalonia is robust between regressions with and without controls. However, as shown by Oster (2019) this is not enough to rule out biases from the presence of unobservable variables, as coefficient

[31] Our baseline results use the third wave of the the *Baròmetre d'Opinió Política*. The second wave was conducted in April 2010, while the fourth wave in October 2010.

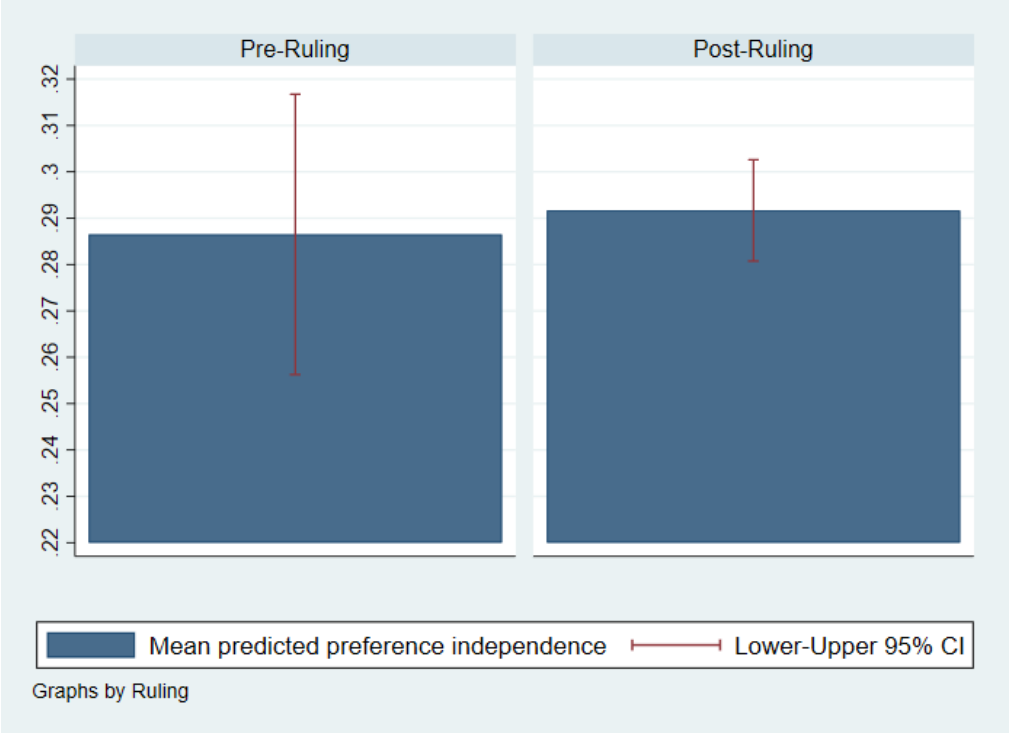


Figure A.11: Difference in predicted preference for independence before and after the ruling of the Constitutional Court

The predicted preference for independence has been found regressing the dummy reflecting the respondent's preference for Catalonia to become an independent state on whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population; and comarcas fixed effects. *Mean predicted independence*: mean of the predicted preference for independence based on controls for people interviewed before and after the ruling of the Constitutional Court. *Lower-Upper 95% CI*: lower and upper bounds of 95% confidence interval. The regression for the prediction has been conducted on the sample of respondents interviewed in the first seven days of interviews and before 19:00. Regressing the predicted preference for independence on the variable *Ruling* provide an estimated constant of 0.2865 (clustered s.e. at day level 1.96e-17) and an estimated effect of *Ruling* of 0.0052 (clustered s.e. at province-day of the interview level 0.0267). *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise.

Table A.18: Preference for independence: placebo distribution of the treatment

VARIABLES	(1) Indep.	(2) Indep.	(3) Indep.	(4) Indep.	(5) Indep.	(6) Indep.	(7) Indep.	(8) Indep.	(9) Indep.
Placebo: 2nd 227 obs wave3-2010	0.00681								
	(0.0331)								
Placebo: 3rd 227 obs wave3-2010		0.0461							
		(0.0316)							
Placebo: 4th 227 obs wave3-2010			0.000537						
			(0.0232)						
Placebo: 5th 227 obs wave3-2010				-0.0362*					
				(0.0207)					
Placebo: 6th 227 obs wave3-2010					-0.0154				
					(0.0219)				
Placebo: 7th 227 obs wave3-2010						-0.00757			
						(0.0343)			
Placebo: 1st day wave2-2010							-0.0379		
							(0.0272)		
Placebo: 1st day (and Monday) wave4-2010								-0.0256	
								(0.0140)	
Placebo: 1st Monday wave2-2010									0.00823
									(0.0298)
Observations	999	999	999	999	999	999	419	461	419
R-squared	0.248	0.249	0.248	0.249	0.248	0.248	0.182	0.242	0.182
Comarca FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Sample	Wave 3	Wave 3	Wave 3	Wave 3	Wave 3	Wave 3	Wave 2	Wave 4	Wave 2
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

Indep.: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Placebo nth 227 obs wave3-2010*: divide sample in equal bins of 227 observations and assign observations in nth bin to treatment and others to control group. *Placebo 1st day waveX-2010*: assign observations in wave X interviewed during the first day of interviews to treatment and other to control group. *Placebo 1st Monday waveX-2010*: assign observations in wave X interviewed during the first Monday of interviews to treatment and other to control group. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. For the waves 2 and 4 dummies for respondent's city population not present. *Sample: wave 3*: observations from wave 3 of 2010 except people interviewed in the first day. *Sample: wave 2*: observations from wave 2 of 2010. *Sample: wave 4*: observations from wave 4 of 2010. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

movements depend on the amount of variance of the dependent variable that omitted variables can explain. Hence, we conduct the robustness checks proposed by Oster (2019) to show that a potential bias from unobservable variables is not important and does not change our main result. This is a further reassurance about the balancing between treated and control groups, and the quasi-random assignment to treatment conditional on observables.

Results are reported in Table A.19. As a first reassurance, the coefficients of the estimation of the effects of the Ruling with and without controls are very similar when the increase in R-squared by including controls is remarkable. The estimation of the bias-adjusted treatment effect of the Ruling depends on the value of R_{max}, the hypothetical R-squared from a regression of the dependent variable on the treatment, the observed controls and the unobserved variables. Following Oster (2019), we first proceed assuming a value of R_{max} equal to 1.3 times the R-squared of the controlled regression. The estimated bias-adjusted treatment effect is 0.147. This confirms the robustness of our main estimated effect as the identified set of the treatment effect in case of equal selection on unobservables and observables a) does not include zero and b) it is within the 95% confidence interval of the estimation of our treatment effect.

We also compute the degree of selection on unobservables, relative to observables, that would make our estimated treatment effect equal to 0. It would be needed that the variance between unobservable variables and our dependent variables should be 12 times more than the one with observed variables to have a null effect of the Ruling on the preferred relationship between Spain and Catalonia.

The robustness of our results is also confirmed in the extreme case in which the hypothetical R-squared of a regression of the dependent variable on treatment, observed and unobserved controls equals 1.

Table A.19: Measurement of the bias from unobservables variables using selection on observables

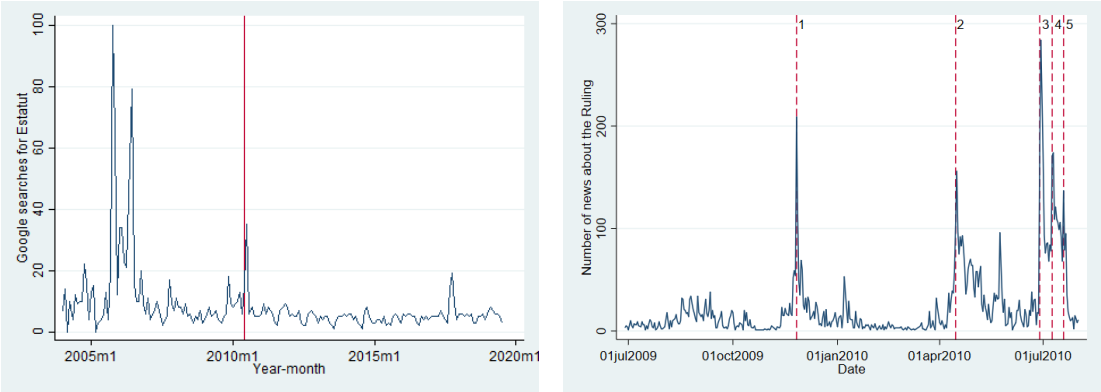
			$R_{max} = 1.3\tilde{R}$		$R_{max} = 1$	
More Autonomy on Ruling	**Uncontrolled**	**Controlled**	**Identified set**	δ **for** $\beta = 0$	**Identified set**	δ **for** $\beta = 0$
Treatment effect	0.153	0.133	[0.133;0.147]	-12.930	[0.133;0.231]	-2.038
s.e.	(0.058)	(0.043)				
R-squared	0.004	0.339				

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. *Uncontrolled*: treatment effect, standard errors (s.e.) and R-squared from a OLS estimation of the regression of *More autonomy* and *Ruling*. *Controlled*: treatment effect ($\tilde{\beta}$), standard errors (s.e.) and R-squared ($\tilde{R}$) from a OLS estimation of the regression of *More autonomy*, *Ruling*, controls and Comarca fixed effects. *Identified set*: bounds for the treatment effect, between the controlled effect ($\tilde{\beta}$) and the bias-adjusted treatment effect when the maximum R-squared is R_{max} and $\delta = 1$, that is and equal selection on unobservables as observables ($\beta^*(R_{max}, 1)$). δ *for* $\beta = 0$: estimate of the degree of selection on unobservables as a proportion of selection on observables that is needed to obtain a bias-adjusted treatment effect of 0. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *** p<0.01, ** p<0.05, * p<0.1

D.2 Noncompliance

The estimated effect is downward biased in the presence of noncompliance, which might occur if people in the treatment group are unaware of the Ruling. The Ruling received extensive news coverage and was a top story for newspapers and TV news. Figure A.12a

reports the Google trends for searches of the word "Estatut", with two peaks in 2005 and 2006 that correspond to the approval of the Statute by the Catalan Parliament and its referendum approval, respectively. Searches increased significantly again after the Ruling. Moreover, in Section 5.2.1, we show that the Ruling caused a significant increase in the number of respondents who consider the Statute of Autonomy to be the most important problem in Catalonia.



(a) Google searches

(b) Number of news

Figure A.12: Time series of Google searches and news related to the Ruling

Panel A.12a. Source: Google Trends for searches for the word "Estatut". Searches in Catalonia only. Red line: June 2010. Maximum value normalized to 100.

Panel A.12b. Source: Factiva. We collected all the news containing the words "Estatut" and "Tribunal Constitucional" between June 28th, 2009, and July 22nd, 2010, in Spain. The vertical lines correspond to the following dates and events, Event 1, November 27th, 2009: joint editorial of 12 Catalan newspapers about a possible ruling of the Constitutional Court. Event 2, April 15th, 2010: meeting of the Constitutional Court to discuss about the Ruling. Event 3, June 28th, 2010: Ruling. Event 4, July 9th, 2010: demonstration against the Ruling. Event 5, July 19th, 2010: release of the complete Ruling with all the individual votes and comments of the judges of the Constitutional Court.

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D.3 Confounding events

Although we cannot completely discard the presence of collateral events triggered by the Ruling that could affect our treatment group, we do not observe any abnormal change in the number of news stories about the Ruling during the remaining days of the fieldwork of our survey.[32] As we can see in Figure A.12b, there was a demonstration against the ruling on July 10; however, the demonstration was after the interviews ended and cannot therefore affect our estimates. Additionally, active political propaganda was present in the years between the appeal and the final ruling. Since the previous propaganda affected both the treatment and control groups, this channel would not undermine the interpretation of the cause of the estimated effect but would emphasize the importance of the political channel.

Confounding events: 2010 FIFA World Cup

The only important event that happened during the days of the interviews is the 2010 FIFA World Cup, which was won eventually won by Spain. The Spanish national team

[32]The sudden increase in support for Catalan independence coincides with other important economic and political events: the financial and banking crisis that began in 2008, several corruption scandals in Spain, and the change of parties in government from PSOE to a more centralist party, PP. However, no important event occurred during the interview period. Therefore, we can interpret our estimates as the effect of the Ruling, keeping fixed economic, political and/or social events.

did not play on June 28.[33] The final of the World Cup took place on July 11th, that is after the interviews were conducted. Three matches of Spain happened during the survey work: round of 16 (June 29th), quarter-finals (July 3rd), and semi-finals (July 7th). In our baseline estimate we only use the first seven days of interviews, therefore the semi-finals match is not included. Table A.20 Column (1) re-estimates our baseline effect excluding the days after a match played by Spain, and confirms the robustness of our results. Depetris-Chauvin, Durante and Campante (2020) argue that football victories of national teams can lead to less identification to ethnic groups in Africa. Columns (2) estimates the effect of the victories of the Spanish team at the 2010 World Cup and we do not find any significant effect on feeling more Catalan.

Table A.20: Preference for independence: robustness for 2010 football World Cup

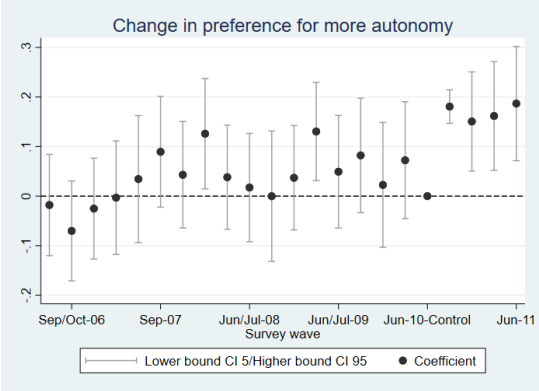
	(1)	(2)
VARIABLES	More autonomy	Feeling Catalan
Ruling	0.101***	
	(0.0323)	
Spain match World Cup		-0.0610
		(0.0588)
Observations	786	987
R-squared	0.344	0.420
Comarca FE	YES	YES
Controls	YES	YES
Sample	No World Cup	All
Estimation	OLS	OLS

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. For the waves 2 and 4 dummies for respondent's city population not present. *Sample: no World Cup*: Sample of people interviewed before 19:00 and in the first seven days of interviews but not during the day after a match played by Spain at the World Cup (June 30th, round of 16 Spain-Portugal 1-0, and July 3rd, quarter-finals Paraguay-Spain 0-1). *Sample: All*: Sample of people interviewed before 19:00 and in the first seven days of interviews. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

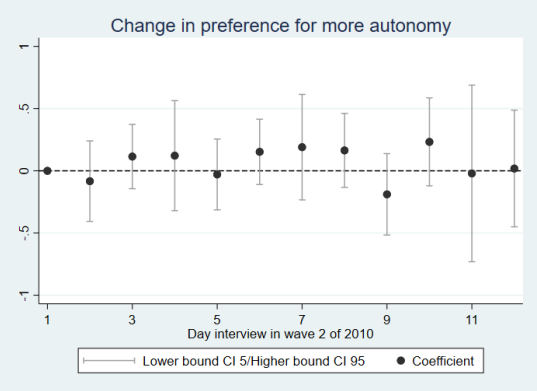
[33] On June 28, 2010, two matches of Round of 16 took place: Netherlands-Slovakia 2-1, and Brazil-Chile 3-0.

D.4 Pre-trends

Our estimates could be biased in the presence of pre-trends in our dependent variables. In fact, Figure 1 shows that there was a slow increase in the support for independence in Catalonia between 2006 and 2010, which was followed by a more abrupt increase after the Ruling. We provide the first evidence against the presence of pre-trends by comparing the evolution of the preference for more autonomy in Catalonia between different waves of the survey that we exploit in this paper. We control for several observable characteristics to account for part of the time varying confounders between waves, and we regress the preference for more autonomy on survey dummies. We separate the sample in the wave in which the Ruling happened between control and treatment observations. Figure A.13a presents this event study, and the estimated difference between each wave and our control observations in 2010. Several considerations emerge from the analysis of this figure. First, the absence of conditional changes in more autonomy before the Ruling suggests that pre-trends are unlikely to bias our estimates. Second, it is possible to observe an increase in more autonomy from the wave of the Ruling onwards. Third, this increase in more autonomy appears to be sustained in the waves after the Ruling.[34]



(a) Waves from 2006 to 2011



(b) Wave 2 of 2010 by day of the interview

Figure A.13: Pre-trends analysis

Panel A.13a reports the estimated coefficient of the effect of the survey wave on *More autonomy* using waves from 2006 to 2011. The omitted category is the observations from interviews in the third wave of 2010 before June 28th at 19:00. Standard errors clustered at province-survey wave level. Panel A.13b reports the estimated coefficient of the effect of the day of the interview on *More autonomy* using the second waves of 2010. The omitted category is the first day of interview. Robust standard errors. All panels uses probability weights. *Lower-Upper Bound CI 95*: lower and upper bounds of 95% confidence interval.

Unfortunately, this event study compares observations over periods of months. Our identification strategy allows us to improve this estimation by comparing observations very close in time. Therefore, only a daily trend in the increase for secession could bias our estimates. This is unlikely to be the case for several reasons. First, the latent increase in support for independence shown in Figure 1 occurs over the course of several years. Second, Figure A.13b uses the wave anterior to the Ruling of the same survey to show that during the days of the interviews, there was not a daily increase in the preference for more autonomy for Catalonia. Third, Figure A.12 also shows that the amount of Google searches and news about the Ruling were constant in the months before the verdict. Fourth, in Appendix D.6, we show that our results are robust to considering unique observations in the day before and after the Ruling.

[34] Appendix E.4 studies the persistence of the effects of the Ruling across sample waves in a more extensive and systematic way.

Even if our control observations are only in the first day of interviews and we cannot formally control for longer pre-trends, all the aforementioned evidence makes the presence of pre-trends unlikely in the days before the Ruling.

D.5 Small sample size

One final worry is that the treated and control group are unbalanced in terms of number of observations. In our main specification we use 227 control observations and 1050 treated observations. As treated and control observations are similar in terms of many observable characteristics this should not raise concerns of the consistency of our estimates. Still, statistical power and inference can be affected by the different sample size in the two groups. In Table A.22 we restrict our analysis to the use of a treatment group which has the identical size as the control group.[35] Column (1) of Table A.22 shows that our results are robust to this additional restriction.

Similarly, one might worry that the number of observations in the control group is not big enough. Column (2) of Table A.22 restimate the effect of the Ruling using using as control: a) the respondents interviewed in the third wave of the survey in 2010 before the Ruling took place (the control group in our main specifications), and b) the respondents interviewed in the second wave of 2010. Our results are maintained when we use a bigger sample. Column (3) confirms the same result applying the sampling restriction about the hour of the interview in both samples.

We report in Table A.21 the summary statistics and balancing tests for the independent variables in the second and third waves of the CEO public opinion surveys in 2010. In the fourth column we show the differences in characteristics between the second wave of 2010 and the third wave of 2010. While the last column shows the differences with respect to the control group we use in our paper–the people interviewed in the third wave of 2010 before the Ruling. The third wave of 2010 and, more specifically, the control group in our study has very similar characteristics with respect to people interviewed in the previous wave of the survey.

Small number of observations in the control group can raise the worry about whether the treatment effect we find in this paper is observed by chance. Inference of our estimates can be incorrect, as asymptotic properties of the OLS estimator might not be reached. Fisherian randomization inference can provide an alternative way to obtain proper inference in the setting of small number of observations (Fisher, 1935). This inference is based on the idea of permutation tests and that is possible to compute regression coefficients for each possible alternative assignment of treatment, exploiting the knowledge of the randomization process. As a reminder in Appendix D.1 we conduct several placebos by changing the day of the Ruling and we show that we found insignificant effects using these placebos on preference for secession. Still, randomization inference provides an alternative way to show in more systematic way that the the reason why we found an effect of the Ruling is not due to the chance of the specific treatment and control assignment. We report the results using randomization inference to obtain the p-value of the effect of the Ruling in column (4) of Table A.22.[36] We confirm that our main result is not observed by chance.

[35] We use only the first 170 treated observations interviewed before 19:00. Out of the 227 observations in the control group we end up with 170 observations without missing values. Hence, we consider the first 170 observations in the treated group without missing values and interviewed before 19:00.

[36] Current statistical softwares to perform randomization inference do not allow for probability weighting, this is why the coefficient in column (4) of Table A.22 is slightly different.

Table A.21: Main summary statistics and mean difference between the second and third wave of the surveys in 2010

Variable	**Mean**			**Difference**	
	2-2010	**3-2010-C**	**3-2010-T**	**2-2010 vs 3-2010**	**2-2010 vs 3-2010-C**
Interview in catalan	0.67	0.73	0.67	0.03*	0.06
Speak catalan at home	0.48	0.52	0.46	0.00	0.04
Speak catalan at work	0.24	0.27	0.25	0.03*	0.03
Speak catalan with friends	0.40	0.40	0.40	0.01	-0.00
Born in Catalonia	0.73	0.73	0.71	0.02	0.00
Born in rest of Spain	0.24	0.25	0.27	-0.02	0.00
Foreign born	0.02	0.02	0.02	0.00	-0.00
Father born in Catalonia	0.46	0.48	0.43	0.01	0.02
Father born in rest of Spain	0.52	0.50	0.55	-0.01	-0.02
Father foreign born	0.02	0.02	0.02	-0.00	0.00
Mother born in Catalonia	0.46	0.46	0.44	0.01	0.00
Mother born in rest of Spain	0.52	0.52	0.54	-0.01	0.00
Mother foreign born	0.03	0.02	0.02	0.00	-0.01
Female	0.52	0.60	0.56	-0.00	0.08*
Married	0.61	0.67	0.61	-0.01	0.06
Educ. lower ESO	0.09	0.11	0.09	-0.00	0.02
Educ. ESO	0.32	0.39	0.33	-0.03	0.06
Educ. bachillerato	0.33	0.24	0.30	-0.02	-0.09**
Educ. university	0.26	0.27	0.28	0.05***	0.01
Income lower 1k	0.16	0.14	0.16	-0.02	-0.02
Income 1k-2k	0.35	0.44	0.38	0.02	0.09*
Income 2k-3k	0.27	0.21	0.28	0.01	-0.06
Income 3k or more	0.22	0.21	0.18	-0.01	-0.01
Self-employed	0.11	0.08	0.08	-0.02	-0.03
Employed	0.37	0.41	0.37	0.04*	0.05
Unemployed	0.52	0.51	0.55	-0.02	-0.01
Age	48.68	50.79	50.55	-0.37	2.10
Age squared	2671.77	2812.15	2843.92	-38.61	140.38
City pop. 0-2000	0.05	0.05	0.05	-0.00	-0.01
City pop. 2001-10000	0.14	0.15	0.14	-0.00	0.01
City pop. 10001-50000	0.26	0.28	0.26	0.00	0.02
City pop. 50001-150000	0.20	0.19	0.22	-0.00	-0.01
City pop. 1500001-1000000	0.12	0.19	0.10	-0.00	0.07*
City pop. 1000000 or more	0.22	0.15	0.23	-0.00	-0.07**

Mean 2-2010: mean of the reported variable in the second wave of the CEO public opinion survey in 2010. *Mean 3-2010-C*: mean of the reported variable in the third wave of the CEO public opinion survey in 2010 in the control group (respondents interviewed before June 28th, 2010, at 19:00). *Mean 3-2010-T*: mean of the reported variable in the third wave of the CEO public opinion survey in 2010 in the treatment group (respondents interviewed after June 28th, 2010, at 19:00, in the first seven days of interviews before 19). *Diff. 2-2010 vs 3-2010*: t-test of the difference in reported variable between respondents interviewed in the second (2-2010) and third wave of 2010 (3-2010), obtained regressing the reported variable on an indicator variable for the wave of the interview using probability weights. *Diff. 2-2010 vs 3-2010-C*: t-test of the difference in reported variable between respondents interviewed in the second (2-2010) and in the control group of the third wave of 2010 (3-2010-C), obtained regressing the reported variable on an indicator variable for the wave of the interview for the respondents interviewed before June 28th, 2010, at 19:00, using probability weights. *** p<0.01, ** p<0.05, * p<0.1

Table A.22: Preferred relationship between Catalonia and Spain: robustness using a more balanced or bigger sample

	(1)	(2)	(3)	(4)
VARIABLES	More autonomy	More autonomy	More autonomy	More autonomy
Ruling	0.156**	0.147***	0.130***	0.110***
	(0.0501)	(0.0344)	(0.0375)	(0.0379)
Observations	340	3,032	2,318	960
R-squared	0.435	0.279	0.296	0.324
Controls	YES	YES	YES	YES
Comarca FE	YES	YES	YES	YES
Balanced sample	YES	NO	NO	NO
Waves	W3 2010	W2 W3 2010	W2 W3 2010	W3 2010
Hour sample	All	All	Before 19	Before 19
Weights	YES	YES	YES	NO
Inference	cluster s.e.	cluster s.e.	cluster s.e.	random. inf.
Estimation	OLS	OLS	OLS	OLS

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Independence*: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Balanced sample*: use of control observation and first 170 treated observations interviewed before 19:00. *Waves*: estimation performed using observations from the third wave of the CEO survey of 2010 only (*W3 2010*) or using also observations from the second wave of the CEO survey of 2010 (*W2 W3 2010*). *Hour sample*: use of all observations or only observations interviewed before 19. *Weights*: Probability weights used. *Inference: cluster s.e.*: Standard errors clustered at province-day of the interview level. *Inference: random. inf.*: standard errors obtained by randomization inference performing 1,000 permutations within each stratum defined by the CEO. All unanswered or unknown answers coded as missing values. *** p<0.01, ** p<0.05, * p<0.1

D.6 Sample restrictions

One important concern with the use of survey data regards the way in which interviews were organized. In particular, different categories of people could potentially be interviewed after 19:00, which in Spain often corresponds to the end of the work day. Moreover, according to Muñoz, Falcó-Gimeno and Hernández, 2018 the last days of the survey can be devoted to interview the people necessary to obtain the necessary quotas of groups with the highest non-response. In order to mitigate this concern we restrict our sample to people interviewed in the first seven days and before 19:00. Table 1 column (2) in Section 4.2 shows the summary statistics of our restricted sample.

Table A.23 shows that in fact the structure of the field work generate some unbalances. Column (2) shows the difference in observable characteristics of the control group with respect to the last 227 observations.[37] According to Muñoz, Falcó-Gimeno and Hernández, 2018 on the first days the people that tend to be interviewed differs from those interviewed at the end. We find that more educated people and younger are interviewed more in the first days. Column (3) shows difference in characteristics between people interviewed before and after 19:00. For instance, male, more educated and employed seems to be interviewed more after 19:00.

We provide robustness of our estimated results to the use of the different sample according to the day of interview or the time of the day at which they have interview in Figures A.14a and A.14b. Our main result is robust using different samples. Figure A.14a shows that the estimated effect is robust to the sampling day of the treated group. While the immediate effect (the day after, which is the recommended window in Muñoz, Falcó-Gimeno and Hernández, 2018) is as large as 0.22 points, enlarging the window decreases the average effect but it converges to 0.12 points.

D.7 Geographical variation

Our estimations relies on comparing people with similar observable characteristics living inside the same comarca, interviewed before and after the Ruling. The introduction of comarca fixed effects might be particularly demanding, given that we might not have enough comparison inside the same comarca. In this Appendix we relax this comparison and we impose fixed effects at different geographical levels. Results are reported in Table A.24. Column (1) reports result without any geographical fixed effect, while column (2) to (4) controls for province, province times size of municipality, and comarca fixed effects. Results are maintained throughout specifications.

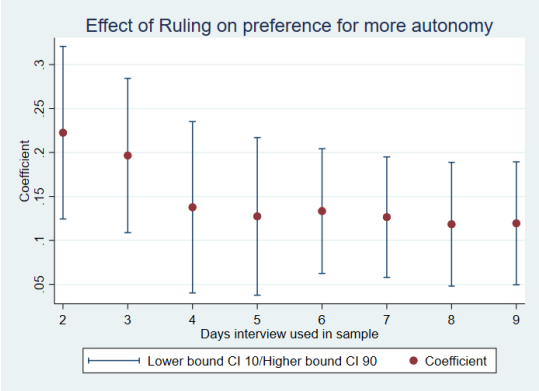
Moreover, we also show that our results are not driven by any specific geographical region or possible imbalances in the geographical distribution of respondents before and after the Ruling. To do that, we estimate our main coefficient when sequentially dropping one comarca at a time. We then do the same, excluding different pairs of comarcas. We replicate this also excluding three and four comarcas at the time. In Figure A.15, we report all these estimations together with our main effect of the Ruling on the preferred relationship between Spain and Catalonia considering all the comarcas. The results leave different comarcas out and are very similar to our main effects, their distribution of the coefficients is exactly centered at the level of our estimated effect using all the geographical variations, and they are included inside the 95% confidence interval of our estimated coefficient.

[37] Not the same number of observations is interviewed every day. Since 227 observations are in the control group we compare them with the last 227 observations in the survey

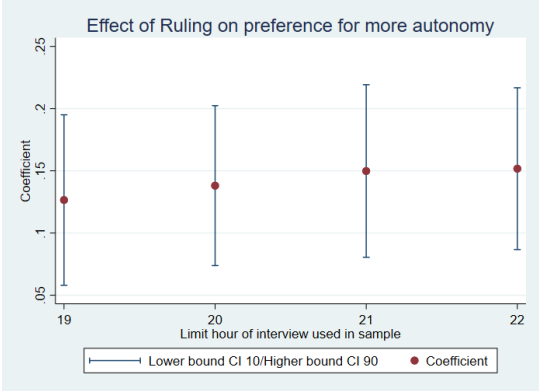
Table A.23: Balancing reasons for restricting the sample

Variable	**First-last obs.**	**Before-after 19**
Interview in catalan	0.10*	0.07**
Speak catalan at home	0.14**	0.02
Speak catalan at work	0.06	0.15***
Speak catalan with friends	0.13**	0.01
Born in Catalonia	0.14***	0.10***
Born in rest of Spain	-0.12**	-0.11***
Foreign born	-0.01	0.01
Father born in Catalonia	0.13**	0.04
Father born in rest of Spain	-0.12*	-0.04
Father foreign born	-0.02	0.00
Mother born in Catalonia	0.09	0.06
Mother born in rest of Spain	-0.08	-0.09**
Mother foreign born	-0.00	0.02
Female	-0.09	-0.26***
Married	-0.13**	-0.08*
Educ. lower ESO	-0.06**	0.00
Educ. ESO	-0.14**	-0.17***
Educ. bachillerato	0.11*	0.03
Educ. university	0.09	0.13***
Income lower 1k	-0.03	-0.06**
Income 1k-2k	-0.04	0.03
Income 2k-3k	0.03	0.00
Income 3k or more	0.04	0.03
Self-employed	0.01	0.09***
Employed	-0.03	0.13***
Unemployed	0.02	-0.21***
Age 18-34	0.38***	0.15***
Age 35-49	-0.12**	0.07*
Age 50-64	-0.25***	-0.14***
Age 64 or more	-0.01	-0.08**
City pop. 0-2000	0.17***	-0.01
City pop. 2001-10000	-0.02	0.02
City pop. 10001-50000	-0.05	0.03
City pop. 50001-150000	-0.05	0.00
City pop. 1500001-1000000	-0.07	-0.05*
City pop. 1000000 or more	0.03	0.01

First-last obs.: t-test of the difference in reported variable for the first 227 and the last 227 respondents interviewed before 19:00, obtained regressing the reported variable on a dummy taking value 1 if the interview took place on the first 227 interviews, using probability weights. *Before-after 19*: t-test of the difference in reported variable for the respondents interviewed before and after 19:00, obtained regressing the reported variable on a dummy taking value 1 if the interview took place after 19:00 using probability weights. *** p<0.01, ** p<0.05, * p<0.1



(a) Robustness by different days



(b) Robustness by different time of the day

Figure A.14: Robustness for sample interviewed in different days and time of the day

The graphs reports the estimated coefficient of the effect of the Ruling. Panel A.14a. For each X day, coefficient obtained regressing *More autonomy* on *Ruling*, individual controls and comarcas fixed effects for the people interviewed during the first X days of interview. Sample of people interviewed before 19:00. Panel A.14b. For each X hour, coefficient obtained regressing *More autonomy* on *Ruling*, individual controls and comarcas fixed effects for the people interviewed before the hour X. Sample of people interviewed in the first seven days of interviews.

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. Controls: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Lower-Upper Bound CI 90*: lower and upper bounds of 90% confidence interval. All unanswered or unknown answers coded as missing values. Probability weights used. Standard errors clustered at province-day of the interview level.

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Table A.24: Robustness using different geographical fixed effects

VARIABLES	(1) More autonomy	(2) More autonomy	(3) More autonomy	(4) More autonomy
Ruling	0.137***	0.141***	0.132***	0.133***
	(0.0407)	(0.0375)	(0.0411)	(0.0431)
Observations	960	960	960	960
R-squared	0.309	0.314	0.319	0.339
Province FE	NO	YES	NO	NO
Province x Size Mun FE	NO	NO	YES	NO
Comarca FE	NO	NO	NO	YES
Controls	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Province FE*: province fixed effects. *Province x Size Mun FE*: province times dummies for respondent's city population (less 2,000; between 2,001 and 10,000; between 10,001 and 50,000; between 50,000 and 150,000; between 150,000 and 1,000,000; and more than 1,000,000 inhabitants) fixed effects. *Comarca FE*: comarca fixed effects. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

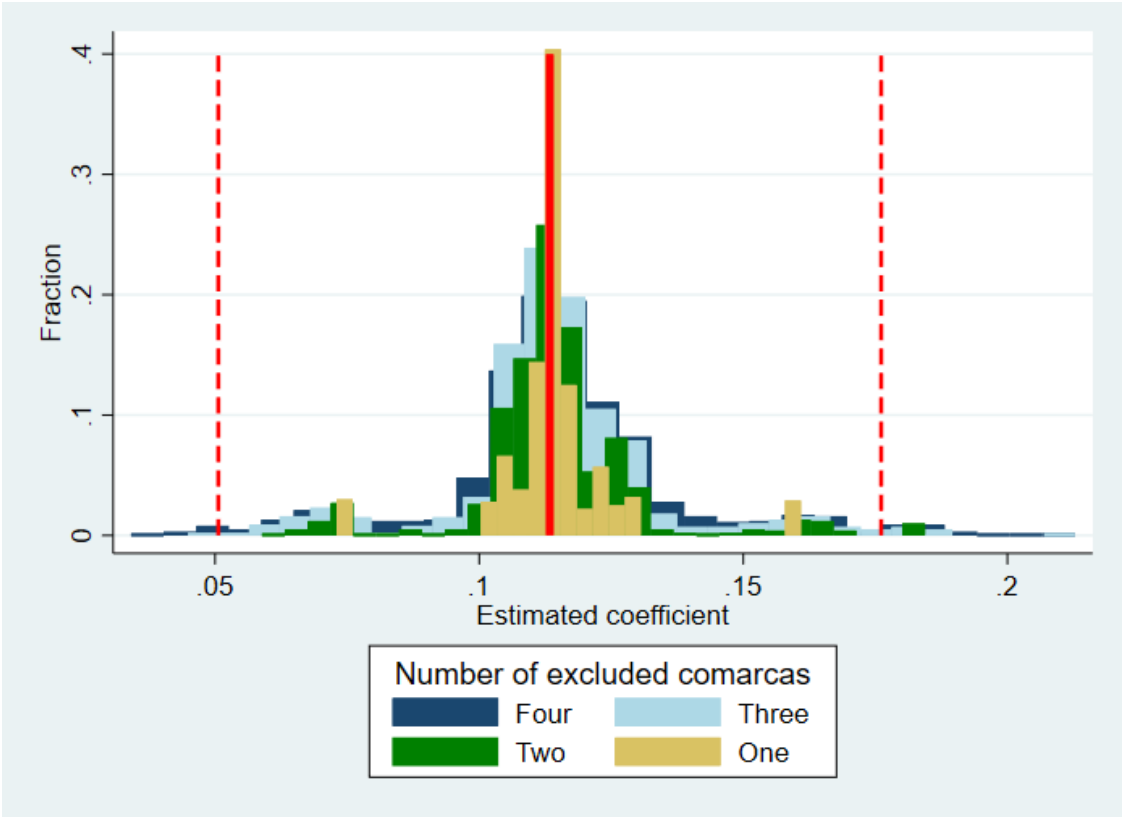


Figure A.15: Robustness omitting observations from different comarcas

The figure reports the distribution of the 4,000 estimations of the effect of the Ruling on *More autonomy* sequentially excluding different comarcas. All the regressions include controls and comarca fixed effects. Yellow bars report the distribution of the 1,000 estimations in which a random comarca is excluded each time. Green, light blue and blue bars report the distribution of the 1,000 estimations in which two, three or four random comarca are excluded each time, respectively. The red bar reports the estimated effect of the Ruling on *More autonomy* considering all the comarcas, and the red dashed line represents the lower and upper bound of the 95% confidence interval. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. The list of *Controls* is reported in Appendix A.3.1. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews.

D.8 Non-response and participation

Non-response bias: A possible problem for the causal interpretation of our results would arise if as a result of being exposed to ruling of the Constitutional Court some people might change their likelihood to respond to some survey questions. Figure A.16 reports non-response rates of questions (either not respond to a question or reply "I do not know") for people interviewed before and after the ruling took place. With the exception to the question about the level of trust in courts, all the other questions report similar non-response rates in the treatment and control groups.

To solve the non-responses in the question about trust on courts, Table A.25 performs a robustness check using the entrophy balancing method developed by Hainmueller (2012). We assign weights to each data unit such that the control group data is reweighted to match the covariate first moment of non-responses in the treatment group.[38] Column (1) reports the baseline result. Column (2) shows that applying entrophy balancing we obtain balanced treatment and control groups in non-response rates. Column (3) shows that our baseline result on trust in courts is robust to the entrophy balancing method.

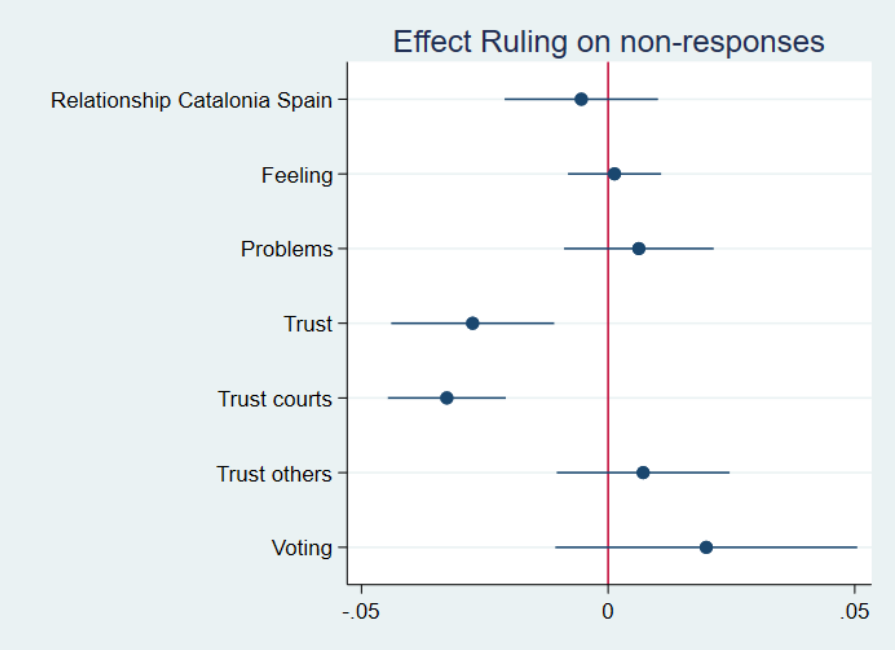


Figure A.16: Item non-responses

Each coefficient is obtained regressing a dummy taking value 1 if the respondent answered "I do not know" or did not answer to the question under analysis and the variable *Ruling* and comarcas fixed effects. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Relationship Catalonia-Spain*: question on preference for the institutional relationship between Catalonia and Spain. *Feeling*: question on self-establishment of feeling Spanish or Catalan or mixed of both. *Problems*: question on what are the problems for Catalonia. *Trust*: questions on level of trust in courts, Spanish Parliament, Spanish Government, Catalan Parliament, Catalan Government, and political parties. *Trust courts*: question on level of trust in courts. *Trust others*: questions on level of trust in Spanish Parliament, Spanish Government, Catalan Parliament, Catalan Government, and political parties. *Voting*: questions on which party the respondent vote at the last regional elections, which party the respondent will vote at the next regional election, and on political proximity to parties present in Catalonia. Blue line: lower and upper bounds of 95% confidence interval. Sample of people interviewed before 19:00 and in the first seven days of interview. Standard errors clustered at province-day of the interview level.

[38] We also use comarca fixed effects, so the weights vary according to comarca.

Table A.25: Trust in courts: robustness accounting for non-responses

VARIABLES	(1) Trust: Courts	(2) No answers on trust: Courts	(3) Trust: Courts
Ruling	-0.327**	0.00282	-0.398**
	(0.139)	(0.00650)	(0.165)
Observations	961	2,000	1,513
R-squared	0.088	0.000	0.100
Comarca FE	YES	NO	NO
Controls	YES	NO	NO
Weights	YES	E.B. x p.w.	E.B. x p.w.
Estimation	OLS	OLS	OLS

Ruling: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Trust: courts*: question on level of trust in courts (from 0 to 10). *No answer on trust: courts*: dummy whether the respondent did not answer or answer "I do not know" to question on trust in courts. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Weights YES*: probability weights used. *Weights E.B. x p.w.*: entrophy balancing weights and probability weights used such that the control group data inside a comarca is reweighted to match the non-responses first moment in the treatment group. All unanswered or unknown answers coded as missing values. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

Participation bias: The only data available about non-responses are about whether a respondent decides to conduct the survey but does not respond to specific questions. The CEO does not provide information about how many people decide not to conduct the survey, the day in which they got contacted for the first time, and their characteristics. Therefore, we cannot provide evidence of participation rate in the survey directly. Under the assumption that non-responses in the survey predict decision to participate to the survey, the results shown in this Appendix reassures that participation bias is not a crucial concern. Moreover, observations before and after the Ruling are balanced in terms of many observable characteristics, suggesting that it does not seem the case that there is a change in non-responses to the survey of particular categories of people.

Still, we create a new proxy for testing whether participation rate in the survey changed after the Ruling. The idea behind this proxy is that if some people decide not to participate in the survey the time between the end of an interview and the beginning of the following one should be bigger. In our data we possess information about the exact starting and ending time of each interview. We collect from CEO new data with the code of the interviewer that make each interview for both the wave of the survey in which the Ruling happened and the previous wave.[39] For each interview we then compute the waiting time between the beginning of that interview and the end of the previous interview conducted by the same interviewer. Our testing hypothesis is that if this waiting time change after the Ruling then it is likely that non-participation rate reacted to the Ruling. If non-participation is related to any unobservable characteristics or preferences for secessionism this can potentially bias our results. Moreover, this would indicate an

[39]We have data on 59 interviewers, 17 of which conducted interviews only in the second wave of 2010, 7 in the third wave of 2020, and 35 were present in both waves. On average an interviewer conducts 8 interviews per day, and 1.6 interviews per hour.

emotional reaction of the population against the survey.

We test the effect of the Ruling on non-participation rate in column (1) of Table A.26. We use the second and third wave of 2010 surveys, and we control for the fact that waiting time can be different in particular months, days or hours, using waves, day and hours fixed effects, respectively. We find a statistically insignificant effect of the Ruling on participation rates to the survey. Moreover, should a concern of a correlation between unobserved variables and the fact of deciding to participate in the survey (or being a replacement for somebody else) be existing, we show in column (2) that our main results are robust controlling for the waiting time of the interview.

Table A.26: Effect of the Ruling on the survey non-participation

	(1)	(2)
VARIABLES	Waiting time	More autonomy
Ruling	1.040	0.0891**
	(3.245)	(0.0339)
Waiting time		0.00177
		(0.00185)
Observations	1,892	784
R-squared	0.048	0.342
Wave FE	YES	NO
Day FE	YES	NO
Hour FE	YES	NO
Comarca FE	NO	YES
Controls	NO	YES
Waves	W2 W3 2010	W3 2010
Estimation	OLS	OLS

Waiting time: time between the beginning of that interview and the end of the previous interview done by the same interviewer. *More autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. *Wave FE*: wave fixed effect. *Day FE*: day of the interview fixed effects. *Hour FE*: beginning hour of the interview fixed effects. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. All unanswered or unknown answers coded as missing values. Probability weights used. *Waves*: sample of people interviewed before 19:00 from the second wave of 2010 and from the third wave in the first seven days of interviews (W2 W3 2010) or sample of people from the third wave of 2010 interviewed before 19:00 and in the first seven days of interviews (W3 2010). Robust standard errors in column (1). Standard errors clustered at province-day of the interview level in column (2). *** p<0.01, ** p<0.05, * p<0.1

D.9 Mispecification

The variables we use as dependent variables are either dummies or variables that express a value over categories. In our baseline specifications we estimate the effect of the ruling of the Constitutional Court using a Linear Probabilistic Model. However, Probit and Ordered Probit are more appropriate estimation method for the case of dummies or categorical variables, respectively. Tables A.27 to A.30 restimate all results present in the paper using Probit and Ordered Probit. Figure A.17 reports the marginal effects of the Ruling on trust on institutions after estimating the Ordered Probit regressions. All the results in the paper are robust to the use of different econometric specifications.

Table A.27: Preference for independence: robustness using Probit regressions

	(1)	(2)
VARIABLES	Indep.	Indep.
Ruling	0.185**	0.315**
	(0.0835)	(0.147)
Observations	946	946
Comarca FE	YES	YES
Controls	YES	YES
Estimation	Probit	Logit
M.E. coeff.	0.046	0.045
M.E. s.e.	0.020	0.021

Indep.: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *M.E. coeff.*: marginal effect of the Ruling on the dependent variable, obtained after a Probit or Logit estimation. *M.E. s.e.*: standard error of the estimate of *M.E. coeff.*. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

Table A.28: Trust in institutions: robustness using Ordered Probit regressions

VARIABLES	(1) Trust: Courts	(2) Trust: Gvt Esp	(3) Trust: Parl Esp	(4) Trust: Gov Cat	(5) Trust: Parl Cat.	(6) Trust: Parties	(7) Insatisfaction democracy
Ruling	-0.151**	-0.0950	-0.0894***	-0.00370	-0.0173	-0.132***	0.182**
	(0.0597)	(0.0590)	(0.0327)	(0.0438)	(0.0396)	(0.0507)	(0.0820)
Observations	961	991	973	996	971	987	964
Comarca FE	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES
Estimation	O-Probit	O-Probit	O-Probit	O-Probit	O-Probit	O-Probit	Probit
M.E. coeff.	.	.	.	.	.	.	0.06
M.E. s.e.	.	.	.	.	.	.	0.03

Trust: X: variable reporting how much the interviewed trust the following institutions from 1 to 10: courts (*Courts*), Spanish Government (*Gvt Esp*), Spanish Parliament (*Parl Esp*), Catalan Government (*Gvt Cat*), Catalan Parliament (*Parl Cat*), and political parties (*Parties*). *Insatisfaction democracy*: dummy taking 1 if the interviewed has small or no satisfaction with the functioning of the democracy, and taking 0 if the interviewed is enough or very satisfied. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *M.E. coeff.*: marginal effect of the Ruling on the dependent variable, obtained after a Ordered Probit (*O-Probit*) or Probit estimation. *M.E. s.e.*: standard error of the estimate of *M.E. coeff.*. All unanswered or unknown answers coded as missing values. The marginal effects estimated after the Ordered Probit estimations in Columns (1) to (6) are reported in Figure A.17. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

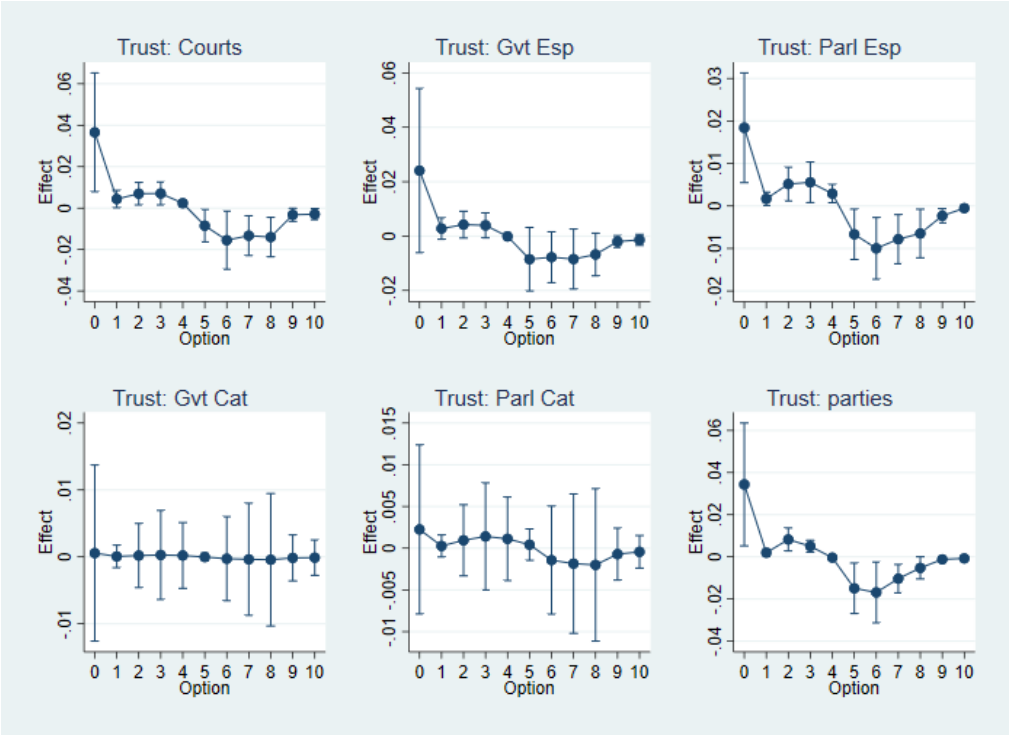


Figure A.17: Trust in institutions: marginal effects after using Ordered Probit regressions

Blue dots and lines represents the estimated marginal effect of Ruling obtained from Table A.28 between the lower and upper bounds of 95% confidence interval. Each graph represents the regression with a different dependent variable. *Trust: X*: variable reporting how much the interviewed trust the following institutions from 1 to 10: courts (*Courts*), Spanish Government (*Gvt Esp*), Spanish Parliament (*Parl Esp*), Catalan Government (*Gvt Cat*), Catalan Parliament (*Parl Cat*), and political parties (*Parties*). The marginal effects has been found after regressing by Ordered Probit the variable reflecting the trust in one institution on *Ruling*, whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education; dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population; and comarcas fixed effects. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. All unanswered or unknown answers coded as missing values. Sample of respondents interviewed in the first seven days of interviews and before 19:00. Standard errors clustered at province-day of the interview level.

Table A.29: Intention to vote: robustness using Probit regressions

VARIABLES	(1) Vote	(2) Past vote
Ruling	0.208***	0.135
	(0.0596)	(0.115)
Observations	566	658
Comarca FE	YES	YES
Controls	YES	YES
Estimation	Probit	Probit
M.E. coeff.	0.06	0.04
M.E. s.e.	0.02	0.04

Vote: dummy taking 1 if the interviewed has the intention to vote for Convergència i Unió (CiU) or Esquerra Republicana de Catalunya (ERC) at the next elections for the Catalan Parliament, and taking 0 if the interviewed intends to vote for another party (if the interviewed cannot vote, intends not to vote, or to conduct a blank or null vote this variable is coded as missing.). *Past vote*: dummy taking 1 if the interviewed voted for Convergència i Unió (CiU) or Esquerra Republicana de Catalunya (ERC) at the Catalan Parliament elections of 2006, and taking 0 if the interviewed voted for another party (if the interviewed cannot vote, did not vote, or conducted a blank or null vote this variable is coded as missing.). *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *M.E. coeff.*: marginal effect of the Ruling on the dependent variable, obtained after a Probit estimation. *M.E. s.e.*: standard error of the estimate of *M.E. coeff.*. All unanswered or unknown answers coded as missing values. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

Table A.30: Problems of Catalonia: robustness using Probit regressions

VARIABLES	(1) Probl (most): eco-lab	(2) Probl (most): Cat-Esp	(3) Probl (most): Estatut
Ruling	-0.374**	0.910***	0.928***
	(0.149)	(0.248)	(0.263)
Observations	969	886	822
Comarca FE	YES	YES	YES
Controls	YES	YES	YES
Estimation	Probit	Probit	Probit
M.E. coeff.	-0.13	0.12	0.10
M.E. s.e.	0.05	0.04	0.03

Probl (Most): eco-lab: dummy taking 1 if the interviewed mentions the unemployment, job insecurity, the functioning of the economy, or the low level of wages as the most important problem of Catalonia. *Probl (Most): Cat-Esp*: dummy taking 1 if the interviewed mentions the relationship between Spain and Catalonia as the most important problem of Catalonia. *Probl (Most): estatut*: dummy taking 1 if the interviewed mentions the Catalan Statute of Autonomy (*estatut*) as the most important problem of Catalonia. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *M.E. coeff.*: marginal effect of the Ruling on the dependent variable, obtained after a Probit estimation. *M.E. s.e.*: standard error of the estimate of *M.E. coeff.*. All unanswered or unknown answers coded as missing values. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1.

D.10 Inference

In this Appendix we show robustness of the inference of our results to different clustering of the standard errors and multiple hypothesis testing.

D.10.1 Alternative clustering of the standard errors

In Table A.31, we show that the main result is robust to different levels of clustering of the standard errors. Column (1) shows that the p-value of the effect of the Ruling is exactly 0.1 when we do not cluster standard errors. We will show later that stastical significance is obtained when a more balanced or bigger sample is used. Column (2) reports our baseline specification in which we cluster standard errors at province-day of the interview level. The reason why we choose this clustering is twofold: a) the treatment is taking place at day level, and b) weighting of observations for representativeness is at province level. Column (3) augments this clustering by considering that sample stratification is at province and size of municipality level. Hence, we cluster standard errors at province-size of municipality-day of the interview level and our results are invariant. In our main specification we control for comarca fixed effects, hence the main variation we exploit is within a comarca. Column (4) shows robustness to clustering of standard errors at comarca-day of the interview level.

In our preferred specification we have 39 clusters. This can raise possible concerns about a small number of clusters. We show that our results do not depend on that in two ways. First, our results are robust to clustering with higher numbers of clusters, as shown in columns (3) and (4). Second, we show robustness to bootstrap standard errors in column (5). Third, following Cameron and Miller (2015) we perform a wild cluster bootstrap with multi-way clustered standard errors by province and day of the interview. We do reject the null hypothesis that the effect of Ruling is zero.

D.10.2 Multiple hypothesis testing

In the paper, we estimate the effect of the Ruling on many different outcomes. This can raise concerns about the importance of multiple-hypothesis testing. We correct the p-values of the main estimations in the paper controlling for the False Discovery Rates (see Anderson, 2008). We present adjusted p-values in Table A.32. We confirm the significance of all the results in the paper. The only minor exception is that now the Ruling effect on people reporting the Catalan financing system as one of the main problems of Catalonia is barely significant.

Table A.31: Preferred relationship between Catalonia and Spain: robustness to clustering

VARIABLES	(1) More aut.	(2) More aut.	(3) More aut.	(4) More aut.	(5) More aut.	(6) More aut.
Ruling	0.133	0.133***	0.133*	0.133**	0.110**	0.133***
	(0.0811)	(0.0431)	(0.0793)	(0.0562)	(0.0560)	(0.0431)
Observations	960	960	960	960	960	960
R-squared	0.339	0.339	0.339	0.339	0.324	0.339
Controls	YES	YES	YES	YES	YES	YES
Comarca FE	YES	YES	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS	OLS	OLS
Cluster s.e.	rob	prov.Xday	prov.XsizeXday	comarcaXday	boot. prov.Xday	m.c. prov. day
t or z wild boot						10.64
p-value wild boot						0.05

More autonomy: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Independence*: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors robust (*rob*) or clustered at province-day of the interview level (*prov.Xday*), at province-size of the municipality-day of the interview level (*prov.Xday*), at comarca-day of the interview level (*comarcaXday*), bootstrapped standard errors at province-day of interview level (*boot. prov.Xday*), and multi-way clustereb by province and day of the interview (*mc. prov.Xday*). *t or z wild boot*: T or Z statistics for the wild cluster bootstrap using Webb weights. *t or z wild boot*: p-value of the wild cluster boostrap test using Webb weights. *** p<0.01, ** p<0.05, * p<0.1

Table A.32: Robustness of the results to multiple hypothesis testing

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Preferred relationship between Spain and Catalonia, problems, identity and voting							
		Problem (Most)					
VARIABLES	More aut.	Cat-Esp	Estatut	Eco-lab	Financ.	Feel Cat.	Vote
Ruling	0.113***	0.078***	0.060***	-0.120**	0.013	0.094**	0.086***
	(0.001)	(0.000)	(0.000)	(0.012)	(0.128)	(0.040)	(0.001)
	[0.004]	[0.002]	[0.003]	[0.016]	[0.075]	[0.037]	[0.005]
Panel B: Trust in democratic institutions							
	Courts	Gvt Esp	Parl Esp	Gvt Cat	Parl Cat	Parties	Insatisf. democr.
Ruling	-0.355***	-0.262*	-0.188***	-0.021	0.005	-0.252**	0.057*
	(0.007)	(0.082)	(0.005)	(0.794)	(0.945)	(0.045)	(0.063)
	[0.012]	[0.056]	[0.011]	[0.175]	[0.175]	[0.037]	[0.047]

The description of the Dependent Variables is reported in Appendix A.1. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. All columns are estimated by OLS including comarca fixed effects and controls. The list of *Controls* is reported in Appendix A.3.1. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. Unadjusted p-values in parenthesis, while FDR-adjusted p-values in brackets. FDR-p-values are False Discovery Rates adjusted p-values, following the procedure in Anderson (2008). *** p<0.01, ** p<0.05, * p<0.1

D.11 Political influence on the sentence

The Constitutional Court is the supreme interpreter of the Spanish Constitution and it is competent to hear appeals against the alleged unconstitutionality of laws or legal conflicts between the Central and the Autonomous Communities governments or between the governments of two or more Autonomous Communities. Its members are formally appointed for a period of nine years and should be renewed by thirds every three years. However, it could be argued that there could be political manipulation or bias of the composition of the Court. Here, we show that it did not seem to be case that this channel can influence our estimates.

Figure A.18 shows that the composition of the Constitutional Court when the Ruling took place was exceptional. Judge Pablo Pérez Tremps was recused because he participated in a study about the constitutionality of the Catalan Statute of Autonomy before his appointment at the Constitutional Court. The recusal was asked by the Popular Party and was approved by the Court by a bare majority of 6 vs 5 votes in February 2007. Judges María Emília Casas, Guillermo Jimenez, Jesús Rodríguez-Zapata and Vicente Conde were appointed in 1998 for a 9 years term that expired in 2007. They were not replaced because they were nominated by the Spanish Senate and their replacement required a new qualified majority of votes of the Spanish Senate. Moreover, in May 2008, judge Roberto García died and was not replaced. Overall, the Constitutional Court that ruled against the Estatut was therefore composed by only 6 judges in a regular position.

Name	Role	Position	Proposed by	Appointed in	Government at time of appoinment	Situation
María Emilia Casas Baamonde	President	Progressist	Senate	1998	Aznar-PP	Active
Guillermo Jiménez Sánchez	Vice-President	Conservative	Senate	1998	Aznar-PP	Active
Ramón Rodríguez Arribas		Conservative	Consejo General del Poder Judicial	2004	Zapatero-PSOE	Active
Jorge Rodríguez-Zapata Pérez		Conservative	Senate	1998	Aznar-PP	Active
Vicente Conde Martín de Hijas		Conservative	Senate	1998	Aznar-PP	Active
Javier Delgado Barrio		Conservative	Congress	2001	Aznar-PP	Active
Pascual Sala Sánchez		Progressist	Consejo General del Poder Judicial	2004	Zapatero-PSOE	Active
Eugeni Gay Montalvo		Progressist	Congress	2001	Aznar-PP	Active
Elisa Pérez Vera		Progressist	Congress	2001	Aznar-PP	Active
Manuel Aragón Reyes		Progressist	Government	2004	Zapatero-PSOE	Active
Roberto García Calvo		Conservative	Congress	2001	Aznar-PP	Death
Pablo Pérez Tremps		Progressist	Government	2004	Zapatero-PSOE	Recusal

Figure A.18: Composition of the Constitutional Court in 2010

This anomaly, however, did not affect the usual balance between conservative and progressive judges in the Court. The deceased judge and two of the judges out of term were conservative and the recused judge and the remaining two judges out of term were progressive. While assessing whether the Ruling was politically biased or not goes beyond the scope of this article, we provide in Table A.33 evidence that it does not seem that the Ruling was entirely representing the preferences of Popular Party and its voters. First, if the Ruling was identified as entirely biased by the Popular Party, we should expect that at least people not voting for the Popular Party should support or sympathize less with it. Column (1) of Table A.33 shows no change in voting intention towards the Popular Party. Moreover, from column (2) we can observe that no voters of Popular Party do not decrease their antagonism with respect to PP after the Ruling. We also find that previous voters of the Popular Party (PP) are dissatisfied with the Ruling. In column (3) we find that previous PP voters are less likely to vote for PP after the Ruling. Finally, column (4) shows that the Ruling also decreased trust in courts of voters of the Popular Party, who were the voters with the highest trust in courts before the sentence. These evidence are consistent with the idea that the decision of the court was not biased towards PP voters' preferences.

Table A.33: Change in proximity to Popular Party (PP) and trust in courts by voter

VARIABLES	(1) Vote: PPC	(2) Proximity: PPC	(3) Vote: PPC	(4) Trust: Courts
Ruling	0.00416	0.00541	-0.00829	-0.308*
	(0.0164)	(0.0227)	(0.0109)	(0.158)
Past vote PPC			0.923***	0.859*
			(0.0698)	(0.458)
Ruling X Past vote PPC			-0.222**	-0.807
			(0.0996)	(0.650)
Observations	595	1,007	488	648
R-squared	0.256	0.095	0.687	0.116
Comarca FE	YES	YES	YES	YES
Controls	YES	YES	YES	YES
Estimation	OLS	OLS	OLS	OLS

Vote: PPC: dummy taking 1 if the interviewed has the intention to vote for Partido Popular Catalán (PPC) at the next elections for the Catalan Parliament, and taking 0 if the interviewed intends to vote for another party (if the interviewed cannot vote, intends not to vote, or to conduct a blank or null vote this variable is coded as missing.). *Past Vote PPC*: dummy taking 1 if the interviewed voted for Partido Popular Catalán (PPC) at the Catalan Parliament elections of 2006, and taking 0 if otherwise (if the interviewed cannot vote, did not vote, conducted a blank or null vote, or voted another party this variable is coded as missing.). *Proximity: PPC*: dummy taking 1 if the interviewed feels nor far nor close, close, or very close with respect to PPC. Trust: Courts: variable reporting how much the interviewed trust courts from 1 to 10. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. Comarca FE: comarca fixed effects. Controls: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (educ.); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, **

D.12 Credibility of the polling institution

The survey we exploit in this paper was conducted by the Catalan Public Opinion Center which is an autonomous administrative body with its own legal personality and full capacity to act to fulfill its functions, attached to the Department of the Presidency through the Secretariat of the Government of the Generalitat de Catalunya.

There are several reasons to believe that the survey was not intended to influence the responses. First, the questionnaire does not include any reference to the Estatut nor the ruling of the Constitutional Court in none of the questions or possible answers. Actually, the ruling was never mentioned by the interviewer and could only be mentioned by the interviewee in the open ended questions (for example in the question relative to the most important problem). Second, the questions included in the survey were the usual questions included in previous waves. Third, the timing of the survey was also the usual one. As a matter of fact, the fieldwork of the corresponding 2009 wave took place between June 29 and July 10 (recall that the fieldwork of the wave we exploit in our analysis spans from June 28 to July 8). Fourth, the fieldwork was conducted by GESOP a private independent company awarded with the quality certification ISO9001. Fifth, the Presidency of the Generalitat de Catalunya at the time of our survey belong to a non-secessionist party; the Socialist Party. Sixth, the results of the survey were not released in trenches during the fieldwork but they were only released several weeks later (the results were released in July 30).

D.13 Robustness of the results on institutional polarization

D.13.1 Collinearity between Catalan heritage and other characteristics

In Section 5.2, we show that the Ruling is creating a polarization in preferences for the autonomy of Catalonia between people with different Catalan heritage. We explicitly interpret this result as evidence consistent with identity politics theory that predicts that the effect on preferences should reflect the observed change in identity. Catalan heritage is clearly a proxy of Catalan identity, but it might also represent different socio-demographic and socio-economic characteristics. To produce additional evidence that the effect of Catalan heritage is mainly representing an exogenous proxy of identity, we estimate the polarization effects controlling for many other variables that might be collinear with Catalan heritage: sex, civil status, age, education, income, employment status and the own respondent birthplace (divided between Catalonia, the rest of Spain or outside Spain). That is, we estimate Model A.1 by sequentially augmenting the model including the interaction between the Ruling and one control. The results are reported in Table A.34. These results confirm that i) before the shock, people with more Catalan heritage were in favor of higher autonomy for Catalonia, and ii) after the shock, this difference in preferences between people with different Catalan ethnicity amplified.

D.13.2 Short-term effects

In order to attribute a causal interpretation to the estimations of Model A.2 in the paper, the identifying assumption of the differences-in-differences is that no other event influenced attitudes toward Catalonian autonomy differentially according to Catalan heritage. We can restrict the number of waves after the Ruling to limit the potential presence of alternative confounders. In column (1) of Table A.35 we show that the effect is robust including uniquely the fourth wave of the CEO survey in 2010 (run in October) as posterior wave.

D.13.3 Using ICPS data

Additionally, relying on the annual public opinion survey run by the Institut de Ciències Polítiques i Socials (ICPS) we can estimate the effects of the Ruling on the preferred relationship between Catalonia and Spain as CEO, outside our sample. This allows us to replicate our estimation of the heterogeneity of the effect of the Ruling according to Catalan heritage using annual data. We collected data from 2001 to 2012.[40] We then replicate the differences-in-differences estimation of Model A.2, using ICPS data.[41] Column (2) of Table A.35 confirms the CEO results in terms of direction and significance of the estimates. Not only that, the point estimates using the two different data sources are very similar.

[40] The field work of the ICPS survey wave of 2010 was run in September 2010.

[41] We include as vector of controls as many variables as possible as the ones used with the CEO data. Unfortunately, some variables are either not present or suffer some change in their definition and therefore are not included.

Table A.34: Effect of the Ruling on the preferred relationship between Spain and Catalonia: Robustness of the polarization according to Catalan heritage using additional interaction terms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES	More aut.	More aut.	More aut.	More aut.	More aut.	More aut.	More aut.	More aut.	More aut.
Catalan heritage	0.420***	0.421***	0.422***	0.463***	0.384***	0.439***	0.445***	0.328***	0.482***
	(0.0470)	(0.0537)	(0.0470)	(0.0466)	(0.0482)	(0.0369)	(0.0424)	(0.0546)	(0.0384)
Ruling	0.0384	0.0404	-0.0219	-0.167**	0.338**	0.262***	0.0322	-0.0736*	0.0486
	(0.0431)	(0.0651)	(0.0833)	(0.0790)	(0.159)	(0.0867)	(0.0455)	(0.0366)	(0.209)
Ruling x Catalan heritage	0.221***	0.221***	0.219***	0.182***	0.264***	0.204***	0.198***	0.332***	0.184***
	(0.0635)	(0.0607)	(0.0640)	(0.0650)	(0.0676)	(0.0632)	(0.0590)	(0.0773)	(0.0616)
Observations	960	960	960	960	960	960	960	960	960
R-squared	0.263	0.263	0.263	0.269	0.265	0.268	0.263	0.265	0.280
Comarca FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Add. interactions	NO	Female	Married	Age	Educ.	Income	Empl.	Birth place	All
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

More aut.: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *Ruling*: dummy taking 1 if the respondent is interviewed after June 28th, 2010, at 19:00. *Catalan heritage*: dummy taking 1 if the respondent's parents were both born in Catalonia, and 0 otherwise. *Comarca FE*: comarca fixed effects. The list of *Controls* is reported in Appendix A.3.3. *Add. interactions*: interaction between the Ruling and the control variable(s) reported. Sample of people from the third wave of 2010 interviewed before 19:00 and in the first seven days of interviews. Probability weights used. Standard errors clustered at province-day of the interview level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A.35: Effect of the Ruling on the preferred relationship between Spain and Catalonia: Robustness of the polarization according to Catalan heritage

VARIABLES	(1) More aut. CEO	(2) More aut. ICPS	(3) More aut. CIS 4	(4) More aut. CIS homog.	(5) More aut. CIS homog.
Catalan heritage	0.365***	0.357***			
	(0.0138)	(0.0214)			
Ruling x Catalan heritage	0.106**	0.172***			
	(0.0472)	(0.0370)			
Catalonia			0.791***	0.639***	0.759***
			(0.0909)	(0.115)	(0.0727)
Ruling x Catalonia			0.169***	0.171***	0.173***
			(0.0596)	(0.0405)	(0.0450)
Observations	29,144	12,401	28,371	23,793	44,903
R-squared	0.160	0.141	0.189	0.189	0.203
Comarca FE	YES	NO	NO	NO	NO
Province FE	NO	YES	YES	YES	YES
Survey FE	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES
Years	Jun06-Oct10	01-10	Dec05-Oct11	Dec05-Jul10	Dec05-Nov11
Data	CEO	ICPS	CIS	CIS	CIS
Variation	Within-CAT	Within-CAT	Within-ESP	Within-ESP	Within-ESP
Estimation	OLS	OLS	OLS	OLS	OLS
Average y	2.68	2.49	2.20	2.21	2.12

More aut. CEO/ICPS: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than status-quo), Autonomous Community (status-quo), federal state (more autonomy than the status-quo), or independent state, respectively. *More aut. CIS 4*: variable that takes values from 1 to 4 if the respondent prefers regions to have no autonomy, have autonomy as the status quo, more autonomy than the status-quo, or have the possibility to become independent states, respectively. *More aut. CIS homog.*: variable as *More aut. CIS 4* with the only exception that options respondent prefers regions to have no autonomy or have autonomy lower than the status-quo are taken as if they were the same. *Ruling*: dummy taking 1 if the respondent is interviewed after June 28th, 2010, at 19:00 or in a survey wave posterior to the Ruling, and 0 otherwise. *Catalan heritage*: dummy taking 1 if the respondent's parents were both born in Catalonia, and 0 otherwise. *Catalonia*: dummy taking 1 if the respondent live in Catalonia and 0 if the respondent live in the rest of Spain (but not in the Basque Country, Navarra or Galicia). *Comarca FE*: comarca fixed effects. *Province FE*: province fixed effects. *Survey FE*: survey wave fixed effects. *Controls* in column (1): dummy reflecting whether the respondent was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (educ.); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Controls* in column (2): dummy reflecting whether the respondent was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; dummies for respondent's education (educ.); dummies for respondent's age; dummies for respondent's city population. *Controls* in columns (3) to (5): age, sex, dummies for the size of city, dummies for educational attainments, and dummies for employment status. *Years*: beginning and end of survey waves used. *Data*: data source used. *Variation*: sample of people within-Catalonia (*Within-CAT*) or within-Spain (*Within-ESP*). *Average y*: mean of dependent variable. Probability weights used. Standard errors clustered at province-survey level in parentheses in all the specifications. *** p<0.01, ** p<0.05, * p<0.1

D.13.4 Comparability of CIS and CEO variables

The wording of the question about the territorial preferences of CIS surveys is slightly different from the wording of CEO. Moreover, while the CEO surveys always had 4 possible answers, the set of possible answers of the CIS question changed from 4 options to 5 options. Until 2008 (and, exceptionally, in October 2011), the question had 4 possible answers ranging from less to more autonomy: no autonomy, same autonomy as the status quo, more autonomy than the status-quo, or have the possibility to become independent states. We have data with these answers for December 2005, December 2006, October 2007, March 2008, October 2011. After 2008, with the exception of October 2011, CIS added the category lower autonomy than status quo, between the no Autonomy and the status quo options. This leaves us with only one post-treatment survey for the question with a 4 items answer and three pre-treatment surveys with the question with 5 items (April 2009, January 2010, and April 2010).

Since none of the two questions are ideal for our study, we constructed a new variable harmonizing both questions. Specifically, we merged the two more centralist categories (no autonomy and lower autonomy) in the 5-item answer. This allows us to have enough pre and post treatment observations and to be able to compare the results of CIS in Catalonia with the results of CEO. In Figure A.19 we show the distribution of answers of our harmonized variable and we compare it with the the distribution of the More Autonomy variable of the CEO survey (3rd wave 2010). While there are minor differences in the distribution of the lower autonomy categories, the distribution of both variables is very similar.

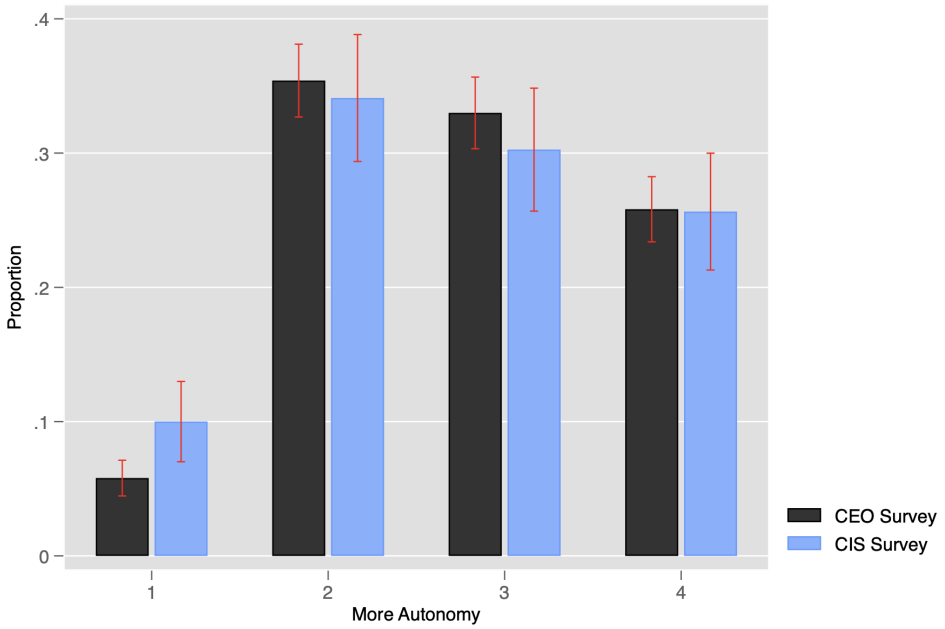


Figure A.19: Comparison of the More Autonomy variable in CEO Survey and CIS Survey

Entries report the proportion of respondents in each category of the ideological scale and 95% confidence intervals. The data from the CEO survey correspond to the third wave of 2010 and the data from the CIS survey correspond to the waves of January 2010, April 2010, July 2010 and October 2010.

Our results are robust to the changes in the answers provided as options for the preference for more autonomy between different CIS waves. Robustness is shown in

columns (3) to (5) of Table A.35. Column (3) uses as dependent variable the same variable that was providing four alternative options as the CEO. This variable allows us to show robustness enlarging the pre-treatment period but postponing the post-treatment point to 2011 instead of 2010. We homogeneized the variables for the preference for more autonomy between CIS waves considering the options Autonomous Community should have no autonomy or have lower autonomy than status quo as a single option. Using these new variable we replicate the results using uniquely the wave in 2010 after the Ruling and waves in the following year too (columns 4 and 5 of Table A.35, respectively).

E Additional results on persistence and voting outcomes

E.1 Persistence and voting outcomes

In this section, we estimate whether the change in individual support for independence and intention to vote due to the Ruling translated into political action in a persistent manner. The ideal case study is the 2015 Catalan elections that resulted in the presidency of Carles Puigdemont and the unilateral independence declaration. While in previous electoral processes, other cleavages (i.e., left-right, corruption-honesty) had a prominent role, the 2015 election was presented as a plebiscite for independence by the Catalan nationalist parties. In the 2015 Catalan election, the two main secessionist parties – CiU (centre-right) and ERC (centre-left) – presented a common list called "Junts pel Sí" and promised to declare the independence of Catalonia within 18 months if they obtained the majority of seats in Parliament. As expected, the stance for independence became the main cleavage of the electoral campaign. Turnout at the election hit a record of approximately 75%, more than 7 percentage points than that of the previous election, indicating that citizens considered the stakes to be high.

Despite the fact that our identification strategy does not allow us to study long-term effects, we can analyze whether the areas where citizens reacted more to the Ruling were also more likely to exhibit different voting behavior later. Using data from other survey waves, Appendix E.4 shows that the change in support for independence was persistent even after 2010. Given this evidence that the Ruling had permanent effects on the political preferences of Catalan citizens, we can explore how this affected the result of the 2015 elections. While it is difficult to claim causality, this exercise helps us understand how changes in preferences for independence transformed into voting outcomes in favor of parties campaigning on that issue.

Our procedure follows two steps. First, we estimate the aggregate effect of the Ruling by geographical area in 2010. Second, we predict which areas in Catalonia changed their preferences the most following the Ruling, and we use these predictions as explanatory variables for the 2015 elections.

Data: We use data on voting patterns for each electoral list running in the elections of the Catalan Parliament in 1999, 2003, 2006, 2010, 2012, and 2015 at the municipality level from the Ministry of Interior and the Ministry of Public Administrations in Spain.

Econometric methodology: We begin by estimating the heterogeneity of the effect of the Ruling across municipalities in Catalonia. Our survey is representative at the level of specific city population categories in each province;[42] therefore, we can predict marginal effects of the Ruling for each of these areas. We define ps as the suffix for each province size of the municipality combination and estimate Model A.4, where $PROVI$ and $SizeMun$ are the province and size of the municipality fixed effects.

$$Y_i = \alpha_2 + \beta_2 Ruling_i + \gamma_2 X_i + PROVI \times SizeMun + \lambda_2 Ruling_i \times PROV_i \times SizeMun + u_i, \quad \text{(A.4)}$$

We predict how each area changed their preferences by estimating the marginal effect of the Ruling in each province-size of the municipality combination ($\widehat{ME_{ps}} = \widehat{\beta_2} + \widehat{\lambda_2} \times PROVI_{i(p)} \times SizeMun_{i(s)}$).[43] We study the effect of the Ruling on the vote share of

[42] City populations are divided into six categories: less than 2,000, from 2,001 to 10,000, from 10,001 to 50,000, from 50,001 to 150,000, from 150,001 to 1,000,000, and more than 1,000,000 inhabitants.

[43] The results with the geographical heterogeneity of the effect can be found in Appendix E.2.

the three main Catalan nationalist parties that supported secession in 2015 (sum of the vote share of ERC, CiU and CUP, Vot_{ce}).[44] We estimate the correlation between voting behavior in the 2015 election and changes in preferences due to the Ruling by estimating Model A.5:

$$Vot_{ce} = \alpha_3 + \tau_c + \psi_t Post2010_e + \phi_3 \widehat{ME_{ps}} \times Post2010_e + v_{ce}, \tag{A.5}$$

That is, we estimate a difference-in-difference model to understand how the vote share for Catalan nationalist parties changed differently after the Ruling ($Post2010$) between places that were more or less affected by the change in support of independence. Model A.5 includes fixed effects at the city level (τ_c) and considers the elections in 1999, 2003 and 2006 as pretreatment election periods (e). Our posttreatment period is the 2015 election. We report results for this regression in Table A.36. We also use turnout rates, that is, the proportion of voters to potential voters, as a dependent variable.

This econometric strategy has several weaknesses, and, as a result, we do not interpret our results as causal. However, Appendix E.3 shows several evidence in favour of our strategy. First, municipalities in Catalonia could have different trends in their voting outcomes before the Ruling. We show evidence of parallel trends for voting shares in the pretreatment period. Second, the first stage presented in Model A.4 might not be precisely estimated with a small sample. Hence, we show that our results do not vary if we also use observations from the previous wave of the CEO survey as controls. Third, Model A.5 requires the estimation of the effect of a predicted regressor. We provide specific bootstrap standard errors for our two-stage procedure and show that our results are robust.

Results: We find that although the Ruling is not associated with overall changes in voting behavior, it might have generated electoral polarization across municipalities inside Catalonia. Columns (3) and (4) of Table A.36 show that the overall after-2010 vote share for Catalan nationalist parties and turnout increased by 4.7 and 14.5 percentage points, respectively, disregarding the effect of the Ruling. The differential effect of the predicted effect of the Ruling after 2010 is not statistically significant. As a reminder, we report again in columns (1) and (2) results about the short-time changes in intention to vote obtained inside the CEO survey, which are reported in Panel B of Table 3 in Section 6 the paper. The overall long-run after-2010 change in vote share for Catalan nationalist parties is a little bit smaller but not statistically different from the short-time change.

To study the polarization of voting behavior with respect to independence, we split the sample according to historical support for secessionist parties and consider those with historical support above the median. We use the votes for ERC in 1999 as a proxy for support for secession before the Ruling because it was the only secessionist party with parliamentary representation. Columns (5) and (6) show that the increase in vote share for Catalan nationalist parties depends on the historical support for secessionist parties, which is consistent with the sample split. That is, for places not affected by the Ruling, after 2010, the vote share for secessionist parties increased by 6.4 and 3 percentage points in places that were more or less historically secessionist, respectively.

[44] Popular Unity Candidacy (CUP) is a left-wing party that also supports independence for Catalonia. They have run in Catalan elections only since 2012. Therefore, we impute their vote share before 2012 as 0. In Appendix E.3, we show that our main result from this section is robust to the exclusion of this party in the construction of the dependent variable. In 2015, we use the sum of the ERC and CiU vote share as the vote share of Junts pel Sí, the main pro-secession coalition.

Table A.36: Effect of the Ruling on intention to vote for Catalan nationalist parties and voting outcomes in 2015 elections

VARIABLES	(1) Vote	(2) Past vote	(3) Share Indep.	(4) Turnout	(5) Share Indep.	(6) Share Indep.
Ruling	0.0608***	0.0428				
	(0.0166)	(0.0392)				
Post 2010			0.0472***	0.145***	0.0641***	0.0299***
			(0.00260)	(0.00171)	(0.00343)	(0.00375)
Post 2010 X M.E. Ruling			0.0197	-0.00779	0.0621***	-0.0347
			(0.0163)	(0.0106)	(0.0209)	(0.0244)
Observations	595	672	3,784	3,784	1,900	1,884
R-squared	0.280	0.212	0.887	0.825	0.765	0.904
Comarca FE	YES	YES	NO	NO	NO	NO
City FE	NO	NO	YES	YES	YES	YES
Controls	YES	YES	NO	NO	NO	NO
Sample	CEO	CEO	All cities	All cities	ERC-99 P50+	ERC-99 P50-
Estimation	OLS	OLS	OLS	OLS	OLS	OLS
Average y	0.54	0.47	0.67	0.69	0.73	0.61

Vote: dummy taking 1 if the interviewed has the intention to vote for Convergència i Unió (CiU) or Esquerra Republicana de Catalunya (ERC) at the next elections for the Catalan Parliament, and taking 0 if the interviewed intends to vote for another party (if the interviewed cannot vote, intends not to vote, or to conduct a blank or null vote this variable is coded as missing.). *Past vote*: dummy taking 1 if the interviewed voted for Convergència i Unió (CiU) or Esquerra Republicana de Catalunya (ERC) at the Catalan Parliament elections of 2006, and taking 0 if the interviewed voted for another party (if the interviewed cannot vote, did not vote, or conducted a blank or null vote this variable is coded as missing.). *Share Indep.*: variable equal to the total number of votes for Convergència i Unió (CiU) and Esquerra Republicana de Catalunya (ERC) as a fraction of the total number of people who voted in the municipality for the election years 1999, 2003 and 2006; for the election year 2015 *Share Indep.* equals the total number of votes for Junts pel Sí (JxSí) and Candidatura d'Unitat Popular (CUP) as a fraction of the total number of people who voted in the municipality. *Turnout*: variable equal to the total number of people who voted as a fraction of the total number of people who can vote in the municipality. *Ruling*: dummy taking 1 for all observations interviewed after June 28th, 2010, at 19:00, and 0 otherwise. *Post 2010*: dummy taking 1 for all the elections after the Ruling. *M.E. Ruling*: marginal effect of the Ruling on support for independence estimated in the municipality. Using the CEO June 2010 survey *M.E. Ruling* is the heterogeneous effect of the Ruling according to the city size of the municipality and the province in which it belongs, after controlling for individual controls and dummies for the size of the municipality interacted with dummy at province level. We have matched the value for *M.E. Ruling* to each municipality using the number of potential voters in 2010. *Comarca FE*: comarca fixed effects. *City FE*: municipality fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. *Sample: CEO*: Sample of people interviewed before 19:00 and in the first seven days of interviews in the third wave of 2010 CEO survey. *Sample: All cities*: all municipalities in Catalonia. *Sample: ERC-99 P50+*: municipalities in Catalonia in which the vote share of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was higher than the median in Catalonia. *Sample: ERC-99 P50-*: municipalities in Catalonia in which the vote share of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was lower than the median in Catalonia. For columns (1) and (2), all unanswered or unknown answers coded as missing values, and probability weights used. For columns (3) to (6), election years used: 1999, 2003, 2006, and 2015.*Average y*: mean of dependent variable. Standard errors clustered at province-day of the interview level in columns (1) and (2) and robust standard errors in columns (3) to (6). *** p<0.01, ** p<0.05, * p<0.1

The Ruling increased the vote share of secessionist parties in places where secessionist parties were historically stronger. In particular, a city that changed preferences for independence, as in our baseline estimate, by 5.2 percentage points, increased the vote share for secessionist parties by 0.32 percentage points more than a city with no change in preferences due to the Ruling. This effect is not explained by turnout.[45] On the contrary, we do not find a statistically significant coefficient of the predicted effect of the Ruling on vote share in historically less secessionist locations.

The aforementioned results indicate an increase in polarization after the Ruling. Conditioning on a secessionist effect of the Ruling, the vote share of secessionist parties increased in locations that were already supporting secession but did not change in the rest of Catalonia. In addition to this polarizing effect across locations, the Ruling had a polarizing effect within historically pro-secession locations: secessionist parties obtained even larger shares in locations where the Ruling had the largest effect on support for independence.

E.2 Geographical heterogeneity of the effect of the Ruling on the support for independence within Catalonia

In order to observe the long-term effects of the Ruling on voting outcomes we first predict which geographical areas where affected the most in 2010. In Table A.37 we can observe how the effect of the Ruling differs between Catalan municipalities. We focus only in the interactions of Ruling with size of the municipality and province because our sample is representative at this level. As we can see from the table, the Ruling has heterogeneous effects in the Catalan geography.[46]

E.3 Additional results and robustness of voting outcomes

Table A.38 reports several additional results the voting results. Table A.39 show the robustness of the voting results shown in Table A.36 of the paper.

Turnout: The increase in vote share for Catalan nationalist parties is not driven by changes in turnout in historically independentist areas. In fact, we do not find a statistically significant coefficient of the predicted effect of the Ruling on turnout in historically more secessionist places (column 1 of Table A.38).

Among places where secessionist parties were historically weaker, turnout increased the most in those cities where the Ruling had a negative effect. In column (2) we observe that the predicted change in preferences due to the Ruling is associated to a statistically significant decrease in turnout after 2010.

Voting flows: The results of Columns (3) and (4) of Table A.38 are suggestive of voting flows between independentist parties. In fact, we see that ERC lost more votes and CiU gained more votes in cities where the Ruling increased preferences for independence.

[45] The results of turnout, splitting the sample according to previous support for secessionist parties, can be found in Appendix E.3. Additionally, the Appendix provides evidence of voting flows between secessionist parties and that the Ruling particularly favoured CiU at the expense of PSC. These findings closely mirror the results found in Appendix C.6 using intention to vote in our survey, giving further credit to the possibility of linking our survey data with voting outcomes in later years. In Appendix E.3, we also estimate that after 2010, the marginal effects of the Ruling changed according to all the distribution of previous shares of parties' pro-secession votes instead of splitting our sample.

[46] A possible explanation for the large confidence intervals in many categories is that most of the cells have few observations, especially in the control group.

Table A.37: Geographical heterogeneity

VARIABLES	(1) Independence
Ruling	0.0998**
	(0.0372)
Ruling x BCN less 2k inh.	-0.319**
	(0.115)
Ruling x BCN 2k-10k inh.	-0.257**
	(0.0933)
Ruling x BCN 10k-50k inh.	-0.0797
	(0.0759)
Ruling x BCN 50-150k inh.	0.0665
	(0.0653)
Ruling x BCN 150k-1mil inh.	-0.0989
	(0.0729)
Ruling x GIR less 2k inh.	0.119
	(0.120)
Ruling x GIR 2k-10k inh.	-0.118*
	(0.0592)
Ruling x GIR 10k-50k inh.	-0.125**
	(0.0545)
Ruling x GIR 50k-150k inh.	0.316**
	(0.148)
Ruling x LLE less 2k inh.	-0.194**
	(0.0744)
Ruling x LLE 2k-10k inh.	-0.0596
	(0.0681)
Ruling x LLE 10k-50k inh.	0.367***
	(0.0873)
Ruling x LLE 50k-150k inh.	0.0426
	(0.0479)
Ruling x TAR less 2k inh.	-0.0103
	(0.136)
Ruling x TAR 2k-10k inh.	0.135
	(0.0978)
Ruling x TAR 10k-50k inh.	-0.200***
	(0.0542)
Ruling x TAR 50k-150k inh.	0.0285
	(0.0995)
Observations	960
R-squared	0.223
Controls	YES
Province x size city FE	YES
Omitted	BCN City
Estimation	OLS

Indep.: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *BCN*: dummy taking 1 if the interviewed lives in the province of Barcelona. *GIR*: dummy taking 1 if the interviewed lives in the province of Girona. *LLE*: dummy taking 1 if the interviewed lives in the province of Lleida. *TAR*: dummy taking 1 if the interviewed lives in the province of Tarragona. *inh.*: number of inhabitants in the city where the interviewed lives. *Omitted*: omitted category. *Province x City Size FE*: province times city size dummies fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1

Still, columns (3) and (4) use 2012 elections as post-treatment period. We cannot perform this analysis using 2015 as post-treatment period since these two parties presented a common list at that election. Moreover, we cannot be conclusive on whether there was an effective flow of votes between ERC and CiU because we do not have individual voting data and we could incur in an ecological fallacy.

To understand which party lost votes the most in favour of indepentist parties, we look in columns (5) and (6) at the electoral performances of PSC. In Appendix C.6 we show that the increase in intention to vote for CiU was accompanied by a decrease in intention of vote share for PSC. Results in columns (5) and (6) of Table A.38 about actual voting closely mimics the results found using intention to vote in our survey.

Marginal effect at different ERC vote shares: We now provide more detailed results about how the Ruling is impacting voting outcomes according to different levels of previous secessionist vote, measured by the vote share of ERC in 1999. First, we replicate our results without splitting the sample between municipalities with voting below or above the median level of vote for ERC in 1999. In column (7) of Table A.38 we augment our model introducing the heterogeneity of the predicted effect of the Ruling after 2010 with respect to a dummy that indicates if vote share for ERC in the municipality is higher than Catalonia's median value. As it is possible to see, we confirm that in municipalities with vote share for ERC in 1999 below the median there is not a differential increase in vote share for independentist parties after 2010 according to our predicted effect of the Ruling. However, in municipalities with vote share for ERC in 1999 above the median, the vote share for independentist parties after 2010 increased the most in places with a higher predicted effect of the Ruling.

In column (8) we consider the previous heterogeneity using continuous variables for ERC vote share in 1999. Moreover, we consider also the heterogeneity with respect to the squared value of ERC vote share in 1999. This is helpful because it allows us to compute the marginal effects of the increase in indendentist votes after 2010 in places with higher predicted value of the Ruling according to different past secessionist vote. These marginal effects are reported in Figure A.20. This figure shows in a more detailed way the polarization happening in Catalonia. In places with low previous support to secessionism a bigger effect of the Ruling is actually decreasing the vote share of independentist parties in 2015. On the contrary, in places with high previous support to secessionism a bigger effect of the Ruling is increasing the vote share of independentist parties in 2015.

Table A.38: Voting in 2015: additional results

VARIABLES	(1) Turnout	(2) Turnout	(3) Share ERC	(4) Share CiU	(5) Share PSC	(6) Share PSC	(7) Share indep.	(8) Share indep.
Post 2010	0.144***	0.145***	0.00910***	-0.00838***	-0.120***	-0.163***	0.0470***	0.0469***
	(0.00209)	(0.00271)	(0.00172)	(0.00226)	(0.00233)	(0.00288)	(0.00258)	(0.00257)
Post 2010 X M.E. Ruling	0.0108	-0.0290*	-0.0273**	0.0261*	-0.0665***	-0.0124	-0.0323	-0.215**
	(0.0129)	(0.0172)	(0.0112)	(0.0148)	(0.0137)	(0.0189)	(0.0246)	(0.0999)
Post 2010 X M.E. Ruling x ERC 1999 (> med.)							0.0972***	
							(0.0325)	
Post 2010 X M.E. Ruling x ERC 1999								2.440*
								(1.327)
Post 2010 X M.E. Ruling x ERC 1999 (sq.)								-4.335
								(4.170)
Observations	1,900	1,884	3,784	3,784	1,900	1,884	3,784	3,784
R-squared	0.817	0.820	0.599	0.776	0.824	0.877	0.887	0.888
City FE	YES	YES	YES	YES	YES	YES	YES	YES
Years	99-03-06-15	99-03-06-15	99-03-06-12	99-03-06-12			99-03-06-15	99-03-06-15
Sample	ERC-99 P50+	ERC-99 P50-	All	All	ERC-99 P50+	ERC-99 P50-	All	All
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

Share Indep.: variable equal to the total number of votes for Convergència i Unió (CiU) and Esquerra Republicana de Catalunya (ERC) as a fraction of the total number of people who voted in the municipality for the election years 1999, 2003 and 2006; for the election year 2015 *Share Indep.* equals the total number of votes for Junts pel Sí (JxSí) and Candidatura d'Unitat Popular (CUP) as a fraction of the total number of people who voted in the municipality. *Turnout*: variable equal to the total number of people who voted as a fraction of the total number of people who can vote in the municipality. *Share ERC (CiU) (PSC)*: variable equal to the total number of votes for Esquerra Republicana de Catalunya, ERC, (Convergència i Unió, CiU) (Partido de los Socialistas de Cataluña, PSC) and as a fraction of the total number of people who voted in the municipality for the election years 1999, 2003, 2006, and 2012. *M.E. Ruling*: marginal effect of the Ruling on preference for independence estimated in the municipality. Using the CEO June 2010 survey *M.E. Ruling* is the heterogeneous effect of the Ruling according to the city size of the municipality and the province in which it belongs, after controlling for individual controls and dummies for the size of the municipality interacted with dummy at province level. We have matched the value for *M.E. Ruling* to each municipality using the number of potential voters in 2010. *ERC 1999 (> med.)*: dummy taking value 1 if the vote share in the municipality of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was higher than the median in Catalonia. *ERC 1999*: vote share in the municipality of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was higher than the median in Catalonia. *ERC 1999 (sq.)*: vote share squared in the municipality of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was higher than the median in Catalonia. *City FE*: municipality fixed effects. *Years*: election years used in the estimation. *Sample: All*: all municipalities in Catalonia. *Sample: ERC-99 P50+*: municipalities in Catalonia in which the vote share of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was higher than the median in Catalonia. *Sample: ERC-99 P50-*: municipalities in Catalonia in which the vote share of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was equal or lower than the median in Catalonia. Robust standard errors in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

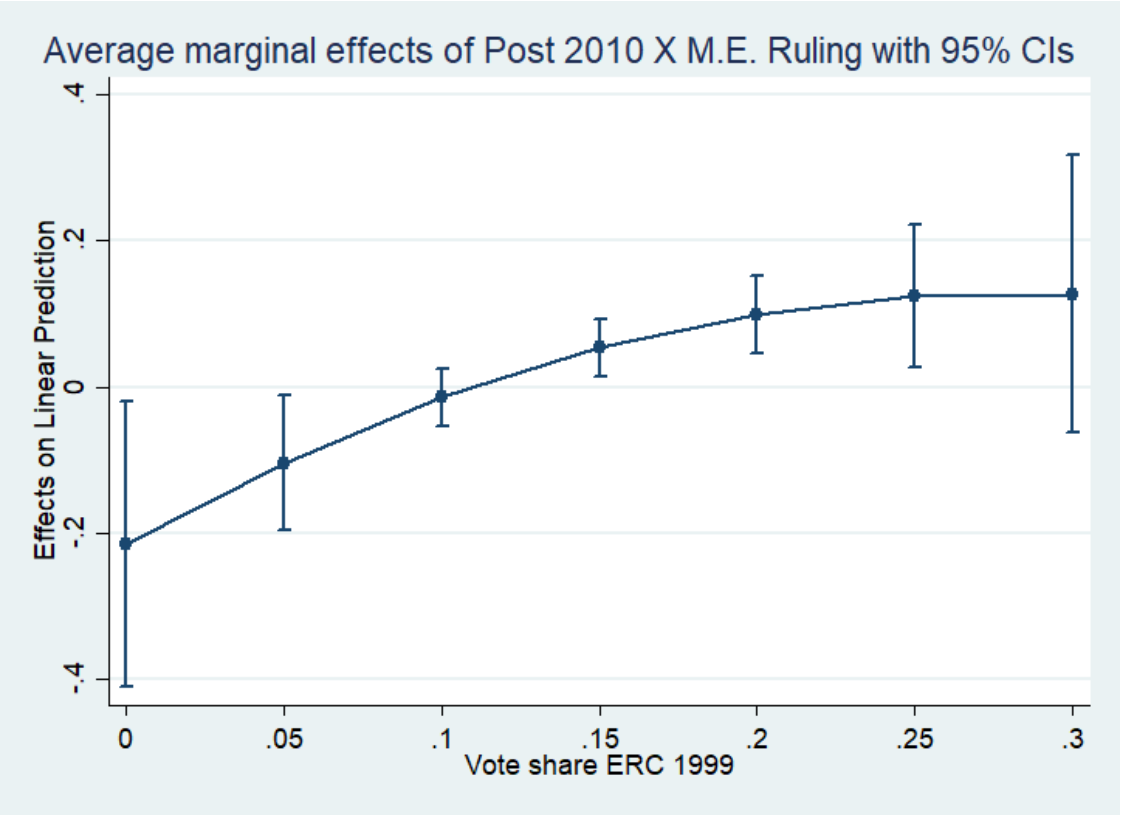


Figure A.20: Marginal effect on voting of the Ruling after 2010 for previous ERC vote shares

Marginal effects after the estimation in column (8) of Table A.38. Each dot and line referr to the marginal effect and the corresponding 95% confidence interval.

Pre-trends: Columns (1) and (2) of Table A.39 provide evidence against the possibility that our results are driven by differential pre-trends in the vote shares of independentist parties. To sustain this claim, we show that after 2003 or 2006 (the elections before the Ruling) there was not a differential increase in voting according to our predicted effect of the Ruling.

Small sample: The Ruling happened at the end of the first day of the interviews of the data we use. 227 respondents were already interviewed were the Ruling took place. The strategy to estimate the long run effects of the Ruling on voting require the estimation of many heterogeneity parameters. However, the small sample size in the control period could potentially make it difficult to estimate with precision the predicted effect of the Ruling according to the category of city in which the respondents live.

To show that this problem is not affecting our estimates we replicate our procedure using a bigger sample. We estimate the heterogeneity of the effect of the Ruling according to province and city size using as control: a) the respondents interviewed in the third wave of the survey in 2010 before the Ruling took place (the control group in our main specifications), and b) the respondents interviewed in the second wave of 2010. We then use these predicted effects to estimate the voting outcomes in 2015. We show the results in columns (3) and (4) of Table A.39. Our main conclusions are confirmed. Moreover, the effect of the Ruling after 2010 in historically less secessionist locations is now negative and statistically significant.

Fitted regressors: An additional problem of our procedure relates to the inference when using predicted regressors. To address this concern we conduct a specific bootstrap procedure. We select a bootstrap sample and perform our first and second stages estimations presented in Models A.4 and A.5 of the paper. We replicate this procedure 500 times and reported the estimated bootstrap standard errors in columns (5) and (6) of Table A.39. The results in the paper are robust to this bootstrap procedure.

CUP vote share inclusion: We now show that results shown in Table A.36 are not driven by the inclusion of CUP vote shares in the dependent variable, even if CUP did not run in elections previous to 2010.

Column (7) of Table A.39 shows that the positive effect of the Ruling in historically independentist areas is importantly concentrated to votes to CUP, as the estimated effect is weaker than the one in Table A.36. However, our main conclusion are not changed. Considering only the sum of ERC and CiU, a city that changed preferences for independence as in our baseline estimate, 5.2 percentage points, increased the vote share for independentist parties by 0.18 percentage points more than a city with no change in preferences due to the Ruling.

Column (8) of Table A.39 confirms that we do not find a statistically significant coefficient of the predicted effect of the Ruling on vote share in historically less secessionist locations.

Table A.39: Voting in 2015: robustness of the results

VARIABLES	(1) Share Indep.	(2) Share Indep.	(3) Share Indep.	(4) Share Indep.	(5) Share Indep.	(6) Share Indep.	(7) Share ERC+CiU	(8) Share ERC+CiU
Post 2003	0.000390							
	(0.00197)							
Post 2003 X M.E. Ruling	0.00294							
	(0.0123)							
Post 2006		-0.00277						
		(0.00197)						
Post 2006 X M.E. Ruling		0.00388						
		(0.0127)						
Post 2010			0.0635***	0.0330***	0.0641***	0.0299***	-0.0431***	-0.0593***
			(0.00349)	(0.00396)	(0.00399)	(0.00444)	(0.00327)	(0.00330)
Post 2010 X M.E. Ruling			0.130***	-0.206***	0.0621**	-0.0347	0.0350*	-0.0258
			(0.0430)	(0.0539)	(0.0295)	(0.0404)	(0.0191)	(0.0213)
Observations	3,784	3,784	1,900	1,884	2,000	2,000	1,900	1,884
R-squared	0.867	0.867	0.765	0.906			0.765	0.917
City FE	YES	YES	YES	YES	YES	YES	YES	YES
Pred. Sample	W3 2010	W3 2010	W2 W3 2010	W2 W3 2010	W3 2010	W3 2010	W3 2010	W3 2010
Vot. Years	99-03-06-15	99-03-06-15	99-03-06-15	99-03-06-15	99-03-06-15	99-03-06-15	99-03-06-15	99-03-06-15
Vot. Sample	All	All	ERC-99 P50+	ERC-99 P50-	ERC-99 P50+	ERC-99 P50-	ERC-99 P50+	ERC-99 P50-
s.e.	Rob	Rob	Rob	Rob	Boot	Boot	Rob	Rob
Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

Share Indep.: variable equal to the total number of votes for Convergència i Unió (CiU) and Esquerra Republicana de Catalunya (ERC) as a fraction of the total number of people who voted in the municipality for the election years 1999, 2003 and 2006; for the election year 2015 *Share Indep.* equals the total number of votes for Junts pel Sí (JxSí) and Candidatura d'Unitat Popular (CUP) as a fraction of the total number of people who voted in the municipality. *Share ERC+CiU*: variable equal to the total number of votes for Convergència i Unió (CiU) and Esquerra Republicana de Catalunya (ERC) as a fraction of the total number of people who voted in the municipality for the election years 1999, 2003 and 2006; for the election year 2015 *Share ERC+CiU* equals the total number of votes for Junts pel Sí (JxSí) as a fraction of the total number of people who voted in the municipality. *Post X*: dummy taking 1 if the election year is X or after X. *M.E. Ruling*: marginal effect of the Ruling on preference for independence estimated in the municipality. Using the CEO June 2010 survey *M.E. Ruling* is the heterogeneous effect of the Ruling according to the city size of the municipality and the province in which it belongs, after controlling for individual controls and dummies for the size of the municipality interacted with dummy at province level. We have matched the value for *M.E. Ruling* to each municipality using the number of potential voters in 2010. *City FE*: municipality fixed effects. *Vot. Years*: election years used in the estimation of Model A.5. *Pred. Sample: W3 2010*: estimation of Model A.4 using observations from the third wave of the CEO survey of 2010 only. *Pred. Sample: W2 W3 2010*: estimation of Model A.4 using observations from the second and third waves of the CEO survey of 2010. *Vot. Sample: All*: all municipalities in Catalonia. *Vot. Sample: ERC-99 P50+*: municipalities in Catalonia in which the vote share of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was higher than the median in Catalonia. *Sample: ERC-99 P50-*: municipalities in Catalonia in which the vote share of Esquerra Republicana de Catalunya in the Catalan elections of 1999 was lower than the median in Catalonia. *s.e.: Rob*: robust standard errors in parenthesis. *s.e.: Boot*: bootstrap standard errors, after 500 replications, in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

E.4 Persistence of political attitudes

We study how persistent the effects of the Ruling on political attitudes are at two levels: in the short run (within the same survey) and in the long run (in posterior waves of the CEO survey). In Figure 5 in Section 6 we plot how the effect of the Ruling on the preference for secession evolves for individuals interviewed each day afterward. We can see that the effect of the Ruling on the preference for secession remains stable during the days of the fieldwork of the survey. Once we have shown that the effect does not disappear in the short-run, we can study persistence in the long-run.

We study long run persistence by testing whether citizens more likely to have increased (decreased) their support for secession or trust in courts due to the Ruling, are also more likely to exhibit higher (lower) support for secession or trust in courts in subsequent waves of the survey. To do so, we use the heterogeneous effects of the ruling by estimating Model A.6 using the third wave of 2010, when the Ruling happened, to predict the marginal effect that the Ruling had on a respondent of a subsequent wave of the survey.

$$Y_i = \alpha_4 + \beta_4 Ruling_i + \gamma_4 X_i + \lambda_4 Ruling_i \times X_i + GEO_i + \varepsilon_i, \tag{A.6}$$

We can see the individual heterogeneous effects on both dependent variables in Table A.40.

We predict marginal effects (ME_i) of the Ruling for each category of respondents by estimating $\widehat{ME_i} = \widehat{\beta_4} + \widehat{\lambda_4} \times X_i$.

In order to discuss how support for independence and institutional trust evolved during the years after the Ruling, we explore how these preferences differs between people with higher level of individual marginal effects due to the Ruling (ME_i). In particular, we estimate Model A.7 where we look at the different evolution through waves ($Wave$) after the Ruling ($Post2010$) for categories of people that were affected differently by the Ruling. We then estimate how preferences evolved through waves estimating the marginal effect of ($Wave$) evaluated at the mean, the 10th percentile and the 90th percentile of the variable ME_i.

$$Y_{it} = \alpha_5 + \tau\widehat{ME_i} + \delta_t Post2010_t \times Wave_t + \chi\widehat{ME_i} \times Post2010_t \times Wave_t + e_{it}, \tag{A.7}$$

As we can see in Figure A.21a, preference for independence increased after the Ruling took place and reached its peak in October 2012, immediately after the first big demonstration that took place on the National Day of Catalonia (11th September). Preferences for independence increased in a statistically significant way when the Ruling took place with respect to the period before 2010. Moreover, the preferences for independence stay at the same level (statistically) even one year after the Ruling.[47]

We estimate the individual marginal effect of the Ruling based on observable characteristics using Model A.6, and Figure A.21a also reports the evolution of the preference for independence for people at 10th and 90th percentile of the marginal effect. Citizens more likely to have increased their support for secession because of the Ruling, are also more likely to express higher support for secession two years after the Ruling than citizens who were less.[48] Two years after the Ruling we find a statistically significant difference in the evolution of the preference for independence for people at the 10th and 90th percentile of

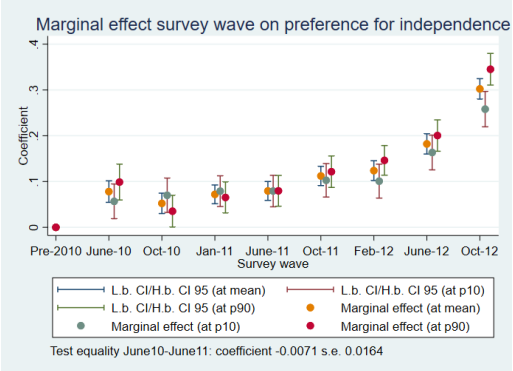
[47] We do not reject the null hypothesis of equality between the coefficients showing the changes in preferences for independence in June 2010 and June 2011.

[48] We restrict our persistence analysis only to two years after because in 2013 the survey methodology changed.

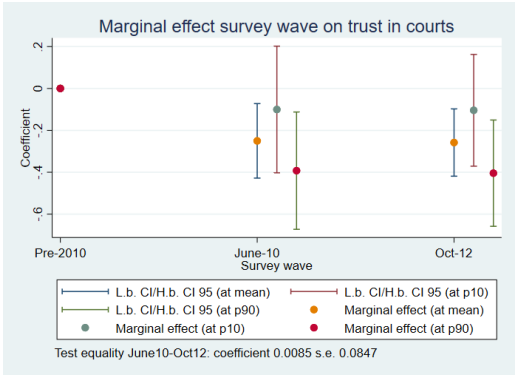
Table A.40: Individual heterogeneity

VARIABLES	(1) Independence	(2) Trust: Courts
Ruling	0.0719	1.443
	(0.133)	(0.893)
Ruling x born in rest of Spain	-0.0380	1.741***
	(0.0571)	(0.272)
Ruling x father born in rest of Spain	-0.117*	-0.525*
	(0.0645)	(0.303)
Ruling x mother born in rest of Spain	0.0968**	-0.499
	(0.0424)	(0.353)
Ruling x foreign born	-0.420	2.702***
	(0.325)	(0.900)
Ruling x father foreign born	0.338	-0.729
	(0.320)	(0.852)
Ruling x speak catalan at home	-0.0868	0.706**
	(0.104)	(0.260)
Ruling x speak catalan with friends	0.162**	-0.787**
	(0.0769)	(0.288)
Ruling x speak catalan at work	-0.191***	-0.0213
	(0.0385)	(0.383)
Ruling x female	0.0148	-0.243
	(0.0373)	(0.276)
Ruling x age 3549	0.125	-0.578
	(0.0822)	(0.358)
Ruling x age 50-64	0.160*	-1.128***
	(0.0904)	(0.314)
Ruling x age 64 or more	0.191*	-0.917
	(0.0992)	(0.550)
Ruling x married	0.150	0.406
	(0.104)	(0.316)
Ruling x educ. ESO (10th grade)	-0.208**	-1.332*
	(0.0808)	(0.780)
Ruling x educ. Bachillerato (12th grade)	-0.106	-0.165
	(0.0892)	(0.696)
Ruling x educ. university	-0.0983	-0.278
	(0.0740)	(1.004)
Ruling x income 1k-2k	-0.224***	-0.946
	(0.0548)	(0.756)
Ruling x income 2k-3k	-0.0504	-0.900
	(0.0765)	(0.840)
Ruling x income 3k or more	-0.145*	-0.103
	(0.0800)	(0.988)
Ruling x self-employed	0.194	1.027*
	(0.147)	(0.559)
Ruling x employed	0.140*	0.124
	(0.0770)	(0.392)
Observations	960	961
R-squared	0.265	0.111
Comarca FE	YES	YES
Controls	YES	YES
Estimation	OLS	OLS

Indep.: dummy reflecting the respondent's preference for Catalonia to become an independent state. *Trust: Courts*: variable reporting how much the interviewed trust courts from 1 to 10. *Ruling*: dummy taking 1 for all observations interviewed after June 28th 2010 at 19:00, and 0 otherwise. *Comarca FE*: comarca fixed effects. *Controls*: dummy reflecting whether Catalan was the language of interview; the respondent spoke only Catalan with family, at work, with friends; the respondent was born in Catalonia, the rest of Spain or outside Spain; the respondent's father was born in Catalonia, the rest of Spain or outside Spain; the respondent's mother was born in Catalonia, the rest of Spain or outside Spain; respondent's sex; the respondent is married; dummies for respondent's education (*educ.*); dummies for respondent's age; dummies for respondent's income; dummies for respondent's employment situation; dummies for respondent's city population. All unanswered or unknown answers coded as missing values. Probability weights used. Sample of people interviewed before 19:00 and in the first seven days of interviews. Standard errors clustered at province-day of the interview level. *** p<0.01, ** p<0.05, * p<0.1



(a) Preference for independence



(b) Trust in courts

Figure A.21: Evolution of the preference for independence and trust in courts across waves estimated for different predicted impact of the Ruling

The graphs show how the preference for independence and trust in courts evolve through the survey waves according to the different predicted impact of the Ruling. Panel A.21a reports the effect when the dependent variable is *Independence*: dummy reflecting the respondent's preference for Catalonia to become an independent state. Panel A.21b reports the effect when the dependent variable is *Trust in courts*: variable reporting how much the interviewed trust courts from 1 to 10. These graphs have been obtained in two steps. First, using the CEO June 2010 survey we estimate the heterogeneous effect of ruling according to individual characteristics, after controlling for individual controls and comarca fixed effects with the usual sample restrictions. Results of this estimation are reported in Table A.40. Second, using the CEO surveys from July 2006 to October 2012, we assign to each observation the marginal effect estimated in the first step according to their individual characteristics. Subsequently, we regress the dependent variable on a dummy for each survey interacted by a dummy taking 1 if the survey is after 2010, the predicted marginal effect of the ruling, and the interaction between the predicted marginal effect and dummy for each survey multiplied by a dummy taking 1 if the survey is after 2010. These graphs report the marginal effect of the survey wave on each dependent variable evaluated for an observation with a mean value (*at mean*), percentile 10 (*at p10*), and percentile 90 (*at p90*) of the predicted marginal effect of the ruling with the corresponding 95% confidence interval.

the individual marginal effect of the Ruling. However, the Ruling cannot explain by itself the overall increase in support for secession that occurred during that period of time. In particular, citizens who did react very little to the ruling also increased their support for secession during that period.

Analogously, Figure A.21b, shows that citizens more likely to have decreased their trust in courts because of the Ruling, are also more likely to express lower trust in courts two years after the Ruling.[49] Moreover, on average, the change in trust in courts remains constant between the period 2010 and 2012.

[49] We do not have observations in the period between the Ruling and October 2012 because the CEO did not include that question in the survey.

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