

## JUDICIAL DECISIONS, BACKLASH AND SECESSIONISM: THE SPANISH CONSTITUTIONAL COURT AND CATALONIA\*

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We exploit a unique quasi-experiment to study the effects of judicial decisions on sensitive issues on political attitudes. In 2010, the Spanish Constitutional Court partially overruled the new Catalan Constitution—the *Estatut*—that granted further decentralisation. Our identification strategy relies on the fact that this ruling occurred amid a public opinion survey. We find that the ruling increased support for independence by 5 percentage points. We interpret this result as evidence of judicial backlash on political attitudes: a judicial decision that limited further autonomy triggered a shift in attitudes towards even more autonomy. Moreover, the ruling decreased trust in the courts and satisfaction with democracy. This backlash of political attitudes extends to other spheres: Catalans increased their national identification with their region and the support for pro-decentralisation parties. Finally, we show that the ruling increased polarisation around the partisan and identity cleavages.

In recent years, courts have played a crucial role in addressing divisive issues such as same-sex marriage, abortion and affirmative action. The US Supreme Court’s decisions in *Brown vs. Board of Education* and *Roe vs. Wade* have been particularly influential in areas like school integration and sexual rights. This influence of courts on issues that are traditionally within the domain of politics is known as judicialisation of politics (Hirschl, 2008).<sup>1</sup> In this paper, we study the effect of judicial decisions about sensitive issues on political attitudes. Specifically, we show that judicial decisions can trigger public opinion backlash, not only against the content of the ruling, but also

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The data and codes for this paper are available on the Journal repository. They were checked for their ability to reproduce the results presented in the paper. The authors were granted an exemption to publish parts of their data because access to these data is restricted. However, the authors provided the Journal with temporary access to the data, which enabled the Journal to run their codes. The codes for the parts subject to exemption are also available on the Journal repository. The restricted access data and these codes were also checked for their ability to reproduce the results presented in the paper. The replication package for this paper is available at the following address: <https://doi.org/10.5281/zenodo.11028802>.

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<sup>1</sup> This influence of the Justice branch of the government (in particular, judges and courts) is known as judicialisation of politics, as noted in Hirschl (2008). The author points out that the judicialisation of politics has reached ‘existential’ issues of the democratic polity, such as the boundaries of the ‘Jewish collective in Israel’ and the role of Quebec in Canada. In Europe, the French and German ‘Supreme Courts’ have had differing rulings about national versus EU supremacy and established the supremacy of the EU Court of Justice under some ‘conditions’ (Pietersen and Chatziathanasiou, 2021).

towards the institution itself, thereby eroding trust in democratic institutions. Furthermore, when the judicial decision relates to a sensitive political cleavage, it further intensifies polarisation around that cleavage.

We focus on a prominent judicial decision that occurred in Spain in 2010: the Spanish Constitutional Court ruling on the Catalan Constitution—the *Estatut*. In 2006, a new Catalan Constitution was approved by both the Spanish and Catalan parliaments and endorsed through a referendum in Catalonia. The text, among other features, proposed a greater degree of decentralisation. However, it was appealed to the Spanish Constitutional Court, which partially overruled it in June 2010. Within two years of the ruling, by June 2012, the support for independence doubled among Catalans. This surge led to pro-secession demonstrations and culminated in the events of 2017, which included a referendum, a failed attempt at independence and several members of the Catalan Government imprisoned.

To study the effect of the ruling of the Constitutional Court on political attitudes, we exploit the fact that the ruling was fortuitously released during the fieldwork of a survey on political attitudes in Catalonia. Moreover, after four years of deliberations of the Constitutional Court, the timing of the final ruling was largely unpredictable. Thus, the interaction of the ruling of the Constitutional Court with the timing of the survey creates a quasi-random assignment of respondents to the exposure to the judicial decision. Exploiting this identification strategy, we compare the self-reported political attitudes of individuals interviewed immediately before the release of the ruling with those of individuals with the same characteristics, but interviewed in the days after the ruling.

This unique setting allows us to provide the first causal evidence of backlash of political attitudes related to the content of a judicial decision and against the institution responsible for it. Moreover, the richness of our data allows us to increase this contribution further and show that this backlash is consistent with the Catalans' stance in other domains, like identity and voting.

In particular, we find that the ruling increased support for independence in Catalonia by approximately 5 percentage points. This represents a substantial effect because, when the ruling took place, support for independence stood at 23%. Moreover, support for greater decentralisation, either in the form of independence or a federal state, also increased at the expense of the status quo or reduced autonomy. In other words, the Constitutional Court's ruling, which limited political decentralisation, prompted Catalans to intensify their political attitudes toward greater decentralisation and secession. We find that this sentiment does not fade over time in our survey. Furthermore, this backlash is also present beyond the content of the ruling, also impacting perceptions of institutions. We demonstrate that the ruling led to a 10% decrease in trust in courts and satisfaction with democracy.

These results can be embedded in the debate about whether judicial decisions move public opinion toward the Court's stance (known as the legitimisation theory) or in the opposite direction (the backlash theory), as described comprehensively by Ura (2014). We improve on these papers in several dimensions related to identification, results and measurement. While the causal evidence is scant and tends to favour the legitimisation theory, we provide quasi-experimental evidence of backlash using a direct measure of the respondent's opinion about the issue in question and trust in democratic institutions.<sup>2</sup>

<sup>2</sup> Exploiting an error-correction model and yearly data, Ura (2014) provided evidence for the legitimisation theory in the long run, after a negative reaction in the short term, estimating the effects of liberal verdicts of the Supreme Court on an index of liberal political attitudes and not on the direct issue of the rulings. One exception to correlational studies is Bishin *et al.* (2016), who provided online experimental evidence for the legitimisation theory.

All of our results are robust to several specifications and robustness checks. In particular, treatment and control observations are balanced in terms of observable characteristics and exhibit no differences in non-response rates. No significant confounding events occurred during the fieldwork, with the exception of some football matches of the 2010 World Cup, which Spain won a few days after the fieldwork ended. Considering that victories of national teams in sports competitions could affect national identity (Depetris-Chauvin *et al.*, 2020), we provide evidence that our main estimates are not affected by these games. Moreover, the unexpected release of the ruling ensures that anticipation and non-compliance do not compromise our design. We provide an extensive discussion of all the evidence supporting our identification strategy in the paper.

The richness of our data allows us to show that the above-mentioned backlash extends to other domains consistently. We show that the ruling, not only generated a backlash in attitudes toward decentralisation, but we also explore whether a similar effect transpires to other sensitive political cleavages in Spain: identity and party divisions.

First, Spanish regions (as administrative and political units) mostly overlap with historical ethnolinguistic divisions. Therefore, the Court's ruling, which curtailed the decentralisation of a region, may have been perceived as unfavourable by people with a strong regional identity. Indeed, we show that, on average, respondents reacted to the ruling by further reinforcing their Catalan identity (rather than the Spanish one). The share of respondents who felt 'only Catalan' increased by 2 percentage points. Additionally, the ruling generated polarisation within Catalonia. Individuals with Catalan parents, who *ex ante* had strong Catalan identity and were more pro-secession, increased their support for independence even further.

These results relate to the literature of identity politics in which external events result in an intensification of identity (Clots Figueras and Masella, 2013; Fouka, 2020; Dehdari and Gehring, 2022; Gehring, 2022).<sup>3</sup> We contribute to this literature by showing these effects as a result of a judicial decision, along with its consequence on polarisation within those identity divisions.

Second, we study the partisan implications of the ruling. Not only did Catalans increase their support for more autonomy after the ruling, but this backlash translated into stronger support for parties more in favour of decentralisation. We find that the ruling boosted the intention to vote for these parties by 9 percentage points. Moreover, taking into account the fact that legislators of the Popular Party were the ones who put forward the appeal, we show that voters became more polarised over the degree of Catalan autonomy along this partisan division. While Catalans as a whole increased their support for decentralisation, voters of the centre-right Popular Party—who were already less supportive of decentralisation—became even more pro-centralisation after the ruling.

In the following section, we provide a detailed review of our contribution to the literature on the effect of judicial decisions, as well as to the identity literature and its implications on secessionism (along the lines of the seminal work of Alesina and Spolaore, 1997). In Section 2, we describe the institutional background. Sections 3 and 4 describe the data and our econometric strategy, respectively. In Section 5, we show the main results of backlash regarding the content of the sentence and trust in democratic institutions. In Section 6, we show additional results, consistent with the main backlash, on identity, voting and their implications in terms of polarisation. Finally, Section 7 concludes.

<sup>3</sup> Shayo (2020) and Bonomi *et al.* (2021) provided a comprehensive overview of identity politics theories.

## 1. Literature Review

We contribute to three different bodies of literature. First, we contribute to the research that studies how judicial decisions affect political attitudes. Second, we contribute to the growing literature on identity, and third, its implications on secessionism.

### 1.1. *Judicial Decisions*

The most direct contribution of our paper concerns previous studies on the effects of courts' rulings on political attitudes. Theoretically, as explained by Ura (2014), divisive/contested rulings can have two opposing effects: the public opinion shifts either toward the ruling's position (the legitimization theory) or toward the opposite position (the backlash or 'thermostatic' theory). This second effect can create an additional backlash when citizens' confidence in the court also decreases following the ruling. In summary, changes in public attitudes could show legitimization, opinion backlash and/or institutional erosion.

Most of the literature on this topic studies the effects of US courts, with a particular focus on the Supreme Court's rulings. The evidence is mixed and mainly correlational. However, there is stronger support for the legitimization theory: for instance, Bishin *et al.* (2016) provided experimental evidence regarding citizens' attitudes toward a Supreme Court ruling about equal marriage rights. They partly found evidence for the legitimization theory among the general population, and, importantly, they ruled out any opinion backlash, even among the 'opposers'. Ura (2014) provided a dynamic evaluation of these attitudes and found that the legitimization theory holds in the long run. Hoekstra (2000; 2003) posed that the support for this theory may depend on the citizens' priors about an issue, and they discussed the evidence.

Previous evidence of judicial backlash does not support the opinion backlash related to the content of the judicial decisions, but only the institutional erosion of the Supreme Court as in Hoekstra (2000; 2003). Even this second backlash is also nuanced: when trust in the US Supreme Court diminishes among individuals who disagree ideologically with the decision taken by the Court (Bartels and Johnston, 2013; Ansolabehere and White, 2020; Nelson and Tucker, 2021), the effect seems to be subject to mean-reversion (Mondak and Smithey, 1997) and composition effects (Christenson and Glick, 2015).

To find any causal evidence of opinion backlash, we must go beyond judicial decisions and look instead at laws. Wheaton (2022) exploited the staggered adoption of laws in the United States and using a difference-in-differences strategy, he showed that backlash occurs with policy changes related to social issues (Equal Rights Amendments, legalisation of marijuana, legalisation of gay marriage, etc.). However, even focusing on the effect of laws, evaluated with the same identification strategy, Aksoy *et al.* (2020) found the opposite results in the European context. They exploited the staggered implementation of same-sex relationship laws (weddings, adoptions, etc.) across European countries. They showed that, when these policies obtain legal recognition, individual attitudes toward sexual minorities improve.

We contribute in two ways to the literature on judicial decisions (and laws). First, we provide convincing causal evidence of the effect of a ruling on political attitudes and support for the court.<sup>4</sup> Second, we present evidence for a case in which a ruling causes backlash, not only

<sup>4</sup> When discussed, the identification strategies in this literature are generally based on lagged preferences in public opinion or first differences. This approach can be problematic in the presence of omitted variables that cause, for instance, a change in opinions or secular trends.

against the institution (erosion), but also in terms of the citizens' opinion on the issue affected by the sentence (opinion backlash).

### 1.2. *Identity*

The advancements in the empirical literature on identity in economics are consistent with the changes documented by Besley and Persson (2021), i.e., political cleavages shifted from the classic economic dimension toward other self-identifying factors such as gender, religion or nation. Nonetheless, the theoretical literature has long been interested in how identity affects our actions (Akerlof and Kranton, 2000). Recent models (Shayo, 2009; 2020; Bonomi *et al.*, 2021) incorporate the idea that external events and their saliency can affect identity and, therefore, choices. The models' intuition is as follows. Individuals are sorted exogenously into non-exclusive groups. Depending on the circumstances, individuals may endogenously choose which of these groups they identify with more intensely, and this identification affects their choices. In Shayo (2020), group identification affects the choices either to benefit the group or to conform with the group's norms. In Bonomi *et al.* (2021), group identity matters through a different channel: members of the group distort their beliefs toward those of the stereotypical group member.

The circumstances or exogenous events that affect identification can be as fortuitous as economic shocks (Guriev and Papaioannou, 2022) or football victories (Depetris-Chauvin *et al.*, 2020).<sup>5</sup> But, more related to our context, implementing laws and government policies can also affect identity and behaviour. For instance, compulsory education (Bandiera *et al.*, 2018; Fouka, 2020) and wars (Dell and Querubin, 2017; Gehring, 2022). Regarding the latter, Gehring (2021) and Dehdari and Gehring (2022) showed that the Franco-German disputes (wars, nation-building and repression policies, etc.) for Alsace and Lorraine decreased identification with the national state. In the Spanish context, Aspachs-Bracons *et al.* (2008) and Clots Figueras and Masella (2013) showed that the compulsory implementation of the Basque and Catalan languages in schools resulted in individuals being more identified with these identities. Bridging education and war, Fouka (2020) studied German language prohibition in US schools after World War I. Exploiting that the ban took place in several, but not all, states, the author showed evidence of identity backlash.

We contribute to this literature by focusing on the effect on the identity of one particularly widespread type of event: judicial decisions affecting politically sensitive issues. Our results show that a judicial decision reducing further autonomy of a region may backlash. It can foster regional identity and polarisation along this dimension.

### 1.3. *Secessionism*

Finally, our results also contribute to the breakup of nations' literature. In the seminal paper of Alesina and Spolaore (1997), the incentives to secede are shaped by the peripheral regions' 'disconformity' with the national public goods, which may depend on ethnolinguistic cleavages. More recently, some papers have evaluated the determinants of the willingness to secede, focusing on income and identity. For instance, Desmet *et al.* (2022) found that identity (instead of income) is the main predictor of propensity to secede. However, Gehring and Schneider (2020) showed

<sup>5</sup> For instance, Depetris-Chauvin *et al.* (2020) showed that football victories in the qualification games of the Africa Cup of Nations increase identification with the nation (rather than the ethnic group) that, in turn, reduces conflicts.

that regional income complements regional identity in the sense that a minimum level of both is necessary for the electoral success of secessionist parties. Our analysis complements these results by providing a mechanism whereby self-perceived identity depends on the (changing) environment and can explain changes in support for secession through time, keeping income fixed.

## 2. Institutional Background

### 2.1. Form of Government

According to the Spanish Constitution, Spain is divided into seventeen autonomous regions (called *Comunidades Autónomas*) and two autonomous cities. Within each Autonomous Community, there are subregional political units: provinces and municipalities. Catalonia is one of these Autonomous Communities, and its capital, Barcelona, is its most populous city. Catalonia's four provinces have an intermediate geographical unit called the *comarca* (forty-two in total). A *comarca*—which is an aggregation of municipalities—has 179,000 inhabitants and a size of 764 km<sup>2</sup> on average. Like the fifty US states, each region or Autonomous Community in Spain has its own regional constitution or 'Statute of Autonomy'. Each of these statutes regulates the internal organisation of the region (i.e., the regional parliament and government) and the relationship with the national state. Spain is not a federation; thus, the Autonomous Communities have less independence than American states. The extent of decentralisation depends on the agreement through the national and regional institutional channels, which results in different regions having different responsibilities in the provision of public goods, tax collection and spending (which are otherwise handled by the national state).<sup>6</sup> In [Online Appendix B.1](#), we provide further details of the Spanish form of government.

### 2.2. Political System

Since the return of democracy in 1978, the Spanish Government has alternated between two main national parties. Although both parties are moderate in economic and social terms, the Socialist Party (PSOE) is centre left and the Popular Party (PP) is centre right.<sup>7</sup> The PP is also the more centralist party in terms of preferences for regional decentralisation. In addition to national parties, regional parties have enjoyed a sizeable presence in the Spanish Parliament, occasionally allowing them to shift the majority of the Congress towards one of the main national parties. The two leading Catalan nationalist parties at the time were *Convergència i Unió* (CiU) and *Esquerra Republicana de Catalunya* (ERC). Whereas CiU was a centre-right Catalan nationalist coalition governing the region from 1980 to 2003 whose main faction (*Convergència Democràtica de Catalunya*, CDC) transitioned to support independence formally in March 2012, ERC is a left-wing party that has unambiguously supported Catalan independence since 1989.

<sup>6</sup> Notably, one of the main differences concerns fiscal autonomy. While Basque Country and Navarre have fiscal autonomy, the rest of the Autonomous Communities, including Catalonia, share fiscal authority with the national state. Education, health and social services are among the most important competencies assumed by the Autonomous Communities over the years.

<sup>7</sup> National parties have regional branches in Catalonia: *Partit dels Socialistes de Catalunya* (PSC) is the Catalan branch of the PSOE and *Partit Popular de Catalunya* (PPC) is the Catalan branch of the PP.



### 2.3. *The Reform of the Catalan Constitution and the Spanish Constitutional Court*

The process of reform of the Catalan Statute of Autonomy traces back to the Catalan elections of 2003, where all parties but the centralist PP promised to reform the Statute of Autonomy, which dated from 1979. In September 2005, the Catalan Parliament approved a reform by 89% of the votes that included more power and new fiscal benefits for the Catalan government. The approved proposal was sent for review to Spain's Parliament, and after several amendments, the Spanish Parliament approved the reform. On 18 June 2006, the final version of the text was approved in a referendum in Catalonia. The referendum resulted in 78.1% of voters supporting the reform, with a turnout of 48.9%. In addition to this process, as with any other Spanish law, every reform of a Statute of Autonomy is subject to the rulings of the Constitutional Court—*Tribunal Constitucional*—regarding its constitutionality. The PP challenged 114 of the 223 articles of the approved regional Constitution and brought the case to the Constitutional Court. In [Online Appendix B.2](#), we describe the role of the Spanish Constitutional Court.

The ruling of the Constitutional Court of Spain was released on 28 June 2010, four years after the approval of the new Statute of Autonomy. The Court struck down fourteen articles and curtailed another twenty-seven. The ruling interpreted that references to 'Catalonia as a nation' in the preamble had no legal effect, rolled back the attempt to place the distinctive Catalan language above Spanish in the region and ruled that regional powers over courts and judges were unconstitutional.<sup>8</sup> In the rest of the text, we refer to the ruling of the Constitutional Court on the Catalan Statute of Autonomy as *the Ruling*. After the Ruling, all major Catalan parties, except for the PP, trade unions and social organisations, called for mobilisation across the region, and over a million people marched on 10 July 2010, led by a banner with the slogan 'We are a nation. We decide'. This demonstration was the precursor of a series of massive pro-secession protests every 11 September to commemorate Catalonia's national day in the following years.

### 2.4. *The Rise of Catalan Secessionism*

After eight years of being governed by a centre-left coalition led by the Socialist Party of Catalonia, Artur Mas, CiU's leader, was elected President of Catalonia in December 2010. Since then, only Catalan nationalist parties have governed the region. This period was also characterised by a severe economic recession. Moreover, a massive and sudden increase in support for independence occurred after the Ruling: from 23% in April 2010—the last wave before the Ruling—to 48% in June 2012. [Figure A.3](#) in [Online Appendix B.3](#) shows the evolution of support in Catalonia for different levels of decentralisation between 2006 and 2012.

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. Carles Puigdemont (from CiU) was elected president of Catalonia. In 2017, he held a referendum, which was declared illegal by the national authorities. Electoral violence ensued, independence was declared (and revoked) and several Catalan politicians were imprisoned. In [Online Appendix B.4](#), we provide more details about the events related to the Catalan conflict in 2012–17.

<sup>8</sup> Other articles affected by the ruling relate to the decentralisation of bank regulations, the possibility of creating new taxes at the local level and the need to participate in the national mechanism of solidarity only between Autonomous Communities when every Autonomous Community conducts a similar fiscal effort. The full ruling can be found [here](#).

### 3. Data

The main data source of this paper is a computer-assisted telephone survey (the *Baròmetre d'Opinió Política*) run by the Catalan Public Opinion Centre (CEO), fielded between 28 June and 8 July 2010 (CEO, 2010b). The order of the interviews is determined by a computer that randomly selects a telephone number from a database and makes the call after each interview finishes. If no one answers the phone, the number remains in the database. The respondents are randomly sampled from inhabitants of Catalonia who are at least eighteen years old in two stages (the first stratification is by province and the size of the municipality, and the second is by gender and age) to keep the sample representative according to the 2009 population census (*Padró de Població*). Additionally, each province is weighted such that the sample is representative of Catalonia.

The firm that ran the survey had no individual socio-demographic information before the interview. The initial contact with the respondent was consistently made in Catalan. However, the interviewer would switch to Spanish if the respondent preferred to continue the interview in that language. Additionally, at the start of the interview, the interviewer explicitly asks the respondent which language (Spanish or Catalan) they would like to use during the interview. Logistically, there are three ways to finish an interview after it begins: (i) the quota of the respondent's 'type' has been fulfilled, (ii) the respondent no longer wants to continue or (iii) the interview is complete. Our dataset contains the latter, i.e., completed interviews.

From each of the 2,000 respondents, we employ data that include the time of the interview, individual socio-demographic characteristics (age, gender, sex and marital status), socio-economic characteristics (education, income and employment status), national identity (the language spoken, region of birth of the respondent and their parents and national self-identification) and political attitudes (past voting behaviour, intentions to vote, the preferred institutional relationship between Spain and Catalonia, trust in institutions and self-assessed most important problems in Catalonia).<sup>9</sup>

The main outcome of interest, the variable *More Autonomy*, is the question regarding the preferred relationship between Catalonia and the Spanish central administration. Possible answers (in addition to 'no answer' and 'do not know') are coded into four categories. Ordered from less to more decentralisation, the respondents can choose between Catalonia being a region with fewer competencies, an Autonomous Community (the status quo), a state within a federal state or an independent country. In the June/July 2010 survey, the support for independence was 26%. Moreover, to understand the impact of the Ruling on identity, we measure national self-identification with a Likert five-item scale question in which individuals are asked to rate whether they feel 'only Spanish', 'more Spanish than Catalan', 'both Spanish and Catalan alike', 'more Catalan than Spanish' or 'only Catalan'. The summary statistics for the independent variables and other dependent variables are discussed in Section 4.2.1 below and [Online Appendix A.3](#), respectively.

Additionally, for the falsification tests and to investigate the long-term effects of the Ruling of the Constitutional Court on the Catalan Statute of Autonomy, we use other waves of the same survey conducted by the CEO. In particular, we collected data from the twenty-five waves from June 2006 to October 2012 (CEO, 2013). In 2010, there were four waves of the CEO survey. The main data used in our paper correspond to the third wave of 2010 (CEO, 2010b). The previous wave happened in April 2010 (CEO, 2010a), while the following occurred in October 2010 (CEO, 2010c).

<sup>9</sup> We code as missing values all unanswered or unknown answers.



Finally, it is worth pointing out the quality of the data. In [Online Appendix A.4](#), we show that the survey run by the CEO does not present any significant anomaly as the distribution of our main variable of interest, the support for more decentralisation, is very similar to an alternative survey run by CIS, the main Spanish public opinion research centre. Moreover, in [Online Appendix A.5](#), we provide evidence about the neutrality of the polling institution, the firm running the survey, the implausibility of manipulation and additional details about the survey logistics. It is important to highlight that the CEO public opinion surveys are done four times a year, at the same time each year, and with the same questions.

#### 4. Empirical Strategy

We are primarily interested in estimating the effect of the Ruling on individual political attitudes ( $Y_i$ ).<sup>10</sup> With this aim, we define the variable  $Ruling_i$ , which takes a value of one for all individuals interviewed after the Ruling was released and a zero value for all individuals interviewed before the Ruling, which was released at 7 p.m. on 28 June 2010. Therefore, those interviewed before the Ruling was made public are assigned to the control group, and those interviewed after the Ruling are assigned to the treatment group. Let  $\mathbf{X}_i$  be a vector of observable socio-demographic characteristics,<sup>11</sup> and  $\mathbf{GEO}_i$  a vector of dummies for the respondent's city population and geographical (*comarca*) fixed effects, i.e., the smallest available geographical unit observation. We define  $\epsilon_i$  as the residuals. We define potential outcomes as  $Y_i(0)$  and  $Y_i(1)$  for the control and treated groups, respectively, and we estimate the model

$$Y_i = \alpha_1 + \beta_1 Ruling_i + \gamma_1 \mathbf{X}_i + \mathbf{GEO}_i + \epsilon_i. \quad (1)$$

Our identification assumption is that the moment at which each respondent is interviewed is independent of the time at which the Ruling occurred; that is, we treat the timing at which the respondents were interviewed as random. In particular, we assume that the potential outcomes are independent of the timing of the interview. As we explain below, we address potential concerns about the structure of the fieldwork by adding controls and restricting our sample.

Although the order of the interviews is random, to avoid the possibility of people interviewed in the morning and afternoon being different, we restrict our sample to people interviewed before 7 p.m. Similarly, to control for potential imbalances in the characteristics of the people interviewed at different stages of the fieldwork, we restrict our sample to the first seven days of interviews. Specifically, the quotas used for the CEO sampling are provinces, size of the municipality, gender and age. If a specific quota is not filled, the last days of the survey might be dedicated to interviewing people with some particular characteristics. These restrictions leave us with 227 observations in the control group and 1,050 observations (of the 1,773 observations interviewed after the Ruling) in the treatment group.

<sup>10</sup> We use different dependent variables: the preferred institutional relationship between Catalonia and Spain, support for independence, trust in political institutions, intentions to vote, cultural feelings and problems that are considered to be most important. Additional details on all the outcome variables used in the paper are presented in [Online Appendix A.1](#).

<sup>11</sup> The included controls are whether Catalan was the language of the interview; whether the respondent spoke only Catalan with family members, at work and with friends; whether the respondent was born in Catalonia, the rest of Spain or outside of Spain; whether the respondent's father was born in Catalonia, the rest of Spain or outside of Spain; whether the respondent's mother was born in Catalonia, the rest of Spain or outside of Spain; the respondent's sex; whether the respondent was married; dummies for the respondent's education; continuous variables for the age of the respondent and its square; dummies for the respondent's income and dummies for the respondent's employment situation. More details can be found in [Online Appendix A.2.1](#).

In addition, we control for  $\mathbf{GEO}_i$  and have a battery of controls potentially related to how the fieldwork was organised. Therefore, for our estimations, we assume that, conditional on individual and geographical characteristics, the treatment status is orthogonal to the potential outcomes,  $\{Y_i(0), Y_i(1)\} \perp Ruling_i | \mathbf{X}_i, \mathbf{GEO}_i$ . The inclusion of *comarca* fixed effects and individual characteristics enables a comparison between different potential outcomes of people with similar characteristics inside the same geographical unit interviewed before and after the Ruling.

We cluster SEs at the province-‘day of interview’ level. The reason why we choose this clustering is two-fold: (a) the treatment takes place at the day level and (b) the weighting of observations for representativeness is at the province level. First, although the treatment affects everyone, the treatment takes place at the day level. People interviewed on different dates received the treatment for a different number of days and then were subject to different unobserved factors. Hence, because similar unexplained factors might affect the dependent variable on a particular day, the errors  $\epsilon_i$  can be correlated within days. Second, the sampling process requires that each province is weighted such that the sample is representative of Catalonia. This weighting process can also create correlations of the errors at the province level, as the weighting also affects the error term. To limit these inference problems, we cluster the SEs at the province-‘day of interview’ level.

This econometric strategy is robust to sampling restrictions, alternative fixed effects and controls, model specification and SE clustering, as discussed in detail in Section 5.1 below.

#### 4.1. *Polarisation Effects*

We also study the consequences of the Ruling in terms of the polarisation of the Catalan society. Accordingly, we examine the heterogeneous effects of the Ruling on political attitudes. Specifically, to study whether the Ruling affected polarisation through the salience of national identities (Catalan versus non-Catalan), we focus on the heterogeneous effects with respect to the Catalan heritage of the respondent. With this aim, we create the variable *Catalan Heritage*, which takes a value of 1 when both parents of the respondent were born in Catalonia (37% of this sample had both Catalan parents) and 0 if at least one parent was born outside Catalonia. This definition of identity based on Catalan heritage is in line with the literature that considers identity formation a dynamic process in which children inherit their parents’ identity (Bisin *et al.*, 2011; Almagro and Andrés-Cerezo, 2020). The heterogeneous effects with respect to Catalan heritage are reported in Section 6.1 below. We estimate the model in (1) with an interaction between *Catalan Heritage* and *Ruling*, controlling for *Catalan Heritage*, instead of the separate dummies for the birthplaces of the mother and father.<sup>12</sup>

Moreover, in Section 6.2 below we study the polarisation effects of the Ruling according to past vote for the Popular Party. We do this augmenting model (1) with a dummy for past vote for the PP and its interaction with *Ruling*. Finally, we explore the interactions of *Ruling*<sub>*i*</sub> with other ethnolinguistic, socio-demographic and socio-economic variables, reported in [Online Appendix C.2.2](#).

<sup>12</sup> Additionally, as the Catalan origin of parents already predicts the language spoken at home, we do not include in the control variables the proxies for the language spoken by the respondents. The complete list of controls is reported in [Online Appendix A.2.3](#).

#### 4.2. *Evidence in Favour of the Identification Strategy*

In this section, we address the main concerns of our identification strategy: balancing, selection on unobservables, anticipation events and other robustness checks.

##### 4.2.1. *Balancing on observables*

The structure of the fieldwork can create potential imbalances between control and treated groups. Table 1 shows the summary statistics of the observed characteristics of the people interviewed before (column (1)) and after (column (2)) the Ruling. Column (3) summarises the number of observations for each variable category in the sample. Column (4) reports a balancing test to show the difference in the observed characteristics for our treated and control groups for the whole sample.

The people interviewed before and after the Ruling do not differ in their observable characteristics except for some minor differences. The absence of differences between pre- and post-observations could be driven by the low statistical power of the balancing test due to the lower number of observations in the control group. Hence, in column (5), we discard this possibility by showing that our balancing results are confirmed when we estimate the mean differences between the treated and the control groups augmented with observations from the previous survey wave (April 2010).

We finally show evidence for balancing between treated and control groups using the *within-comarca* variation we exploit in this paper (column (6)). While we find small differences in one income category and in one municipality size category, we do not reject the joint zero statistical significance of the difference of all variables considered. Still, we include all these observable characteristics as controls in our specifications. For our identification assumption, we require that after controlling for these observable variables, the conditions for whether a person was interviewed before or after the Ruling can be considered to be as-if random.

We show additional balancing evidence in [Online Appendix D.1](#). Notably, we show that the predicted support for independence in Catalonia and self-identification with the Catalan nation based on observables do not change for respondents interviewed after the Ruling ([Online Appendix D.1.1](#)). Similarly, we also show a balance of people interviewed before and after the Ruling with respect to local characteristics that can be predictors of strong local Catalan identity (e.g., the share of people born in Catalonia that speak Catalan or with surnames typical of Catalonia; [Online Appendix D.1.2](#)). Moreover, in [Online Appendix D.2](#), we use the CEO wave anterior to the Ruling to show that during the days of the interviews, there was not a daily increase in the support for more autonomy for Catalonia, and hence nothing is special about being interviewed in the first day of interviews (that is, where our control group is defined).

##### 4.2.2. *Anticipation and non-compliance*

Foreseeable events can produce biases if respondents who change their behaviour due to anticipation effects self-select into the treatment or control groups. We argue that the exact day of the Ruling was unforeseeable. The PP appealed against the Catalan Statute of Autonomy in 2006, and the Constitutional Court published a final ruling four years later. Although the respondents may have known that the Constitutional Court was meeting on 28 June, the exact day on which the ruling would occur was unknown. As *La Vanguardia*, one of the leading Catalan newspapers, reported on its front page on 28 June, ‘the Constitutional Court meets today with the objective of ruling during the week’. Along the same lines, *El País* reported that ‘The Constitutional Court

Table 1. *Main Summary Statistics and Mean Difference Before and After the Ruling.*

Variable	Mean		No. obs.	Diff. pre-post		
	Pre	Post		W3-2010	W3-2010 & W2-2010	W3-2010 Comarca FEs
	(1)	(2)	(3)	(4)	(5)	(6)
Interview in Catalan	0.73	0.67	950	−0.06	0.01	−0.06
Speak Catalan at home	0.52	0.46	724	−0.05	−0.02	−0.05
Speak Catalan at work	0.27	0.25	383	−0.02	0.02	−0.01
Speak Catalan with friends	0.40	0.40	654	0.00	−0.00	0.00
Born in Catalonia	0.73	0.71	960	−0.02	−0.01	−0.02
Born in rest of Spain	0.25	0.27	289	0.02	0.01	0.02
Foreign born	0.02	0.02	28	0.00	0.00	0.00
Father born in Catalonia	0.48	0.43	660	−0.04	−0.03	−0.05
Father born in rest of Spain	0.50	0.55	594	0.05	0.03	0.05
Father foreign born	0.02	0.02	21	−0.01	−0.01	−0.01
Mother born in Catalonia	0.46	0.44	671	−0.02	−0.01	−0.02
Mother born in rest of Spain	0.52	0.54	574	0.02	0.01	0.02
Mother foreign born	0.02	0.02	30	0.00	−0.00	0.00
Female	0.60	0.56	752	−0.04	−0.01	−0.04
Married	0.67	0.61	788	−0.06	−0.01	−0.05
Educ. lower ESO (sixth grade)	0.11	0.09	129	−0.01	−0.00	−0.02
Educ. ESO (tenth grade)	0.39	0.33	417	−0.06	−0.03	−0.06
Educ. bachillerato (twelfth grade)	0.24	0.30	380	0.06	−0.00	0.06
Educ. university	0.27	0.28	345	0.02	0.03	0.01
Net family income lower 1K	0.14	0.16	161	0.02	−0.01	0.01
Net family income 1K–2K	0.44	0.38	383	−0.06	0.00	−0.05
Net family income 2K–3K	0.21	0.28	263	0.07*	0.03	0.08*
Net family income 3K or more	0.21	0.18	202	−0.03	−0.02	−0.04
Self-employed	0.08	0.08	114	0.00	−0.01	0.01
Employed	0.41	0.37	502	−0.04	0.03	−0.03
Unemployed	0.51	0.55	657	0.04	−0.02	0.02
Age	50.79	50.55	–	−0.24	0.90	−0.91
Age squared	2812.15	2843.92	–	31.77	88.78	−45.14
City pop. 0–2,000	0.05	0.05	131	0.00	−0.00	0.00
City pop. 2,001–10,000	0.15	0.14	254	−0.01	−0.01	0.01
City pop. 10,001–50,000	0.28	0.26	367	−0.02	−0.01	−0.01
City pop. 50,001–150,000	0.19	0.22	294	0.03	0.03	0.04
City pop. 150,001–1,000,000	0.19	0.10	82	−0.08**	−0.03*	−0.07**
City pop. 1,000,000 or more	0.15	0.23	149	0.08**	0.03	0.04
<i>F</i> -stat joint significance	–	–	–	1.03	1.37	0.90
<i>p</i> -value joint significance	–	–	–	0.42	0.10	0.61

*Notes:* *Mean:* mean of the reported variable. *Pre (post):* sample of people from W3-2010 interviewed before (after) the Ruling. *No. obs.:* number of observations in the sample that are from the category under consideration (this cannot be computed for age and age squared as they are continuous variables). *W2-2010:* sample of people interviewed in the CEO second wave of 2010 before 7 p.m. *W3-2010:* sample of people interviewed before 7 p.m. and in the first seven days of interview in the CEO third wave of 2010. *Diff. pre-post:* *t*-test of the difference in the reported variable for respondents in the sample considered interviewed before and after the Ruling, obtained by regressing the reported variable on the variable *Ruling* on the sample considered using probability weights and robust SEs. *Comarca FEs:* difference pre-post computed including comarca fixed effects. *F-stat (p-value) joint significance:* *F*-statistics and the corresponding *p*-value obtained after regressing *Ruling* on all the variables under consideration (and comarca fixed effects in the last column) on the sample considered using probability weights. \*\*  $p < .05$ , \*  $p < .1$ .

begins today what may be its last plenary session, summoned to vote and rule on the sentence of the Catalan Statute, although it is expected to last the next several days'.<sup>13</sup> Therefore, the fact that a ruling arrived at the end of 28 June was largely unpredictable. Confirming the absence of anticipation effects, we show in [Online Appendix Figure A.15b](#) that the number of news

<sup>13</sup> The link to the mentioned news articles can be found in the following links [here](#) and [here](#).

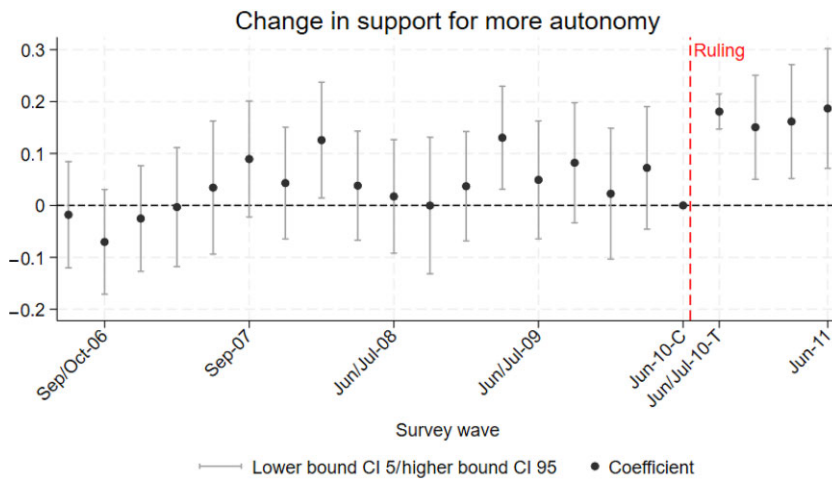


Fig. 1. *Event Study: Change in the Preferred Relationship between Spain and Catalonia across Survey Waves.*

*Notes:* The graph reports the estimated coefficient of the effect of each survey wave on *More Autonomy* using CEO waves from June 2006 to October 2011. The omitted category is the control group (*Jun-10-C*) and comprises the observations from the CEO third wave of 2010 before the Ruling that took place on 28 June at 7 p.m. *Jun/Jul-10-T* refers to our treatment group, observations from the CEO third wave of 2010 after the Ruling. Coefficients estimated by OLS using probability weights regressing *More Autonomy* on wave dummies. SEs clustered at the province-survey wave level. *More Autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the status quo), Autonomous Community (status quo), federal state (more autonomy than the status quo) or independent state, respectively. *Lower-upper bound CI 95*: lower and upper bounds of the 95% confidence interval.

stories about the Ruling remained relatively low during the weeks before 28 June 2010, and only skyrocketed afterward. Moreover, the two previous dates with more news about the Ruling were not related to any filtration of the sentence's content.

Similarly, the estimated effect would also be downward biased if people in the control group had correctly guessed the content of the Ruling. We cannot completely discard this bias, but we believe that this is not a major concern for several reasons. First, the final draft of the Ruling was not leaked before its approval. Second, six different alternative drafts were discussed unsuccessfully in previous meetings of the Constitutional Court, and, a few hours before the Ruling, the article from *El País* cited above reported that 'the judges arrive at the meeting with the same starting positions that have caused the previous draft sentences to fail, so it is unlikely that the draft will be approved'.<sup>14</sup>

Moreover, suppose that the content of the Ruling was already known before the Ruling or largely anticipated by political propaganda of political parties. In that case, we should expect to observe a spike in the support for more autonomy in Catalonia in the previous years before the Ruling. Figure 1 shows evidence against this possibility by plotting the average support for more autonomy, by wave, demeaned by the average support in the interviews before the Ruling in June 2010. In other words, this figure examines the change in support for more autonomy between

<sup>14</sup> Third, as we discuss in [Online Appendix C.4.3](#), partisans and opponents of the Catalan Statute of Autonomy decreased their trust in courts, which is consistent with uncertainty over the content of the Ruling.

survey waves from 2006 to 2011, with respect to the control group used in our study (people interviewed in the third CEO survey wave of 2010 before the Ruling).<sup>15</sup>

Several considerations emerge from the analysis of this figure. The absence of significant changes in the support for more autonomy before the Ruling suggests the lack of pre-trends. This reaffirms the possibility that the content of the Ruling was unpredictable.

Additionally, Figure 1 shows an increase in support for more autonomy from the wave of the Ruling onward. This provides descriptive evidence of compliance that the Ruling was an important event for Catalan citizens, and it potentially impacted support for more autonomy. In [Online Appendix D.3](#), we give additional evidence in favour of compliance, showing that right after the Ruling, news coverage and Google searches increased dramatically. Moreover, this increase in support for more autonomy appears to be sustained in the waves after the Ruling.<sup>16</sup>

#### 4.2.3. Robustness and other potential threats

Although the use of sudden events in a survey to identify exogenous changes in individual attitudes has become a standard identification strategy in event studies, some concerns about the identification strategy and robustness of the results may arise, even with a random treatment. A recent methodological paper (Muñoz *et al.*, 2020) reviews the literature in which this strategy is used and typifies the potential threats. Additionally, the authors highlight different practices to ensure the estimates' credibility, addressing each identification issue. We explicitly address each point made in this paper and further ones, and report a rich battery of robustness checks in Section 5.1 below and [Online Appendix E](#).

Moreover, while the short span of our survey allows us to rule out many alternative confounding factors, it is important to note that the Ruling took place during the 2010 FIFA World Cup, which Spain eventually won. Depetris-Chauvin *et al.* (2020) showed that football victories can impact national identity, potentially affecting attitudes toward state centralisation. In Section 6.1 below, when we present the effects of the Ruling on national identity, we discuss in detail the potential role of the World Cup and provide evidence that this event does not bias our estimates.<sup>17</sup>

## 5. Results

We first show that the Ruling did not go unnoticed in Spain, especially in Catalonia. Then, we present and discuss the effect of the Ruling on political attitudes. We show the backlash against the content of the sentence, i.e., support for further decentralisation and independence. Additionally, we show the presence of an additional backlash result related to institutional erosion. Finally, in Section 5.1, we present and discuss the main robustness checks. All results in this subsection rely on the estimation of model (1).

*Prominence of the Ruling.* The release of the Ruling had prominence in the media and for Catalans. Panel (a) of [Online Appendix Figure A.15](#) shows the increase in Google searches

<sup>15</sup> We do this using individual data from the CEO survey waves from June 2006 to October 2011, and we regress the individual support for more autonomy on survey dummies. We split the CEO third wave of 2010, when the Ruling took place, between treated and control observations, and we use the latter as the omitted category. The average support for more autonomy (on a scale from 1 to 4) was 2.61 in June 2006, 2.63 in June 2010 before the Ruling was released and 2.81 in June and July 2010 after the Ruling took place.

<sup>16</sup> Section 6.3 below discusses further evidence of the persistence of the effects of the Ruling across sample waves.

<sup>17</sup> Moreover, although we cannot entirely discard the presence of collateral events triggered by the Ruling that could affect our treatment group, it is unlikely that other confounding events that took place around the release of the Ruling affect our results. For instance, as discussed in [Online Appendix D.4](#), the news coverage remains constant in our sample.



Table 2. *Effect of the Ruling on Perceived Problems.*

	Most important problems			
	Catalonia-Spain (1)	Statute of autonomy (2)	Economy & labour market (3)	Catalan financing (4)
Ruling	0.0776*** (0.0175)	0.0601*** (0.0147)	−0.120** (0.0448)	0.0126 (0.00801)
Observations	970	970	970	970
R <sup>2</sup>	0.05	0.06	0.03	0.03
Average y	0.09	0.07	0.64	0.01

Notes: *Most important problems*: dummy taking a value of 1 if the interviewed individual mentions one of the following topics as the most important problem of Catalonia: the relationship between Spain and Catalonia (*Catalonia-Spain*); the Catalan Statute of Autonomy (*Statute of autonomy*); unemployment, job insecurity, the functioning of the economy or the low level of wages (*Economy & labour market*); the Catalan financing system (*Catalan financing*). *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. All regressions include individual controls and comarca fixed effects. The list of controls is reported in [Online Appendix A.2.1](#). *Average y*: mean of the dependent variable. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. Regressions estimated by OLS using probability weights. SEs are clustered at the province-‘day of interview’ level. \*\*\*  $p < .01$ , \*\*  $p < .05$ .

for *Estatut* on the day of the Ruling. Similarly, panel (b) displays the mentions of *Estatut* and *Tribunal Constitucional* in newspapers. Moreover, we can observe the importance of the Ruling for Catalans directly in our survey: CEO asks an open question about the ‘current problems of Catalonia’. CEO coded the issues reported by the respondents into several categories, among them the relationship between Spain and Catalonia, and, more specifically, a subcategory that refers to people mentioning the *Estatut*. Columns (1) and (2) of Table 2 show that these two are the problems with the greatest change: the percentage of people reporting the relationship between Catalonia and Spain as the main problem increased by 8 percentage points (column (1)). Among the specific institutional problems, the Statute of Autonomy was declared the main problem facing Catalonia by 6 percentage points more after the Ruling (column (2)). These results are striking,<sup>18</sup> especially in comparison to other significant issues such as the economy and labour markets (whose importance decreased, as shown in column (3)), and public financing or ‘fiscal federalism’ (reported in column (4)).<sup>19</sup>

*Backlash of political attitudes.* In Table 3, we show that the Ruling had a causal effect on support for more autonomy and, in particular, for independence. The main outcome variable regards the preferred institutional relationship between Catalonia and Spain. As a reminder, the variable *More Autonomy* takes a value from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the status quo), an Autonomous Community (the status quo), a federal state (more autonomy than the status quo) or an independent state, respectively. We interpret higher values of this variable as a greater desire for more autonomy.

Column (1) shows that the unconditional effect of the Ruling on support for more autonomy in Catalonia was 0.15 points. Column (2) confirms the impact of the Ruling when we control for

<sup>18</sup> These results are economically very significant. People interviewed after the Ruling increased their reporting of the relationship between Catalonia and Spain and the Statute of Autonomy as the main problems of Catalonia by around 85%, compared to their average level.

<sup>19</sup> Table A.5 in [Online Appendix C.1](#) confirms these results, considering whether the respondent mentioned one of the issues as a problem facing Catalonia instead of whether it is the main problem.

Table 3. *Effect of the Ruling on the Preferred Relationship between Spain and Catalonia.*

	More Autonomy		Independence	More Autonomy		
	(1)	(2)	(3)	(4)	(5)	(6)
Ruling	0.153** (0.0577)	0.113*** (0.0306)	0.0530*** (0.0176)	0.175*** (0.0525)	0.128*** (0.0387)	0.139*** (0.0382)
Observations	1,199	960	960	960	3,032	4,623
R <sup>2</sup>	0.00	0.29	0.18	.	0.26	0.25
Comarca FEs	No	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	Yes	Yes	Yes	Yes
Additional FEs	No	No	No	No	Wave, Post-h19 & Post-Day7	Wave, Post-h19 & Post-Day7
Sample	W3-2010	W3-2010	W3-2010	W3-2010	W2-W3-2010	W2-W3-W4-2010
Restrictions	Yes	Yes	Yes	Yes	No	No
Estimation	OLS	OLS	OLS	O-Probit	OLS	OLS
Average y	2.75	2.75	0.26	2.75	2.75	2.76

*Notes:* *More Autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the 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 a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. Regressions in columns (2) to (6) include individual controls and comarca fixed effects. The list of controls is reported in [Online Appendix A.2.1](#). The estimates of the effects of the controls are presented in [Table A.6 in Online Appendix C.2.1](#). Columns (5) and (6) additionally include the fixed effects reported in *Additional FEs*. *Wave FEs*: wave fixed effects. *Post-h19 FE*: dummy taking a value of 1 for all observations interviewed at 7 p.m. or after, and 0 otherwise. *Post-Day7 FE*: dummy taking a value of 1 for all observations interviewed after the first seven days of interviews, and 0 otherwise. *Average y*: mean of the dependent variable. Columns (1) to (4) use the sample of people interviewed in the CEO third wave of 2010 (*W3-2010*) before 7 p.m. and in the first seven days of interviews (*restrictions: yes*), and columns (5) and (6) without any day or hour restriction (*restrictions: no*). Additionally, column (5) uses observations from the CEO second wave of 2010 (*W2-2010*) in the control group, and column (6) also uses observations interviewed in the CEO fourth wave of 2010 (*W4-2010*) in the treatment group. Regressions estimated by an OLS or ordered probit (*O-Probit*) method using probability weights. Column (4) of the table reports the coefficient estimates of the ordered probit regression, while the marginal effects are shown in [Figure 2](#). SEs are clustered at the province-‘day of interview’ level. \*\*\*  $p < .01$ , \*\*  $p < .05$ .

individual characteristics and fixed effects at the *comarca* level.<sup>20</sup> We estimate that the Ruling increased support for more autonomy in Catalonia by 0.11 points in this preferred specification.<sup>21</sup> Column (3) shows the impact of support for secession: we use the same specification as before, but we use a dummy for independence as the outcome. That is, a variable that takes value 1 if the respondent supports the independence of Catalonia. We find that the Ruling increased support for independence by 5.3 percentage points. Since the support for independence in the survey before the Ruling was 23%, we estimate that the Ruling increased support for independence by almost 20%.

These are large effects. For instance, between 2006 and 2010, support for secession increased only by 1.4 percentage points per year, which is approximately 30% of the jump that we estimate.<sup>22</sup> A complementary reference point is Clots Figueras and Masella (2013). In their article, with data from 2001, the authors found that Catalans exposed to compulsory schooling in Catalan increased their support for Catalan independence by 1.3 percentage points.

<sup>20</sup> The estimates of the effects of the controls are presented in [Table A.6 in Online Appendix C.2.1](#). Moreover, [Online Appendix C.2.2](#) shows the heterogeneity of the effect of the Ruling with respect to these ethnolinguistic, socio-demographic and socio-economic variables.

<sup>21</sup> As the SD of the variable *More Autonomy* is 0.92, people interviewed after the Ruling had 0.124-SD higher support for decentralisation.

<sup>22</sup> Support for independence in July 2006 was 16%.

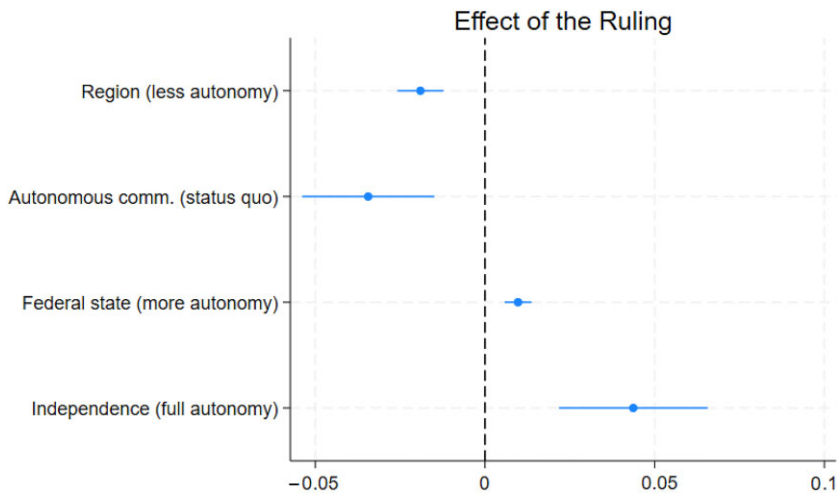


Fig. 2. Marginal Effects of the Ruling on Each Preferred Relationship between Spain and Catalonia.

*Notes:* This figure plots the marginal effect of *Ruling* on the four options for the preferred relationship between Spain and Catalonia, estimated in column (4) of Table 3. Each point refers to the estimated coefficient of the effect of *Ruling* on one specific value of the variable *More Autonomy* and each line refers to the 95% confidence interval. The marginal effects are estimated after regressing, with an ordered probit model and using probability weights, *More Autonomy* on *Ruling*, all the controls and comarca fixed effects. The list of controls is reported in Online Appendix A.2.1. *More Autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the status quo), Autonomous Community (status quo), federal state (more autonomy than the status quo) or independent state, respectively. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. SEs are clustered at the province-‘day of interview’ level.

Beyond the push for more autonomy, we can study how the Ruling affected support for each form of government. In Figure 2, we show the support for each type of government for Catalonia. We report the marginal effects of the ordered probit regression described in column (4) of Table 3. We observe that the Ruling increased support for the forms of government that imply higher autonomy (federal state and, especially, independence) at the expense of the options with less autonomy, such as the region or Autonomous Community (the status quo) categories. These average effects show that the Ruling provoked a shift in attitudes in favour of more autonomy. Interestingly, this is so despite the potential presence of status quo bias, which may be attenuating these results.

The main advantage of using within-survey variation (the CEO third wave of 2010, from June to July 2010) is that we can control for potential confounding factors. On the other hand, the narrow window between treated and control observations poses new questions (for instance, whether the effects persist in time or the role of the small sample size). To address these potential issues, in column (5) of Table 3, we show new results using the previous wave of the survey (the second wave, from April 2010). In column (6), we also add the following wave of the survey (the fourth wave, from October 2010).<sup>23</sup> The results do not change in magnitude or statistical significance.

<sup>23</sup> In both columns (5) and (6), using additional waves, we have higher statistical power. In these specifications we remove our sample restrictions and we add fixed effects for the wave of the interview, whether he/she was interviewed after 7 p.m. or after the seventh day of fieldwork.

Table 4. *Effect of the Ruling on the Trust in Democratic Institutions.*

	Trust						Insatisfaction democr. (7)
	Courts (1)	Spanish Government (2)	Spanish Parliament (3)	Catalan Government (4)	Catalan Parliament (5)	Parties (6)	
Ruling	−0.355*** (0.121)	−0.262* (0.145)	−0.188*** (0.0616)	−0.0215 (0.0816)	0.00513 (0.0739)	−0.252** (0.120)	0.0572* (0.0296)
Observations	961	991	973	996	971	987	989
R <sup>2</sup>	0.02	0.04	0.03	0.02	0.02	0.00	0.03
Average y	3.89	3.66	4.04	4.70	4.91	3.57	0.61

Notes: *Trust*: variable reporting how much the interviewed individual trusts the following institutions from 1 to 10: courts, Spanish Government, Spanish Parliament, Catalan Government, Catalan Parliament and political parties. *Insatisfaction democr.*: dummy taking a value of 1 if the interviewed individual has small or no satisfaction with the functioning of the democracy, and taking a value of 0 if the interviewed individual is satisfied enough or very satisfied. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. All regressions include individual controls and comarca fixed effects. The list of controls is reported in [Online Appendix A.2.1](#). *Average y*: mean of the dependent variable. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. Regressions estimated by OLS using probability weights. SEs are clustered at the province-‘day of interview’ level. \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$ .

This is additional evidence that the small sample size is not affecting our results. This is consistent with Table 1, in which we show that the sample is still balanced when adding observations from the previous survey. Similarly, it is unlikely that a short-term emotional response drives our results, as the effect is still present in column (6).

On these lines, Figure 1 already showed a sustained increase of support after the wave of the Ruling. Additionally, in [Online Appendix F.1](#), we conduct a more systematic analysis of the persistence of the effects across survey waves until 2012. We first predict the marginal effect of the Ruling on respondents based on their socio-economic and demographic characteristics. Then, we consider how this predicted effect explains support for more autonomy in subsequent waves of the survey, and the results show, again, suggestive evidence of a long-term pattern.

*Institutional erosion.* The rapid upsurge of political attitudes for decentralisation came along with an increased distrust in institutions and, more generally, dissatisfaction with democracy. Table 4 shows the effect of the Ruling on trust in national and regional democratic institutions. Trust is measured with an index that takes a value of 10 when there is maximum trust (0 for no trust). Columns (1) and (3) show that the Ruling caused distrust in the courts—0.36 points—and in the Spanish Parliament—0.19 points—which were the active players in charge of the checks and balances.<sup>24</sup> Additionally, trust in the Spanish Government also decreased by 0.26 points (column (2)).<sup>25</sup> While national institutions were negatively affected by the Ruling, columns (4) and (5) show that Catalan institutions were not affected, which suggests that institutional accountability across branches of government may be a relevant channel.

Besides the specific institutions, it can be argued that satisfaction with democracy, as a whole, is negatively affected. Column (6) shows that the Ruling decreased trust in political parties by

<sup>24</sup> This finding is consistent with the previous literature. For instance, Ura and Wohlfarth (2010) showed that voter support for checks and balances (and the separation of powers more generally) is reflected by the simultaneous movement of trust in the legislative and judiciary branches. These results are independent of the alignment of preferences between these branches, but generally depend on trust in these institutions.

<sup>25</sup> These results mean that, compared to their level, trust in these national institutions decreased between 4.6% and 9% because of the Ruling.

0.25 points. Finally, column (7) indicates that the Ruling increased the proportion of people unsatisfied with democracy by 6 percentage points (that is, by approximately 10%).

The results may be interpreted as if many Catalans saw the Ruling as unfavourable, which drew support for more autonomy toward the independence extreme. These results also show that the functioning of democracy as a whole may have been put under scrutiny, even though the reform of the Catalan Constitution was democratically approved by large majorities in the Spanish and Catalan Parliaments, and by a referendum,<sup>26</sup> and then followed all procedural rules of the Spanish democratic organisation.

### 5.1. Robustness of the Main Results

In Section 4.2, regarding the strength of the identification strategy, we discussed in detail the *balancedness* of the sample, *anticipation*, *non-compliance* and *confounding* events.<sup>27</sup> In this section, we provide new robustness checks about the main result of the effect of the Ruling on support for more autonomy. We summarise all these robustness checks in Figure 3. We show that our results do not depend on unobservable factors, geographical variation, sampling restrictions, sample size of treatment and control groups, selection bias due to non-responses and inference. Keeping in mind that this figure summarises the most important robustness checks around these issues, in Online Appendix E, we provide more details and robustness checks. The first column of Figure 3 reports the baseline estimate of the effect of the Ruling on the support for more autonomy (column (2) of Table 3) with the corresponding 95% confidence interval.

First, in column (2) of Figure 3, we show that our result is not likely to suffer from *selection on unobservables*, as the estimate of the effect of the Ruling is very similar when we include or exclude individual controls. Recent advances in the literature on the selection on unobservables discuss that this evidence is still not enough to rule out the selection on unobservables. Therefore, in Online Appendix E.1, we apply the methods of Oster (2019) and find that the selection on the unobservables should be extremely large to lead our estimated effect to 0. Moreover, in Online Appendix E.1, we show additional balancing and falsification tests that use the same wave of the survey and other waves.<sup>28</sup>

Second, we show that our results do not depend on our study's *geographical units*. In the paper, we mainly exploit within-*comarca* variation. However, in columns (3) to (5) of Figure 3, we show that our results are robust to different levels of the geographical fixed effects or even not having them at all. In Online Appendix E.2, we further show that our results are not driven by any particular geographical unit.

Third, in Section 4, we discuss why we imposed some *sampling restrictions* based on the hour and day of the interviews to improve the balancing of our treatment and control groups. In columns (6) to (8) of Figure 3, we show that our results are robust to not imposing sample restrictions. Online Appendix E.3 further discusses the reason for imposing them and shows that our results are robust to different sampling restrictions.

Fourth, we show that the small *sample size*, especially regarding the control group, is unlikely to be a problem. In columns (9) to (10) of Figure 3, we directly address this issue by restricting

<sup>26</sup> The reform of the Statute of Autonomy had the approval of 80% of Catalan voters in the 2006 referendum.

<sup>27</sup> In Online Appendix D, we provide additional complementary evidence about balancing in observables and non-observables (Online Appendix D.1), pre-trends (Online Appendix D.2), non-compliance (Online Appendix D.3) and collateral events (Online Appendix D.4).

<sup>28</sup> We conduct several placebos by changing the day of the Ruling, and we show insignificant effects when applying these placebos to the support for secession.

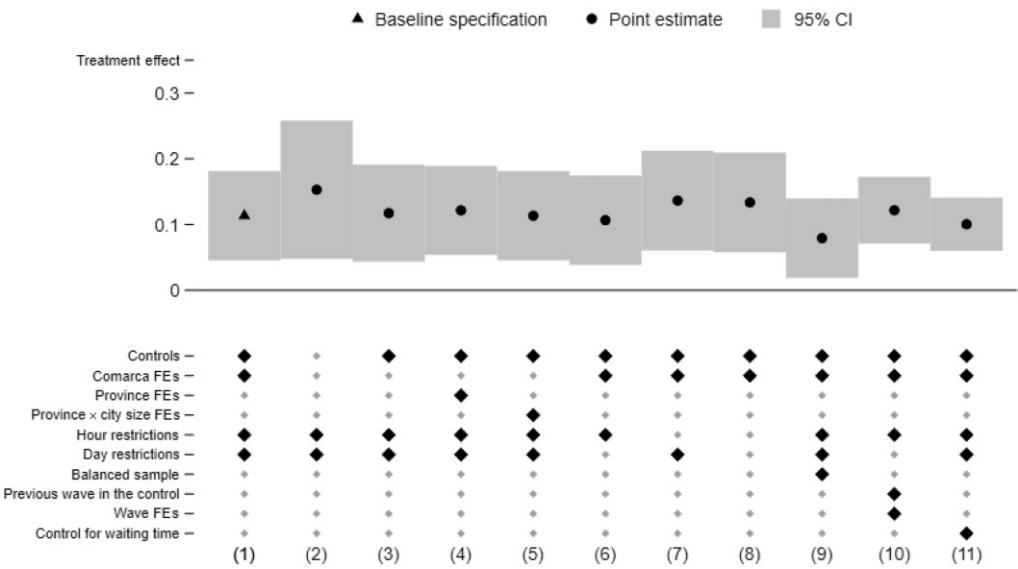


Fig. 3. Robustness Checks: Effect of the Ruling on the Preferred Relationship between Spain and Catalonia.

Notes: This figure plots the effect of *Ruling* on the preferred relationship between Spain and Catalonia, using many different specifications. Each point refers to the estimated coefficient of the effect of *Ruling* on *More Autonomy* and each grey bar refers to the 95% confidence interval. The marginal effects are estimated after regressing, by OLS and using probability weights, *More Autonomy* on *Ruling*, including the controls or fixed effects (FEs) listed in the legend of the table. The list of controls is reported in [Online Appendix A.2.1](#). *More Autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the status quo), Autonomous Community (status quo), federal state (more autonomy than the status quo) or independent state, respectively. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. When we impose hour restrictions, we use the sample of people interviewed before 7 p.m. When we impose day restrictions, we use the sample of people interviewed in the first seven days of interviews. When we use a balanced sample, we restrict the treatment group to the first 170 treated observations interviewed before 7 p.m. All specifications use the sample of people interviewed in the CEO third wave of 2010 and, when we use the previous wave in the control, we also use the sample of people interviewed in the CEO second wave of 2010. When we control for waiting time, we control for a variable measuring the time between the beginning of that interview and the end of the previous interview done by the same interviewer. SEs are clustered at the province-‘day of interview’ level and then the 95% confidence intervals are retrieved from false discovery rate-adjusted *p*-values, following the procedure in Anderson (2008). The corresponding regression tables with unadjusted *p*-values can be found in [Online Appendix E](#).

the sample (to have as many treated observations as in the control) and adding more waves of the survey, respectively. Moreover, as Fisherian randomisation inference can provide a way to obtain proper inference in the setting of a small number of observations, in [Online Appendix E.4](#) we show that our results are robust to this alternative specification.

Fifth, a crucial point is selection bias due to the possibility of *non-response* to the survey. To address this issue, we construct an indirect measure of refusal to participate in the survey based on the waiting time between interviews conducted by the same interviewer.<sup>29</sup> In column

<sup>29</sup> The rationale behind this proxy is that if some individuals decide not to participate in the survey, the interval between the end of one interview and the start of the next should be larger.



(11) of Figure 3, we show that our main result is not altered when we control for this proxy. In [Online Appendix E.5](#), we further discuss the strength of this proxy to rule out participation bias. Moreover, we show direct evidence that non-response to specific questions does not change after the Ruling.

Sixth, given the large number of robustness checks in Figure 3, we address the *inference* concerns related to multiple hypothesis testing by showing in that figure adjusted confidence intervals. We correct the  $p$ -values of each specification controlling for the false discovery rates (FDRs) as in Anderson (2008). Then we compute confidence intervals addressing the multiple hypothesis testing problem.<sup>30</sup> Similarly, the multiple hypothesis testing problem also arises since we test the effect of the Ruling on many different outcomes. In [Online Appendix E.6](#), we show that all the estimated effects of the Ruling using different dependent variables are robust when calculating FDR-adjusted  $p$ -values. Moreover, as discussed in Section 4, in the main specification of the paper we used SEs clustered at the province-‘day of interview’ level. We show robustness of our main result to different clustering in [Online Appendix E.6](#).

Finally, while we use OLS to estimate the effects of the Ruling, column (4) of Table 3 shows that the result on support for more autonomy is robust to using an alternative estimation method, such as ordered probit. [Online Appendix E.7](#) shows that all the other results are robust to non-linear probability and ordered models.

## 6. Identitarian and Partisan Cleavages

We pose that the Ruling brought forward two affected cleavages in Catalonia: the identitarian and partisan ones. On the one hand, the fact that the Spanish regions’ overlap with historical ethnolinguistic groups leads us to study the Ruling’s effect on identity and its heterogeneity in Section 6.1. On the other hand, since legislators of the Popular Party—who appealed the Catalan Constitution—and its supporters are pro-centralisation, in Section 6.2, we investigate the polarisation along this dimension. Additionally, we study the effect of the Ruling on voting intentions.

### 6.1. Identity and Polarisation

Recent contributions to endogenous identity (summarised in Shayo, 2020) argue that citizens identify more intensely ‘with the groups that are most salient, formalized as those having the strongest policy conflict’.<sup>31</sup> Having shown that the Ruling did not go unnoticed, we study its effect on identity. Within this framework, we test whether the Ruling increased self-identification with Catalonia and whether polarisation increases along these lines. Additionally, we study the possibility that our results are confounded with the 2010 FIFA World Cup games.

First, in the CEO survey, respondents are asked about their self-identification with Catalonia and/or Spain. They can choose one among the following categories in the variable *Feeling Catalan*: they feel (i) only Spanish; (ii) more Spanish than Catalan; (iii) both Spanish and Catalan alike; (iv) more Catalan and (v) only Catalan. Figure 4 shows the predicted values for the marginal effects of the Ruling for each category, estimated with an ordered probit regression. Notably, the effect of the Ruling is an increase in identification with Catalonia, i.e., categories

<sup>30</sup> In the different parts of Online Appendix E we report all robustness checks in Figure 3 without the adjusted  $p$ -values.

<sup>31</sup> See page 2373 of Bonomi *et al.* (2021).

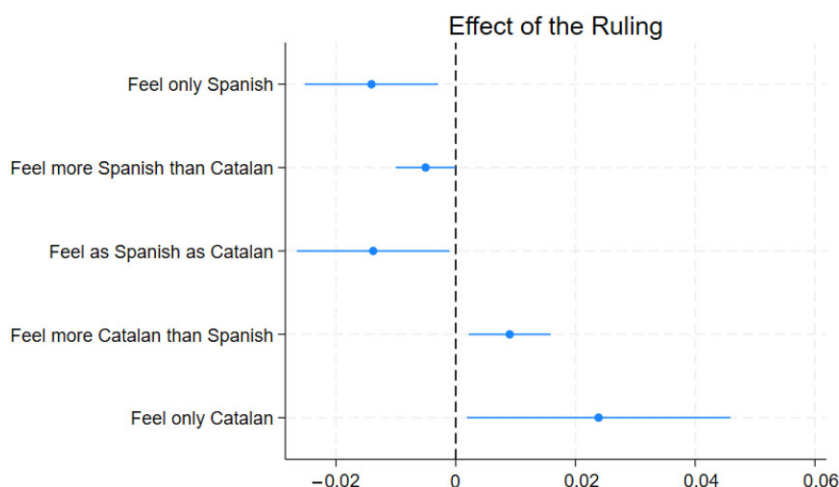


Fig. 4. *Marginal Effects of the Ruling on Each National Self-Identification.*

*Notes:* This figure plots the marginal effect of *Ruling* on the five options for national identification, estimated in column (2) of Table A.8 in Online Appendix C.3.1. 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. The marginal effects are estimated after regressing, with an ordered probit model and using probability weights, *Feeling Catalan* on *Ruling*, all the controls and comarca fixed effects. The list of controls is reported in Online Appendix A.2.1. *Feeling Catalan*: variable taking five values according to which national group the respondent feels they belong to. The variable takes value 1 if the interviewed individual feels only Spanish, 2 if the interviewed individual feels more Spanish than Catalan, 3 if the interviewed individual feels as Spanish as Catalan, 4 if the interviewed individual feels more Catalan than Spanish and 5 if the interviewed individual feels only Catalan. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. SEs are clustered at the province-‘day of interview’ level.

(i) to (iii) decrease in favour of (iv) and especially (v). Self-identification as ‘only Catalan’ increases by 2.3 percentage points, and ‘more Catalan than Spanish’ increases by 0.9 percentage points. In contrast, the Ruling decreases self-identification with ‘only Spanish’, ‘more Spanish than Catalan’ and ‘both Spanish and Catalan alike’ by between 0.5 and 1.4 percentage points. All the marginal effects are statistically significant at a 5% level of significance. In Online Appendix C.3.1, we present additional results of the impact of the Ruling on self-identification (including the ordered probit estimation). More generally, column (1) of Table 5 illustrates that respondents increasingly report self-identifying more as Catalan after the Ruling.<sup>32</sup>

Second, we investigate whether identity ‘polarize[s] ingroup-outgroup conflict along the currently salient dimension’.<sup>33</sup> Polarisation increases if the response about support for more autonomy becomes more different after the Ruling between people who identify more as Catalan and people who identify more as Spanish. In testing this argument, we cannot conduct exactly this heterogeneity analysis using the self-reported identity, as the mediating factor (group

<sup>32</sup> People interviewed after the Ruling had 0.086-SD higher self-identification with the Catalan nation. The SD of the variable *Feeling Catalan* is 1.09.

<sup>33</sup> See page 2373 of Bonomi *et al.* (2021).

Table 5. *Effect of the Ruling and Polarisation on National Identity.*

	Results		Robustness to World Cup		
	Feeling Catalan (1)	More Autonomy (2)	More Autonomy (3)	Feeling Catalan (4)	More Autonomy (5)
Ruling	0.0936** (0.0434)	0.0384 (0.0431)	0.0846* (0.0439)	0.181*** (0.0428)	0.0183 (0.0489)
Catalan Heritage		0.420*** (0.0470)			0.422*** (0.0466)
Ruling × Catalan Heritage		0.221*** (0.0635)			0.220*** (0.0635)
Post-round of 16			0.0226 (0.0553)	−0.0840 (0.0528)	0.0193 (0.0529)
Post-quarterfinal			0.0496 (0.0297)	−0.0680 (0.0766)	0.0197 (0.0385)
Observations	987	960	960	987	960
R <sup>2</sup>	0.38	0.21	0.28	0.38	0.21
Average y	3.46	2.75	2.75	3.46	2.75

*Notes:* *Feeling Catalan*: variable taking five values according to which national group the respondent feels they belong to. The variable takes value 1 if the interviewed individual feels only Spanish, 2 if the interviewed individual feels more Spanish than Catalan, 3 if the interviewed individual feels as Spanish as Catalan, 4 if the interviewed individual feels more Catalan than Spanish and 5 if the interviewed individual 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 the status quo), Autonomous Community (status quo), federal state (more autonomy than the status quo) or independent state, respectively. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. *Catalan Heritage*: dummy taking a value of 1 if the respondent's parents were both born in Catalonia, and 0 if one or both parents were born outside Catalonia. *Post-round of 16*: dummy taking a value of 1 for all observations interviewed in the days after the round-of-sixteen match of Spain against Portugal (29 June 2010 at 8.30 p.m.), and 0 otherwise. *Post-quarterfinal*: dummy taking a value of 1 for all observations interviewed in the days after the quarterfinal match of Spain against Paraguay (3 July 2010 at 8.30 p.m.), and 0 otherwise. All regressions include individual controls and comarca fixed effects. The list of controls in columns (1), (3) and (4) is reported in [Online Appendix A.2.1](#). The list of controls in columns (2) and (5) is reported in [Online Appendix A.2.3](#). *Average y*: mean of the dependent variable. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. Regressions estimated by OLS using probability weights. SEs are clustered at the province-‘day of interview’ level. \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$ .

identification) is endogenous. Instead, we test whether the Ruling polarises preferences for more autonomy for people with different Catalan heritage.

The use of *Catalan Heritage*—measured as having both parents born in Catalonia—is empirically and theoretically justified. First, it is an exogenous variable that can be used to test heterogeneity effects properly. Moreover, it is the variable that predicts the most identification with the Catalan identity (as reported in [Online Appendices C.3.2](#) and [C.3.3](#)). Second, it follows the theoretical explanation of identity formation in which parents pass their identity to their children (Bisin *et al.*, 2011).

The main polarisation result about Catalan autonomy is given in column (2) of Table 5, where we estimate the heterogeneous effect of the Ruling according to Catalan heritage, using the strategy described in Section 4.1. People with both Catalan parents tend to support greater autonomy for Catalonia. Their support increased even further for these people after the Ruling. By contrast, after the Ruling, people without Catalan heritage did not increase their support for more autonomy. Hence, polarisation in the preferred relationship between Catalonia and Spain among people with different Catalan heritage increased after the Ruling.

These results hinge on Catalan heritage. Hence, to ensure that this variable mainly represents an exogenous proxy of identity (instead of other socio-demographics), in [Online Appendix E.8](#), we show that our polarisation effects are robust when controlling for many other heterogeneities.<sup>34</sup>

#### 6.1.1. *Robustness to the 2010 FIFA World Cup*

The only major event during the interview period was the 2010 football World Cup, which Spain won on 11 July. Since football games could influence national identity, as in Depetris-Chauvin *et al.* (2020), we demonstrate that these matches do not drive our results. If the findings of that paper apply to our case then the World Cup could enhance Spanish self-identification at the expense of the Catalan one.<sup>35</sup>

Specifically, the Spanish national team participated in two World Cup matches that could impact our findings: the round of sixteen and the quarterfinals. The semifinal on 7 July is excluded from our analysis since we limit our focus to the first seven days of fieldwork. A detailed overview of the fieldwork and World Cup matches can be found in [Online Appendix Figure A.20](#). It is important to note that all these matches began at 8:30 p.m. CEST. In our restricted sample, we concentrate on interviews conducted before 7 p.m., which means that they took place before the game commenced. As a result, if there was any influence from these matches, it would only affect respondents from the subsequent days.

In columns (3), (4) and (5) of Table 5, we estimate the model in (1), including the dummy variables ‘Post-round of 16’ and ‘Post-quarterfinal’, which are assigned a value of 1 for all days following the respective matches. Column (3) indicates that the effect of the Ruling on support for more autonomy does not change, even when considering the potential influence of the World Cup matches. Column (4) suggests that its impact on *Feeling Catalan* might even be intensified, while column (5) confirms that the polarisation effects remain consistent. Further evidence supporting the fact that our results are not influenced by the World Cup and its potential role in affecting Catalan identity can be found in [Online Appendix E.9](#).

#### 6.2. *Parties and Polarisation*

This section explores whether the Ruling ignited polarisation around the partisan division, another significant cleavage in Catalonia. As the PP appealed the Ruling, we explore whether the Ruling created further divisions in attitudes between PP and non-PP voters. Moreover, in Section 5, we showed that the Ruling increased attitudes toward decentralisation. Consistently, we test whether the Ruling increased the intention to vote for parties more in favour of this stance.

First, similarly to Catalan heritage heterogeneity, having voted for the Popular Party also explains an increase in polarisation. Note that even before the Ruling, PP voters in Catalonia already showed considerably less support for decentralisation than voters of the other Catalan parties.<sup>36</sup> Since vote recall does not change—as shown in [Figure A.21](#) in [Online Appendix E.10](#)—we can investigate how the Ruling intensified the partisan divide around the preferred form of

<sup>34</sup> In particular, with variables that might be collinear with Catalan heritage: sex, civil status, age, education, income, employment status and the respondent’s birthplace.

<sup>35</sup> However, this potential bias could be offset by the significant presence of FC Barcelona players in the Spanish national men’s team.

<sup>36</sup> If we regress support for the regional option on having voted for the PP in the last Catalan election in the previous wave of the survey, we obtain a coefficient of 0.18 (0.015 SE), which means that PP voters were 18% more likely than other voters to support the regional choice. Summary statistics of the preferred institutional relationship between Spain and Catalonia by past vote are presented in [Table A.3](#) in [Online Appendix A.3](#).

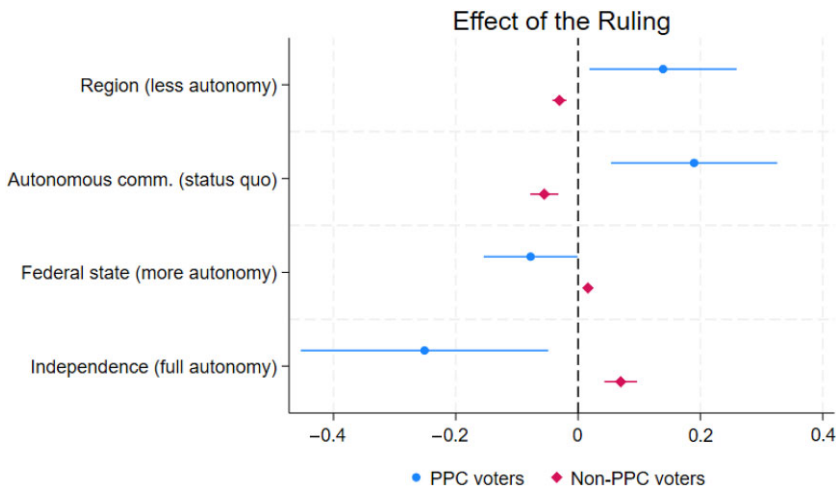


Fig. 5. *Heterogeneities of the Effect of the Ruling on Each Preferred Relationship between Spain and Catalonia According to Past Vote.*

*Notes:* This figure plots the marginal effects of *Ruling* on the four options for the preferred relationship between Spain and Catalonia for people that voted or not for *Partit Popular de Catalunya* (PPC voters), estimated in column (2) of Table A.8 in Online Appendix C.3.1. Each point refers to the estimated coefficient of the effect of *Ruling* on one specific value of the variable *More Autonomy* and each line refers to the 95% confidence interval. Blue line with circle markers refers to PPC voters at the Catalan Parliament elections of 2006, and the red line with rhombus markers for the other voters (*non-PPC voters*).

The marginal effects are estimated after regressing, with an ordered probit model and using probability weights, *More Autonomy* on *Ruling*, *Past vote PPC*, the interaction between *Ruling* and *Past vote PPC*, all the controls and comarca fixed effects. The marginal effect for PPC voters is computed as the sum of the marginal effect of *Ruling* and the marginal effect of *Ruling*  $\times$  *Past vote PPC*. The list of controls is reported in Online Appendix A.2.1. *More Autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the status quo), Autonomous Community (status quo), federal state (more autonomy than the status quo) or independent state, respectively. *Past Vote PPC*: dummy taking a value of 1 if the respondent voted for *Partit Popular de Catalunya* (PPC) at the Catalan Parliament elections of 2006, and taking a value of 0 otherwise. If the interviewed individual could not vote, did not vote or conducted a blank or null vote this variable is coded as missing. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. SEs are clustered at the province-‘day of interview’ level.

organisation. Figure 5 shows the heterogeneous effects of our baseline result by past vote. The figure plots the marginal effects of the Ruling for PP and non-PP voters on each decentralisation option estimated by an ordered probit model. Non-PP voters’ attitudes shifted toward more decentralisation (federal state and independence), while PP voters leaned toward even more centralisation. This implies that the Ruling polarised political attitudes between the voters of the PP and the remaining Catalans. We also show this in column (1) of Table 6, which estimates the heterogeneous effect of the Ruling on the overall support for more autonomy.<sup>37</sup>

Interestingly, we do not observe this cleavage in the backlash in trust in institutions. Following the Ruling, voters of the Popular Party decreased their trust in courts like other Catalans (see Table A.11 in Online Appendix C.4.3). A plausible explanation is that PP voters were disappointed

<sup>37</sup> A discussion of the heterogeneous effect of the Ruling on voters of the remaining parties can be found in Online Appendix C.4.1.

Table 6. *Effect of the Ruling and Polarisation on Voting.*

	More Autonomy	Catalan parties	
	(1)	Future vote (2)	Past vote (3)
Ruling	0.191*** (0.0502)	0.0859*** (0.0242)	0.0582 (0.0382)
Past vote PPC	0.350 (0.307)		
Ruling × Past vote PPC	−0.879** (0.410)		
Observations	650	595	672
R <sup>2</sup>	0.33	0.18	0.12
Average y	2.75	0.52	0.45

*Notes:* *More Autonomy*: variable that takes values from 1 to 4 if the respondent prefers Catalonia to be a region (less autonomy than the status quo), Autonomous Community (status quo), federal state (more autonomy than the status quo) or independent state, respectively. *Future vote Catalan parties*: dummy taking a value of 1 if the respondent 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 a value of 0 if the respondent intends to vote for another party. *Past vote Catalan parties*: dummy taking a value of 1 if the respondent voted for CiU or ERC at the Catalan Parliament elections of 2006, and taking a value of 0 if the respondent voted for another party. *Past Vote PPC*: dummy taking a value of 1 if the respondent voted for *Partit Popular de Catalunya* (PPC) at the Catalan Parliament elections of 2006, and taking a value of 0 otherwise. Voting variables have missing values if the respondent cannot vote, intends not to vote, intends to conduct a blank or null vote, could not vote, did not vote or conducted a blank or null vote. *Ruling*: dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. All regressions include individual controls and comarca fixed effects. The list of controls is reported in [Online Appendix A.2.1](#). *Average y*: mean of the dependent variable. Sample of people interviewed before 7 p.m. and in the first seven days of interviews in the CEO third wave of 2010. Regressions estimated by OLS using probability weights. SEs are clustered at the province-‘day of interview’ level. \*\*\*  $p < .01$ , \*\*  $p < .05$ .

with the Ruling for the opposite reasons to the rest of the Catalans. While the Ruling struck down 12% of the 114 articles appealed, PP supporters might have perceived the Ruling as too lenient, whereas other Catalans might have viewed it as too stringent. This interpretation aligns with the media coverage and political responses that followed the Ruling.<sup>38</sup>

Second, in column (2) of Table 6, we examine the effect of the Ruling on the intention to vote for the two main Catalan nationalist parties—that were more in favour of decentralisation—ERC and CiU. We find that the Ruling increased the likelihood of expressing the intention to vote for these parties by 9 percentage points.<sup>39</sup> One interpretation of this result is that the effect of the Ruling is *demand driven*. That is, voters who increased their support for more autonomy also started endorsing the platform of the parties advocating in favour of more decentralisation.

Alternatively, the effect could be *supply driven*, i.e., driven by a sudden opportunistic change in the strategies of political parties. Several pieces of evidence rule out this hypothesis. First, it is improbable that political parties could credibly and uniformly alter and communicate their strategy overnight. This is particularly notable given that none of the non-secessionist parties

<sup>38</sup> See [Online Appendix C.4.3](#) for additional evidence.

<sup>39</sup> This result implies that people interviewed after the Ruling had a 16% increase in their intention to vote for Catalan nationalist parties. In [Online Appendix C.4.2](#), we break down the partisan results by the individual party, and we show that PSC, the Catalan section of the Socialist Party governing Spain at the time, is the main party losing the intention to vote after the Ruling. To further confirm that our results are not driven by sample imbalance, in column (3) of Table 6, we show no significant differences in past votes for nationalist parties before and after the Ruling. [Online Appendix E.10](#) shows that this non-significant effect is confirmed when we improve the precision of the estimates.



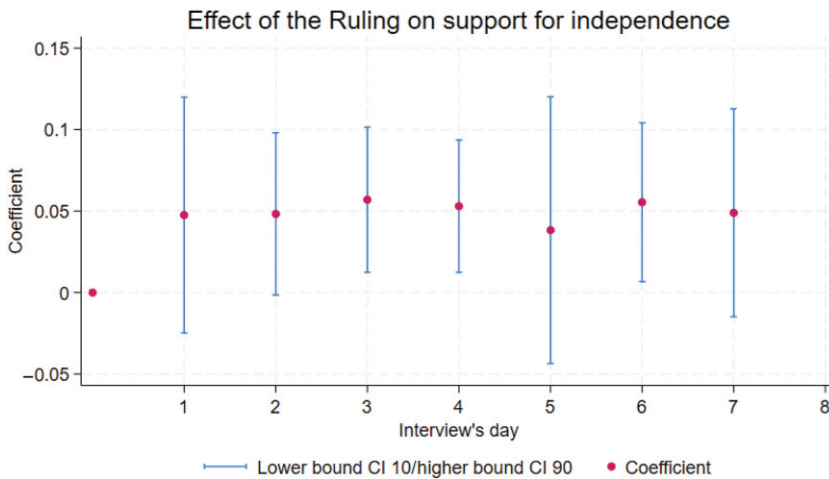


Fig. 6. Event Study: Heterogeneity of the Effect of Ruling on Support for Independence by Day.

*Notes:* The graph reports the estimated coefficient of the effect of *Ruling* interacted with the day of the interview. Each point refers to the estimated coefficient of the effect of *Ruling* on *Independence* for each day and each line refers to the 90% confidence interval. Coefficients are estimated after regressing, by OLS, *Independence* on *Ruling*, the interaction between *Ruling* and the day of the interview, individual controls and comarca fixed effects. The coefficient equals 0 on the day before the ruling took place. The list of controls is reported in [Online Appendix A.2.1](#). Given that the number of interviewed people varies by day, each observation is weighted by the number of observations interviewed in that particular day.

*Independence:* dummy reflecting the respondent's preference for Catalonia to become an independent state. *Ruling:* dummy taking a value of 1 for all observations interviewed after 28 June 2010 at 7 p.m., and 0 otherwise. Sample of people interviewed before 7 p.m. in the first seven days of interviews in the CEO third wave of 2010. SEs are clustered at the province-‘day of interview’ level.

formally embraced the independence cause until 2012.<sup>40</sup> Second, if parties suddenly changed their behaviour, we should observe a larger effect due to greater exposure to the new strategies when we estimate the effect of the Ruling in later days. In Figure 6, the estimate of the effect of the Ruling is similar when estimated on the first day of the interviews or the following days.<sup>41</sup> Third, we investigate another mechanism: the primary public television channel (TV3)—funded by the Catalan Government and alleged supporter of secessionism (Durán, 2018). If it was in charge of these parties' communication strategies, we should observe stronger effects of the Ruling according to the TV3 viewership. We discard this possibility in [Online Appendix C.4.4](#). In this appendix, we also show that individuals whose main sources of information are social media platforms or their friends react similarly to the rest of the population. These results suggest that our estimates of the effect of the Ruling do not seem to be driven by these possible social pressure biases.

<sup>40</sup> As reviewed in [Online Appendix B.3](#), CiU formally transitioned towards secessionism in 2012.

<sup>41</sup> As the number of interview observations for each day varies, we also use as weights the number of people interviewed on a specific day. Day 5 of the interviews is the day with fewer respondents in the sample, as only fifty-six people were interviewed. In [Online Appendix F.1](#), we provide evidence that the effect of the Ruling is persistent, even in posterior waves of the political survey. In [Online Appendix E.3](#), we show additional evidence that the estimated coefficient of the Ruling does not increase as time passes after the survey. We show that, when we have longer windows around the Ruling (by increasing observations in the sample), we do not observe a larger effect of the Ruling.

### 6.3. Long-Term Effects

Multiple events took place after the Ruling. For instance, in the Catalan elections of November 2010, Catalan Nationalist parties notably increased their representation in the Catalan Parliament. In 2012, CiU formally updated its political platform or manifesto into a pro-independence one. In 2015, Catalan nationalist parties framed the Catalan elections as a plebiscite for independence. CiU (centre right) and ERC (left) presented a joint list called *Junts pel Sí*. While these events would prevent us from claiming causal, long-lasting effects of the Ruling, one could argue that it may have been a catalyst.

Accordingly, the Ruling may have influenced the identitarian and partisan reality in Catalonia in the long term. In particular, polarisation around different identitarian traits seems persistent. To show it, in a difference-in-differences setting, we compare observations with different Catalan heritage in waves before and after the Ruling from 2006 to up to one year after the Ruling. In [Online Appendix F.2.1](#), we give more details about this specification. [Table A.31](#) in [Online Appendix F.2.2](#) shows evidence of a long-lasting effect: polarisation maintained one year after the Ruling.

Regarding voting, in [Online Appendix F.3](#), we show that the support for the secessionist coalition *Junts pel Sí* in the 2015 elections may be associated with the Ruling. In the municipalities where secessionist parties were historically stronger, the effect of the Ruling in 2010 is associated with an increase of 0.36 percentage points for this pro-independence coalition in 2015. Then, this suggestive evidence indicates that the Ruling might have also generated electoral polarisation across the municipalities inside Catalonia. Moreover, the coalition won and elected Puigdemont as president of Catalonia, and in 2017, he declared (and suspended) Catalan independence.

## 7. Concluding Remarks

Despite a large body of literature studying the effects of judicial decisions on public opinion (especially US Supreme Court decisions), we are the first to show a simultaneous backlash in political attitudes and trust in institutions. That is, we show that the decision of the Spanish Constitutional Court in 2010 to strike down and curtail some of the articles granting further decentralisation in the Catalan Constitution provoked a 20% increase in support for Catalan independence and a 10% decrease in trust in courts. Moreover, this backlash extends beyond an intensification of political attitudes. The Ruling also made Catalan citizens self-identify more with the Catalan identity than with the Spanish one. Similarly, it also increased their intention to vote for Catalan nationalist parties, supporting further decentralisation or independence. This intensification of political attitudes came with polarisation along identity and voting divisions.

The ruling of the Constitutional Court was released amidst a severe economic crisis. Despite that the crisis is often brought up as an explanation for the increase in secessionism in Catalonia, our analysis suggests that this was not a critical element behind our results. Still, as discussed by Gehring and Schneider (2020), the prosperity of a region may be necessary for having a large support for independence, which is the case of Catalonia.

While our paper pivots around judicial decisions, one might think that a similar backlash could emerge in response to decisions from other branches of government or on other issues. For instance, backlash effects have also been found in the literature on law approvals, for the issues of extending gender rights (Wheaton, 2022) or language prohibition in the United States (Fouka,

2020). However, in the issue of same-sex relationships, Aksoy *et al.* (2020) found legitimization in Europe. Hence, what determines the public reaction to support or oppose the decision?

A plausible explanation is the prior popular endorsement of the decision. We can speculate that backlash can follow if a decision goes against a policy with strong public support. Moreover, if this decision concerns a sensitive topic affecting a distinctive group, these individuals may react homogeneously. Therefore, under these circumstances, the backlash can extend to the existing political cleavage and generate polarisation in citizen's attitudes. For instance, suppose that these groups were defined on an identitarian dimension and perceived a decision as unfavourable to them. In that case, they may strengthen their group identity and solidify their stance on the issue (as in Fouka, 2020 and Dehdari and Gehring, 2022).

Our results complement the existing literature and help organise future policy discussions and research. For instance, regarding the US Supreme Court decision to overturn *Roe vs. Wade*, one could investigate whether specific patterns emerge. For example, will attitudes toward female rights be more extreme? Will the Court's legitimacy decrease? Will these attitudes become more polarised in the liberal/conservative continuum? Building on the earlier logic, we posit that the overruling could produce backlash: it might prompt a shift among citizens unsatisfied with the ruling towards more *pro-choice* views on abortion rights. This can further polarise the American electorate and decrease their trust in national institutions.

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### Online Appendix Replication Package

## References

- Akerlof, G.A. and Kranton, R.E. (2000). 'Economics and identity', *The Quarterly Journal of Economics*, vol. 115(3), pp. 715–53.
- Aksoy, C.G., Carpenter, C.S., De Haas, R. and Tran, K.D. (2020). 'Do laws shape attitudes? Evidence from same-sex relationship recognition policies in Europe', *European Economic Review*, vol. 124(1), 103399.
- Alesina, A. and Spolaore, E. (1997). 'On the number and size of nations', *The Quarterly Journal of Economics*, vol. 112(4), pp. 1027–56.
- Almagro, M. and Andrés-Cerezo, D. (2020). 'The construction of national identities', *Theoretical Economics*, vol. 15(2), pp. 763–810.
- Anderson, M.L. (2008). 'Multiple inference and gender differences in the effects of early intervention: A reevaluation of the abecedarian, Perry preschool, and early training projects', *Journal of the American Statistical Association*, vol. 103(484), pp. 1481–95.
- Ansola-behere, S.D. and White, A. (2020). 'Policy, politics, and public attitudes toward the Supreme Court', *American Politics Research*, vol. 48(3), pp. 365–76.
- Aspachs-Bracons, O., Clots-Figueras, I., Costa-Font, J. and Masella, P. (2008). 'Compulsory language educational policies and identity formation', *Journal of the European Economic Association*, vol. 6(2–3), pp. 434–44.
- Bandiera, O., Mohnen, M., Rasul, I. and Viarengo, M. (2018). 'Nation-building through compulsory schooling during the age of mass migration', *ECONOMIC JOURNAL*, vol. 129(617), pp. 62–109.
- Bartels, B.L. and Johnston, C.D. (2013). 'On the ideological foundations of Supreme Court legitimacy in the American public', *American Journal of Political Science*, vol. 57(1), pp. 184–99.
- Besley, T. and Persson, T. (2021). 'The rise of identity politics: Policy, political organization, and nationalist dynamics', Working paper, LSE.

- Bishin, B.G., Hayes, T.J., Incantalupo, M.B. and Smith, C.A. (2016). 'Opinion backlash and public attitudes: Are political advances in gay rights counterproductive?', *American Journal of Political Science*, vol. 60(3), pp. 625–48.
- Bisin, A., Patacchini, E., Verdier, T. and Zenou, Y. (2011). 'Formation and persistence of oppositional identities', *European Economic Review*, vol. 55(8), pp. 1046–71.
- Bonomi, G., Gennaioli, N. and Tabellini, G. (2021). 'Identity, beliefs, and political conflict', *The Quarterly Journal of Economics*, vol. 136(4), pp. 2371–411.
- CEO. (2010a). 'Baròmetre d'opinió política (BOP). 2a onada 2010', <https://ceo.gencat.cat/es/barometre/detall/index.html?id=2668> (last accessed: 28 March 2022).
- CEO. (2010b). 'Baròmetre d'opinió política (BOP). 3a onada 2010', <https://ceo.gencat.cat/es/barometre/detall/index.html?id=2908> (last accessed: 28 March 2022).
- CEO. (2010c). 'Baròmetre d'opinió política (BOP). 4a onada 2010', <https://ceo.gencat.cat/es/barometre/detall/index.html?id=3068> (last accessed: 28 March 2022).
- CEO. (2013). 'Microdatos fusionados del barómetro. matriz de datos fusionada hasta el 2013 (telefónica)', <https://ceo.gencat.cat/es/barometre/matrius-fusionada-BOP/> (last accessed: 31 October 2017).
- Christenson, D.P. and Glick, D.M. (2015). 'Chief justice Roberts's health care decision disrobed: The microfoundations of the Supreme Court's legitimacy', *American Journal of Political Science*, vol. 59(2), pp. 403–18.
- Clots Figueras, I. and Masella, P. (2013). 'Education, language and identity', *ECONOMIC JOURNAL*, vol. 123(570), pp. F332–57.
- Dehdari, S.H. and Gehring, K. (2022). 'The origins of common identity: Evidence from Alsace-Lorraine', *American Economic Journal: Applied Economics*, vol. 14(1), pp. 261–92.
- Dell, M. and Querubin, P. (2017). 'Nation building through foreign intervention: Evidence from discontinuities in military strategies', *The Quarterly Journal of Economics*, vol. 133(2), pp. 701–64.
- Depetris-Chauvin, E., Durante, R. and Campante, F. (2020). 'Building nations through shared experiences: Evidence from African football', *American Economic Review*, vol. 110(5), pp. 1572–602.
- Desmet, K., Ortuño-Ortín, I. and Özak, Ö. (2022). 'Is secessionism mostly about income or identity? A global analysis of 3,003 subnational regions', Working Paper 30428, National Bureau of Economic Research.
- Durán, I.M. (2018). 'Television and electoral results in Catalonia', *SERIEs*, vol. 9(4), pp. 423–56.
- Fouka, V. (2020). 'Backlash: The unintended effects of language prohibition in us schools after World War I', *The Review of Economic Studies*, vol. 87(1), pp. 204–39.
- Gehring, K. (2021). 'Overcoming history through exit or integration: Deep-rooted sources of support for the European Union', *American Political Science Review*, vol. 115(1), pp. 199–217.
- Gehring, K. (2022). 'Can external threats foster a European Union identity? Evidence from Russia's invasion of Ukraine', *ECONOMIC JOURNAL*, vol. 132(644), pp. 1489–516.
- Gehring, K. and Schneider, S.A. (2020). 'Regional resources and democratic secessionism', *Journal of Public Economics*, vol. 181(4), 104073.
- Guriev, S. and Papaioannou, E. (2022). 'The political economy of populism', *Journal of Economic Literature*, vol. 60(3), pp. 753–832.
- Hirschl, R. (2008). 'The judicialization of mega-politics and the rise of political courts', *Annual Review of Political Science*, vol. 11(1), pp. 93–118.
- Hoekstra, V.J. (2000). 'The Supreme Court and local public opinion', *American Political Science Review*, vol. 94(1), pp. 89–100.
- Hoekstra, V.J. (2003). *Public Reaction to Supreme Court Decisions*, Cambridge: Cambridge University Press.
- Mondak, J.J. and Smithey, S.I. (1997). 'The dynamics of public support for the Supreme Court', *The Journal of Politics*, vol. 59(4), pp. 1114–42.
- Muñoz, J., Falcó-Gimeno, A. and Hernández, E. (2020). 'Unexpected event during survey design: Promise and pitfalls for causal inference', *Political Analysis*, vol. 28(2), pp. 186–206.
- Nelson, M.J. and Tucker, P.D. (2021). 'The stability and durability of the US Supreme Court's legitimacy', *The Journal of Politics*, vol. 83(2), pp. 767–71.
- Oster, E. (2019). 'Unobservable selection and coefficient stability: Theory and evidence', *Journal of Business & Economic Statistics*, vol. 37(2), pp. 187–204.
- Pietersen, N. and Chatziathanasiou, K. (2021). 'Primacy's twilight? On the legal consequences of the ruling of the federal constitutional court of 5 May 2020 for the primacy of EU law', European Parliament, AFCE Committee, Policy Department for Citizens' Rights and Constitutional Affairs.
- Shayo, M. (2009). 'A model of social identity with an application to political economy: Nation, class, and redistribution', *American Political Science Review*, vol. 103(2), pp. 147–74.
- Shayo, M. (2020). 'Social identity and economic policy', *Annual Review of Economics*, vol. 12(1), pp. 355–89.
- Ura, J.D. (2014). 'Backlash and legitimization: Macro political responses to Supreme Court decisions', *American Journal of Political Science*, vol. 58(1), pp. 110–26.
- Ura, J.D. and Wohlfarth, P.C. (2010). '"An appeal to the people": Public opinion and congressional support for the Supreme Court', *The Journal of Politics*, vol. 72(4), pp. 939–56.
- Wheaton, B. (2022). 'Laws, beliefs, and backlash', Working paper, UCLA.