

**Online Appendix for:**  
**‘Affective Polarisation in Times of Political Instability and Conflict. Spain from a  
Comparative Perspective’**

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**Content:**

- A. Timing of the E-DEM panel waves and related political events**
- B. Operationalisation of affective polarisation**
- C. Operationalisation of ideological polarisation**
- D. Aggregate measures of affective polarisation**
- E. Description of additional variables used in the article from the E-DEM dataset**
- F. Weights (for the affective and ideological polarisation indices)**
- G. Additional results**

**A. Timing of the E-DEM panel waves and related political events**

**Table 1A.** Timing of the waves and related major political events in Spain

<b>Wave</b>	<b>Begin</b>	<b>End</b>	<b>Days</b>	<b>Gap</b>	<b>Major political events in Spain</b>
Wave 1	25/10/2018	07/11/2018	14	n.a.	Andalusian regional elections (2/12/2018)
Wave 2	12/02/2019	19/02/2019	8	97	Formation of the Andalusian regional government (16/01/2019)
Wave 3	23/04/2019	26/04/2019	4	63	Spanish general elections (28/04/2019)
Wave 4	17/05/2019	24/05/2019	8	21	Spanish local, regional, and European elections (26/05/2019)
All	25/10/2018	24/05/2019	34	181	

*Source:* own elaboration.

*Notes:* Days = The number of days during which survey responses were collected. Gap = time elapsed, in days, from the last day of data collection of the previous wave to the first day of response collection of the current wave; n.a.: not applicable, since in the first wave there is no previous wave with respect to which a time gap may be calculated.

## B. Operationalisation of affective polarisation

In this appendix section we explain the different affective polarisation indices we have created using the E-DEM dataset. We have created many individual indicators of affective polarisation that depart from the initial work by Wagner (2020). These are based on the group/identity-based in-groups and out-groups sentiments/trust for the following dimensions: parties, voters, leaders, and territorial identities. All indicators based on identities with parties, their voters and leaders are weighted. The fundamental reason for weighting is that the relevance of a party (for the party system and the formation of government) is strongly related to its size, so that it should matter more if an individual strongly dislikes large parties (or the leaders/voters of large parties) rather than small and less significant ones.

### *Partisan Affective Polarisation*

Based on Wagner (2020), we have measured affective polarisation as the weighted spread of like–dislike scores towards political parties/leaders/voters. The general formula is as follows:

$$\text{WAPS}_i = \sqrt{\sum_{o=1}^o v_o * (\text{Like}_{io} - \overline{\text{Like}}_i)^2} \quad (1)$$

Here,  $o$  is the evaluated political object (party/leader/voters),  $i$  the individual respondent,  $\overline{\text{Like}}_i$  is the respondent's average like–dislike score,  $\text{Like}_{io}$  is the like–dislike score assigned to each object  $o$  by individual respondent  $i$ , and  $v_o$  is the size of each party/leader's party/voters' party measured as the normalised proportion of votes each party received.<sup>1</sup> The average like–dislike score is also weighted by party size:

$$\overline{\text{Like}}_i = \sum_{o=1}^o (v_o * \text{Like}_{io})$$

This index has been measured for parties, leaders and voters' groups. Concretely, the five main national parties and their leaders and voters were selected, together with the three main Catalan/Basque regional parties and leaders: Partido Socialista Obrero Español (PSOE) - Pedro Sánchez; Partido Popular (PP) - Pablo Casado; Ciudadanos (Cs) - Albert Rivera; Unidas Podemos (UP) - Pablo Iglesias; Vox - Santiago Abascal; Esquerra Republicana de Catalunya (ERC) - Oriol Junqueras; Junts per Catalunya (JxCAT) – Carles Puigdemont; and Partido Nacionalista Vasco (EAJ-PNV) - Iñigo Urkullu.

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<sup>1</sup> For more details about the weights, see section 'Weights'.

Feelings towards parties, leaders and voters have been operationalised using feeling thermometer scales, which have been rescaled to range from 0 to 10, where 0 means ‘very unfavourable feelings’ and 10 means ‘very favourable feelings’. For voters, we have only used the feeling thermometer scores towards the voters of the five main national parties due to data limitations.

It is relevant to notice that the like–dislike feelings towards parties are only available in the third and fourth panel waves of the survey, and that the feeling thermometer scales towards Vox’s leaders and voters are not included in the first wave of the survey. Finally, these indices are calculated for all respondents who declare a level of affect for at least two parties/leaders/voters’ groups.

Moreover, we have also calculated the index of affective polarisation as the weighted spread of like–dislike scores towards leaders using the Comparative National Elections Project (CNEP) and the Comparative Study of Electoral Systems (CSES). For this last dataset, we have also calculated the weighted spread of like–dislike scores towards political parties for the available Southern European country/elections. Concretely, we use like–dislike scales towards leaders (and parties) ranging from 0 to 10.

### *Territorial Affective Polarisation*

The E-DEM dataset contains feelings (0–100) and trust (0–10) scales towards each of four different Spanish territorial groups: Basques, Catalans, Andalusians and Madrileans. We have built combined scales measuring sentiments towards each of these four groups: first, we have divided feelings by 10 to obtain a 0–10 scale; and, second, we have added up the two items (feelings and trust) and divided the resulting scale by two. The combined scales range from 0 (very negative sentiments) to 10 (very positive sentiments). This has been done for each panel wave. These sentiment scores have been used to build different indices measuring territorial affective polarisation.

First, we measured territorial affective polarisation as the mean distance from respondents’ own territorial group (or in-group), based on Wagner (2020)’s index for feelings towards parties. This index captures how much an individual on average dislikes/distrust other territorial groups compared to his/her territorial group. The following is the general formula:

$$APDT_i = \sum_{t=1}^t (Sentiments_{in-group,i} - Sentiments_{it}) / n_t \quad (2)$$

Here,  $t$  is the out-territorial group,  $i$  the individual respondent,  $\text{Sentiments}_{\text{in-group},i}$  is the sentiment score assigned to the in-territorial group,  $\text{Sentiments}_{it}$  is the sentiment score assigned to each out-territorial group  $t$  by individual respondent  $i$ , and  $n_t$  is the number of out-territorial groups.

For this index, we defined three territorial groups: Catalans, Basques and the rest of respondents. As explained above, in the E-DEM data set there are specific feeling and trust scales for Catalans and Basques, which constitute the two territorial groups with a stronger particular national/regional identity. Then, we assume that the sentiments towards the people from the other regions of Spain (who are not Catalans or Basques) are approximately captured by a combined scale of feelings/trust towards Madrileans and Andalusians. That is, in the other regions the core elements of the dominant Spanish national identity are identified with Castile and Andalusia. We know that this assumption can be problematic for some regions with relatively strong national/regional identities (such as Galicia, Navarra or Valencian Community), although these are clearly weaker compared to those in Catalonia and the Basque Country.

For Catalans, sentiments towards the in-group are measured by sentiment scores to Catalans, while the sentiments towards the out-group are captured by the combined scale of sentiment scores to Madrileans and Andalusians, two groups that represent the dominant Spanish national identity. The same applies for Basques. While the sentiments towards the in-group are measured by affect/trust scores to Basques, the sentiments towards the out-group are measured by the combined scale of affect/trust to Madrileans and Andalusians. Finally, for the rest of respondents (those who are not Catalans or Basques), the sentiments towards the in-group are captured by the affect/trust scores to Madrileans and Andalusians, while the sentiments towards the out-groups are captured by the sentiment scores to Catalans and Basques.

The index is calculated for all respondents who declare a level of affect or trust for their in-territorial group and, at least, one territorial out-group. The APDT index ranges from -10 to 10. A score above 0 (positive score) means that the respondent has more positive sentiments towards his/her in-territorial group than towards the out-territorial groups; a score equal to 0 means that the respondent has the same sentiments towards the in- and the out-territorial groups; and a score below 0 (negative score) means that the respondent has more positive sentiments towards the out-territorial groups than towards his/her in-territorial group.

Second, we measured the same mean distance index but for two pairs of territorial groups: Catalans vis-à-vis the others and Basques vis-à-vis the others. The logic is to measure the distance in sentiments between each territorial group with a particular national/regional identity (Catalans/Basques) and the rest of respondents (those who are not Catalans/Basques).

Regarding the mean distance index between Catalans and non-Catalans, affect/trust scores to Catalans measure the sentiments towards the in-group for the Catalans and the sentiments towards the out-group for the rest of respondents. The sentiments towards the out-territorial groups of the Catalans are captured by the combined scale of sentiments to Madrileans and Andalusians; the sentiments towards the in-territorial group of those who are not Catalans or Basques are measured by the combined scale of sentiments towards Madrileans and Andalusians; and, for the Basques, the sentiments towards the in-territorial group are measured by sentiment scores to Basques.

The same logic is applied to the mean distance index between Basques and the others (not Basques). Sentiment scores to Basques capture the sentiments towards the in-group for the Basque people and the sentiments towards the out-group for the rest of respondents. The sentiments towards the out-territorial groups of Basques are measured by the combined scale of sentiments to Madrileans and Andalusians; the sentiments towards the in-territorial group of those who are not Basques or Catalans are captured by the combined scale of sentiments to Madrileans and Andalusians; and, for the Catalans, the sentiments towards the in-territorial group are measured by affect/trust scores to Catalans. These indices for pairs of territorial groups also range from -10 to 10.

### **C. Operationalisation of ideological polarisation**

We have also calculated two measures of ideological polarisation: weighted perceived ideological polarisation and ideological extremism. These measures have been created for the E-DEM dataset and the *Centro de Investigaciones Sociológicas* (CIS)' studies no. 3226, 3238, 3247, 3257 and 3267.

#### *Weighted Perceived Ideological Polarisation*

The first measure is the individual's weighted perceptions of ideological polarisation among political parties. The scales measuring the ideological position of parties range from 0 to 10 in the E-DEM dataset and from 1 to 10 in the CIS dataset. However, we have rescaled the latter to range from 0 to 10 as well. The formula is as follows:

$$WPIP_i = \sqrt{\sum_{p=1}^p v_p * (IdPosition_{ip} - \overline{IdPosition}_i)^2} \quad (3)$$

Here,  $p$  is the political party,  $i$  is the individual respondent,  $IdPosition_{ip}$  is the left–right position of party  $p$  assigned by respondent  $i$ ,  $\overline{IdPosition}_i$  is the respondent’s average ideological position of political parties, and  $v_p$  is the size of each party, measured as the normalized proportion of votes that each selected party received<sup>2</sup>. The average ideological position of political parties is also weighted by party size:

$$\overline{IdPosition}_i = \sum_{p=1}^p (v_p * IdPosition_{ip})$$

The index of the E-DEM survey includes the ideological position of the five main Spanish national parties (PSOE, PP, Cs, UP and Vox), together with the position of the three main Catalan/Basque regional parties (ERC, JxCAT and EAJ-PNV). The index of the CIS only includes the five national parties due to data limitations.

Notably, these ideological variables are not available for the fourth wave of the E-DEM panel survey. Further, the ideological position of Vox is also not available in the first wave. Finally, this index is calculated for all respondents who attribute an ideological position to at least two parties.

### *Ideological Extremism*

The second measure is simply the absolute difference between the respondent’s self-ideological position and the country-wave/study average ideology. The scale measuring the respondent self-ideological position ranges from 0 to 10 in the E-DEM dataset. In the CIS dataset, the scale originally ranges from 1 to 10; however, we have rescaled it to range from 0 to 10 as well. The formula of the index is as follows:

$$IE_i = \sqrt{(Ideol_i - \overline{Ideol})^2} \quad (4)$$

Here,  $i$  is the individual respondent,  $Ideol_i$  is the reported self-ideological position of respondent  $i$ , and  $\overline{Ideol}$  is the country-wave/study average ideology of respondents.

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<sup>2</sup> For more details about the weights, see the section ‘Weights’.

#### D. Aggregate measures of affective polarisation

We have calculated aggregate measures of affective polarisation using feelings about leaders for the country/elections included in the CNEP dataset (and the Southern European countries included in the CSES that do not appear in the CNEP) as well as for different Spanish general elections from 1993 to 2019 (using the CNEP, CSES and E-DEM datasets).

Following Reiljan (2020) and Gidron, Adams & Horne (2020), we first built a weighted out-leaders evaluation measure in two steps. First, we computed, for each leader supporters' group, the weighted mean evaluation of all out-leaders in the system:

$$\text{Out-leaders dislike}_A = \sum_{i=B}^K [(Dislike_i) * (Vote_i / (1 - Vote_A))] \quad (5)$$

Here, *Dislike* denotes a reversed thermometer scale, so that it goes from positive to negative evaluations of party leaders; *Dislike<sub>i</sub>* denotes the thermometer ratings that supporters of party leader A assign to party leaders B, C..., K; and *Vote* denotes the proportion of votes received by the party of each leader in the current election.

Then, we computed the overall intensity of out-leaders dislike across all the leader supporters' groups in the system:

$$\text{Overall Out-leaders dislike} = \sum_{i=A}^K (\text{Out\_leaders dislike}_i) * (Vote_i) \quad (6)$$

Second, we calculated the overall weighted in-leader liking measure:

$$\text{Overall In-leader liking} = \sum_{i=A}^K (\text{In\_leader liking}_i) * (Vote_i) \quad (7)$$

Finally, we calculated the In-leader liking versus Out-leaders liking (reversed out-leader dislike) differential, obtaining an aggregate index of affective polarisation. This index, therefore, measures the average divergence of affective evaluations towards party leaders between in- and out-leaders, weighted by the proportion of votes received by the parties of each leader.

Three different datasets were used to calculate these aggregate measures for eight different Spanish general elections from 1993 to 2019: the CSES, from which we have selected the 1996, 2000 and 2008 Spanish elections; the CNEP, from which we have obtained the 1993, 2004, 2011 and 2015 elections; and the third wave of the E-DEM panel dataset, which refers to the general elections held in April 2019.

A crucial point here is the definition of the different groups of leader supporters. Instead of using party identification to define the groups (as it is done by Reiljan (2020) and Gidron, Adams & Horne (2020)), we constructed them based on the respondent's most-liked leader (following Wagner 2020). First, each respondent was classified as a supporter of a

concrete party leader based on his/her preferred party leader (the leader with a highest feeling thermometer rating). Then, for those respondents who assign their highest rating to more than one leader, we identified which of these party leaders respondents feel closest to by using their reported party identification. Then, for those who do not identify with any of these parties, we classified them using vote choice in the current national elections. In the case of the E-DEM panel, for those respondents who do not report the vote for any of these parties, we have taken advantage of the probabilities to vote (PTVs) scales to calculate, for each of these respondents, the party with a higher PTV. All respondents who, despite these efforts, could not be classified into a particular group were removed from consideration.

#### **E. Description of additional variables used in the article from the E-DEM dataset**

*Feelings towards Immigrants.* Thermometer feelings towards immigrants, ranging from 0 (unfavourable feelings) to 100 (favourable feelings).

*Feelings towards Refugees.* Thermometer feelings towards refugees, ranging from 0 (unfavourable feelings) to 100 (favourable feelings).

*Feelings towards People from Other Religions.* Thermometer feelings towards people from other religions, ranging from 0 (unfavourable feelings) to 100 (favourable feelings).

*Left-Right Scale.* Respondent ideological self-position, ranging from 0 (left) to 10 (right).

*General Economic situation.* Level of satisfaction with the general economic situation of Spain, ranging from 0 (completely unsatisfied) to 10 (completely satisfied).

*Situation of Corruption.* Qualification of the situation in Spain with respect to corruption, ranging from 0 (very bad) to 10 (very good).

*Personal Economic Uncertainty Index.* This index is obtained through the average of four items that measure the respondent's concerns about: 1) bills; 2) reducing lifestyle; 3) getting a job; and 4) loans and mortgages. Each item contains four categories: 0) not at all concerned; 1) barely concerned; 2) quite concerned; and 3) very much concerned.

*Subjective Well-being.* Feelings towards respondent's present household income, with four categories: 1) living comfortably on present income; 2) coping on present income; 3) finding it difficult on present income; and 4) finding it very difficult on present income.

*Opinion on Government Decentralisation.* Opinion on government decentralization, ranging from 0 (the Spanish Government should regain its powers) to 10 (the Autonomous Communities should be able to legislate on major issues in citizens' daily lives).

*Opinion on Immigration.* A scale composed by two items: opinion on the desirable number of immigrants in Spain, ranging from 0 (immigration should be kept to a minimum) to 10 (the arrival of the largest number of immigrants should be allowed); and opinion on cultural assimilation of migrants, ranging from 0 (they have to adapt to the customs of Spain) to 10 (they should be able to keep their customs). The items were added up and the resulting scale was divided by two.

*Opinion on Socio-Economic Issues.* A scale comprising three items: opinion on the level of fairness of the current distribution of income and wealth in Spain, ranging from 0 (wealth is fairly distributed) to 10 (wealth should be redistributed more fairly); opinion on provision of public services, ranging from 0 (they should be carried out by private companies) to 10 (they should be carried out by public institutions); and opinion on state intervention in the economy, ranging from 0 (private initiative is the best way) to 10 (state intervention is the best way). The items have been added up and the resulting scale has been divided by three.

*Opinion on Socio-Cultural Issues.* A scale comprising three items: opinion on women's abortion rights, ranging from 0 (women should not have abortion rights) to 10 (women should have abortion rights); opinion on women working, ranging from 0 (she should be prepared to quit her job for the sake of her family) to 10 (she should be able to work); and opinion on same-sex marriages, ranging from 0 (they should be forbidden by law) to 10 (they should be allowed by law). The items have been added up and the resulting scale has been divided by three.

*Extremism on Decentralisation.* An index calculated in the same way as Ideological Extremism (4) using the scale of Opinion on Government Decentralisation.

*Extremism on Immigration.* An index calculated in the same way as Ideological Extremism (4) using the scale of Opinion on Immigration.

*Extremism on Socio-Economic Issues.* An index calculated in the same way as Ideological Extremism (4) using the scale of Opinion on Socio-Economic Issues.

*Extremism on Socio-Cultural Issues.* An index calculated in the same way as Ideological Extremism (4) using the scale of Opinion on Socio-Cultural Issues.

## F. Weights (for the affective and ideological polarisation indices)

### *E-DEM*

For the **first two waves** of the E-DEM dataset, we have weighted each voters' group / party leader / party by the weighted mean voting intention estimate of each party. Concretely, we have proceeded as follows:

- 1- We have used the list of electoral polls for the April 2019 Spanish general elections recollected by the Wikipedia: [https://en.wikipedia.org/wiki/Opinion\\_polling\\_for\\_the\\_April\\_2019\\_Spanish\\_general\\_election#cite\\_note-8](https://en.wikipedia.org/wiki/Opinion_polling_for_the_April_2019_Spanish_general_election#cite_note-8)
- 2- We have considered all the electoral polls performed 90 days before the first day of the wave's fieldwork. For example, the first wave was performed between 25 October 2018 and 7 November 2018; therefore, we have considered all the electoral polls which last day of fieldwork was conducted between 27 July 2018 and 25 October 2018.
- 3- We have calculated the mean voting intention estimate of each relevant party, weighted by three different factors (this is a free adaptation of the general rules described in El País: <https://elpais.com/especiales/2019/elecciones-generales/encuestas-electorales/>):
  - a. **Weights by date:** We assigned more weight to the most recent polls by applying the following exponential formula:  
Date-weight =  $1.01228161^t$   
where t is the number of days of the considered period (that is, t goes from 0 to 90; in the first wave, t=0 is 27 July 2018 and t=90 is 25 October 2018).  
According to the formula, the voting intention in a poll conducted at t=0 is multiplied by 1, while the voting intention in a poll conducted at t=90 is multiplied by 3.
  - b. **Weights by repeated polls:** We weighted less the repeated polls from the same polling firm. Concretely, the most recent poll of each firm is multiplied by 1, while the rest of polls from the same firm are multiplied by 0.6.
  - c. **Weights by sample size:** The polls with a higher sample size receive more weight, though follow a decreasing trend. We have determined two thresholds, based on the following formula (López-Roldán & Fachelli, p. 22):  
$$n = (z^2 \times P \times Q) / (e^2)$$

Here,  $n$  is the sample size,  $z$  is the number of deviation units that implies the adopted confidence level,  $P$  is the proportion of individuals who have a given characteristic,  $Q$  is the proportion of individuals who do not have this characteristic, and  $e$  is the sampling error.

Assuming a confidence level of 95% ( $z=1.96$ ) and a situation of maximum indeterminacy ( $P=Q=50\%$ ), we have calculated  $n$  if  $e=3\%$  and  $e=2\%$ :

$$n = (1.96^2 \times 50 \times 50)/(3^2) = 1067.11$$

$$n = (1.96^2 \times 50 \times 50)/(2^2) = 2401$$

Given that the polls that have 1,067 respondents or fewer are multiplied by 0.6; the polls that have between 1,068 and 2,400 respondents are multiplied by 1; and those that have 2,401 respondents or more are multiplied by 1.2. The polls that have an unknown sample size are multiplied by 0.6.

Finally, the total weights are calculated: Total weights = weights by date x weights by repeated polls x weights by sample size.

Concerning the **last two waves**, and given that the third wave was performed a few days before the general elections and the fourth was conducted a few days after the elections, we have simply used the results of the elections as the weights of each party, voters' group and party leader. That is, we have considered that the electoral results are the most reliable picture of the real equilibrium of forces between parties at the time the third and fourth waves were conducted.

### *CIS*

For the first two selected CIS studies, we weighted each party by its weighted mean voting intention estimate. Concretely, we proceeded in the same way as indicated previously:

- 1- We used the list of electoral polls for the April 2019 Spanish general elections recollected by the Wikipedia.
- 2- We considered all the electoral polls performed 90 days before the first day of the study's fieldwork.
- 3- We calculated the mean voting intention estimate of each relevant party, weighted by the same three different factors described for the E-DEM dataset:
  - a. **Weights by date**
  - b. **Weights by repeated polls**
  - c. **Weights by sample size**

Finally, the total weights were calculated: Total weights = weights by date x weights by repeated polls x weights by sample size.

For the selected fourth CIS study (07/2019), we selected the polls for November 2019 general elections ([https://en.wikipedia.org/wiki/Opinion\\_polling\\_for\\_the\\_November\\_2019\\_Spanish\\_general\\_election#cite\\_note-176](https://en.wikipedia.org/wiki/Opinion_polling_for_the_November_2019_Spanish_general_election#cite_note-176)) performed between the first day of the study's fieldwork (1 July 2019) and the previous general elections (28 April 2019). The polls were weighted as described previously, and the electoral results of the Generals Elections were included in the calculus with a weight of 5. In this way, we 'updated' the results of the elections in April with the polls performed during the following two months.

Concerning the selected third (05/2019) and fifth CIS studies (11/2019), and given that they were performed, respectively, few days after the April general elections and few days before the November general elections, we simply used the results of the elections as the weights of each party.

#### *CNEP/CSES*

Given that the CNEP and CSES datasets comprise different national post-electoral surveys, we simply used the results of the current national elections as the weights of each party.

## G. Additional results

**Table 2A.** Comparative levels of affective polarisation

Country/election (ranked by levels of polarisation)	Affective polarisation (country mean)	Affective polarisation aggregate measure
Russia 2016	1.30	2.84
Indonesia 2014	1.35	2.52
Hong Kong 1998	1.42	3.55
Argentina 2007	1.62	3.27
<b>Spain 2000</b>	1.68*(1.88*)	3.76*
<b>Portugal 2019</b>	1.72*(1.73*)	3.85*
<b>Spain 2011</b>	1.72	3.89
<b>Spain 2004</b>	1.82(2.36*)	3.82
Taiwan 2016	1.84	3.76
Mexico 2012	1.87	3.78
Indonesia 2019	1.91	2.74
Colombia 2014	1.95	4.27
<b>Greece 2009</b>	1.97*(2.26*)	3.65*
<b>Portugal 2002</b>	1.98*(2.03*)	4.35*
Taiwan 2004	1.99	3.68
<b>Greece 2015<sub>b</sub></b>	1.99*(2.12*)	4.45*
<b>Italy 2013</b>	2.07	4.25
South Africa 2019	2.10	4.26
South Africa 2004	2.15	5.20
Indonesia 2009	2.17	3.54
<b>Spain 2008</b>	2.20*(2.28*)	4.73*
Chile 2017	2.22	5.06
Germany 2017	2.25	4.19
<b>Greece 2012</b>	2.26*(2.32*)	4.99*
South Africa 2014	2.29	5.10
<b>Spain 1996</b>	2.30*(2.28*)	4.65*
<b>Spain 1993</b>	2.31	4.72
<b>Portugal 2009</b>	2.31*(2.33*)	4.74*
Chile 1993	2.33	3.85
<b>Italy 2018</b>	2.33*(2.44*)	4.77*
United States 1992	2.35	4.39
<b>Portugal 2005</b>	2.36(2.39*)	4.69
<b>Italy 1996</b>	2.41	4.19
<b>Portugal 2015</b>	2.43(2.48*)	5.38
<b>Greece 1996</b>	2.44	5.14
<b>Spain 2015</b>	2.44	5.05
Mexico 2018	2.47	4.55
South Africa 2009	2.50	5.78
<b>Italy 2006</b>	2.51(1.91*)	4.50
Mexico 2006	2.63	5.19
Ukraine 2019	2.64	5.01
Colombia 2018	2.64	4.52
Kenya 2013	2.65	5.28
<b>Turkey 2014</b>	2.67	5.45
Bulgaria 1996	2.68	5.22
<b>Greece 2004</b>	2.68	5.29
Dominican Rep 2010	2.68	5.33
United Kingdom 2017	2.70	5.36
Hungary 1998	2.72	4.77
Uruguay 2004	2.80	5.18
<b>Greece 2015<sub>a</sub></b>	2.82(2.60*)	5.19

France 2017	2.88	5.64
Hungary 2006	2.88	5.69
United States 2004	3.00	6.30
United States 2016	3.01	6.91
United States 2012	3.07	6.41
<b>Turkey 2015</b>	3.08*(3.21*)	6.79*
<b>Turkey 2018</b>	3.09*(3.08*)	5.88*
<b>Turkey 2011</b>	3.16*(3.15*)	6.71*
Mozambique 2004	3.31	6.45
United States 2020	3.40	6.91
<hr/>		
<b>Total</b>	2.37	4.78

**Sources:** CNEP and CSES datasets.

**Notes:**

The numbers in parentheses in the first Column are the affective polarisation computed by party feelings coming from the CSES; the numbers not in parentheses refers to affective polarisation regarding leaders.

\* The source is the CSES dataset.

<sup>a</sup> For the General Greek Elections in January .

<sup>b</sup> For the General Greek Elections in September.

**Table 3A.** Average within individual change in territorial affective polarisation in Spain, December 2018–May 2019

	<b>Polarisation Catalans vs. Others</b>
<b>Total Average</b>	-0.090
<b>By waves</b>	
<b>October 2018-February 2019</b>	-0.252
<b>February 2019-April 2019</b>	-0.013
<b>April 2019-May 2019</b>	-0.006

**Source:** E-DEM panel dataset.

**Table 4A.** Factor loadings for the affective polarisation indices in Spain, February and March 2019 (Varimax Rotated)\*

	February 2019 (2 Wave)			April 2019 (3 Wave)		
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
<b>Polarisation Variables</b>						
<b>WAPS Party</b>		n.i.		0.853		
<b>WAPS Leaders</b>		0.842		0.872		
<b>WAPS Voters</b>		0.850		0.833		
<b>Catalans vs. others</b>			0.883			0.887
<b>Basques vs. others</b>			0.901			0.913
<b>Feelings towards Immigrants</b>	0.892				0.890	
<b>Feelings towards Refugees</b>	0.880				0.883	
<b>Feelings towards people from other religions</b>	0.700				0.707	
<b>Perceived Ideological Polarisation</b>		0.520		0.538		
<b>Ideological Extremism</b>		0.628		0.552		
<b>Chi<sup>2</sup></b>		4980.53***			6187.61***	
<b>N</b>		1765			1599	

Source: E-DEM dataset, waves 2 and 3.

Notes: \*Principal-Component Factors.  
Only loadings above 0.3 are displayed.

**Table 5A.** Predictors of affective polarisation regarding leaders (double-way fixed effects regressions)

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
Perceived Ideological Polarisation	0.103*** (0.024)	-	0.097*** (0.024)
Ideological Extremism	0.080*** (0.017)	-	0.077*** (0.017)
Territorial Affective Polarisation: Catalans vs. others	0.021** (0.008)	-	0.019* (0.008)
Left–Right Scale	-0.002 (0.014)	-	-0.002 (0.014)
General Economic Situation	-0.010 (0.009)	-0.012 (0.009)	-0.009 (0.009)
Situation of Corruption	-0.009 (0.009)	-0.008 (0.009)	-0.007 (0.009)
Personal Economic Uncertainty Index	0.016 (0.035)	0.014 (0.035)	0.012 (0.035)
Subjective Well-being	0.020 (0.029)	0.009 (0.030)	0.017 (0.029)
Opinion on Government Decentralisation	-	-0.003 (0.007)	-0.002 (0.007)
Opinion on Immigration	-	-0.021+ (0.012)	-0.019 (0.012)
Opinion on Socio-Economic Issues	-	0.019+ (0.011)	0.016 (0.011)
Opinion on Socio-Cultural Issues	-	0.022 (0.019)	0.018 (0.019)
Extremism on Decentralisation	-	0.017 (0.011)	0.012 (0.011)
Extremism on Immigration	-	0.031* (0.014)	0.026+ (0.013)
Extremism on Socio-Economic Issues	-	0.030+ (0.016)	0.025 (0.016)
Extremism on Socio-Cultural Issues	-	-0.005 (0.027)	-0.002 (0.026)
February 2019	-0.036 (0.023)	-0.021 (0.024)	-0.028 (0.024)
April 2019	0.151*** (0.026)	0.190*** (0.028)	0.167*** (0.028)
Intercept	1.778*** (0.126)	1.916*** (0.227)	1.493*** (0.246)
Overall R <sup>2</sup>	0.131	0.039	0.144
Sigma u	1.060	1.103	1.050
Sigma e	0.689	0.694	0.688

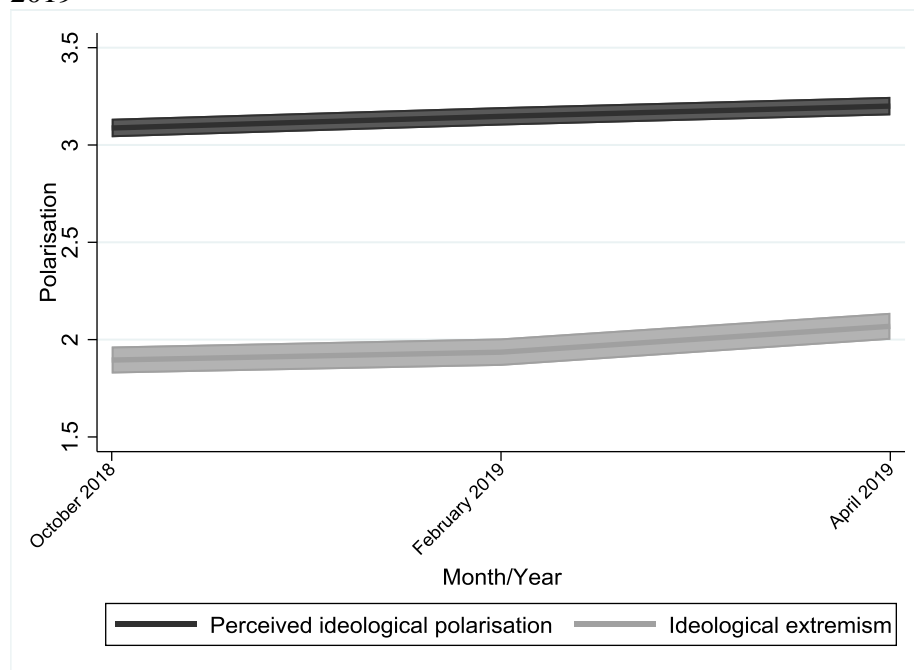
Rho	0.703	0.716	0.700
Observations per group	3	3	3
<i>N</i>	5733	5733	5733

Source: E-DEM dataset, waves 1, 2 and 3.

Notes: Robust standard errors in parentheses.

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

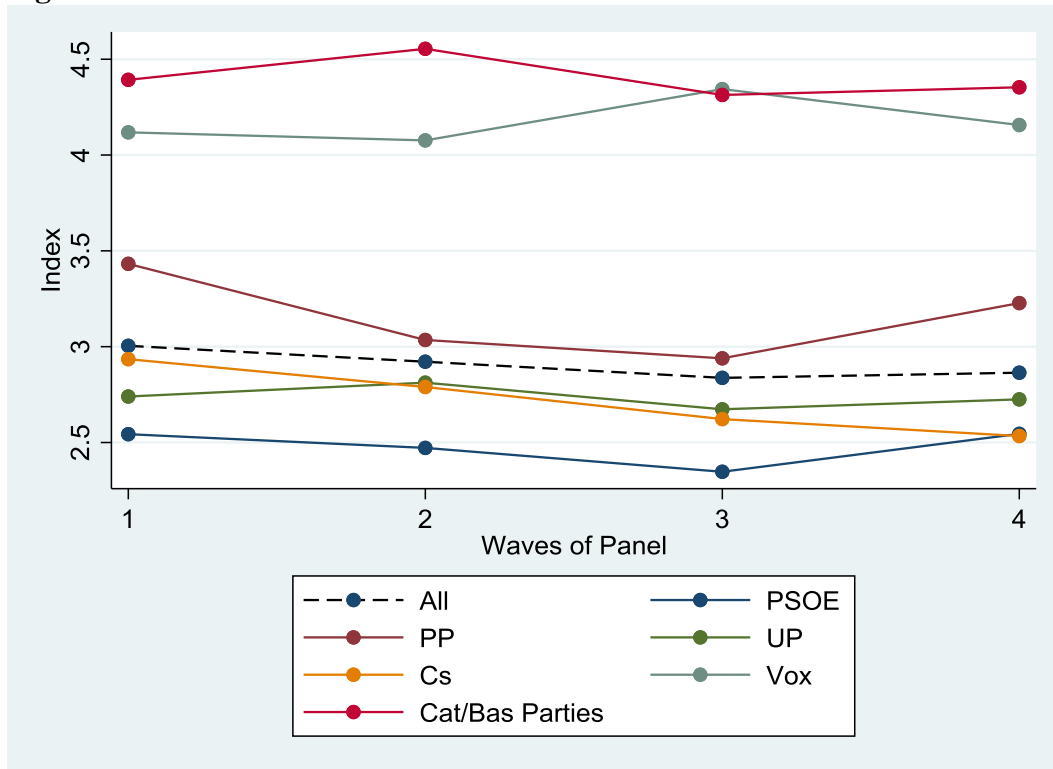
**Figure 1A.** Ideological Polarisation in Spain, October 2018 to April 2019



Notes: 95% confidence intervals.

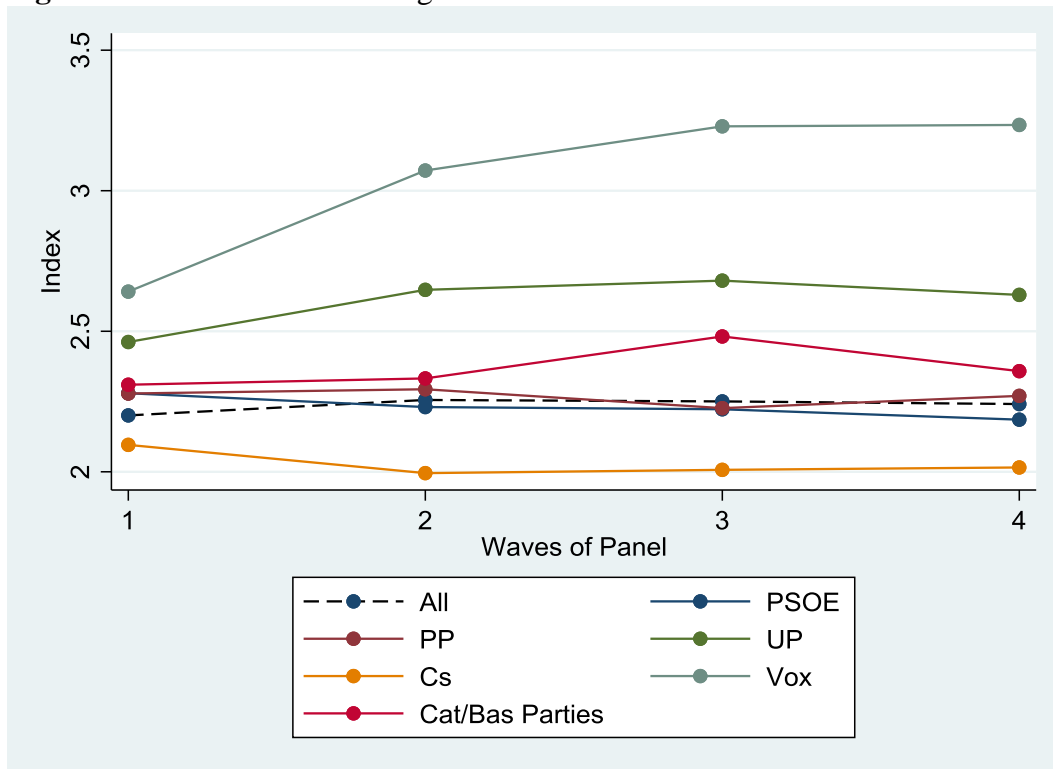
Source: E-DEM panel dataset.

**Figure 2A. Extremism on Government Decentralisation**



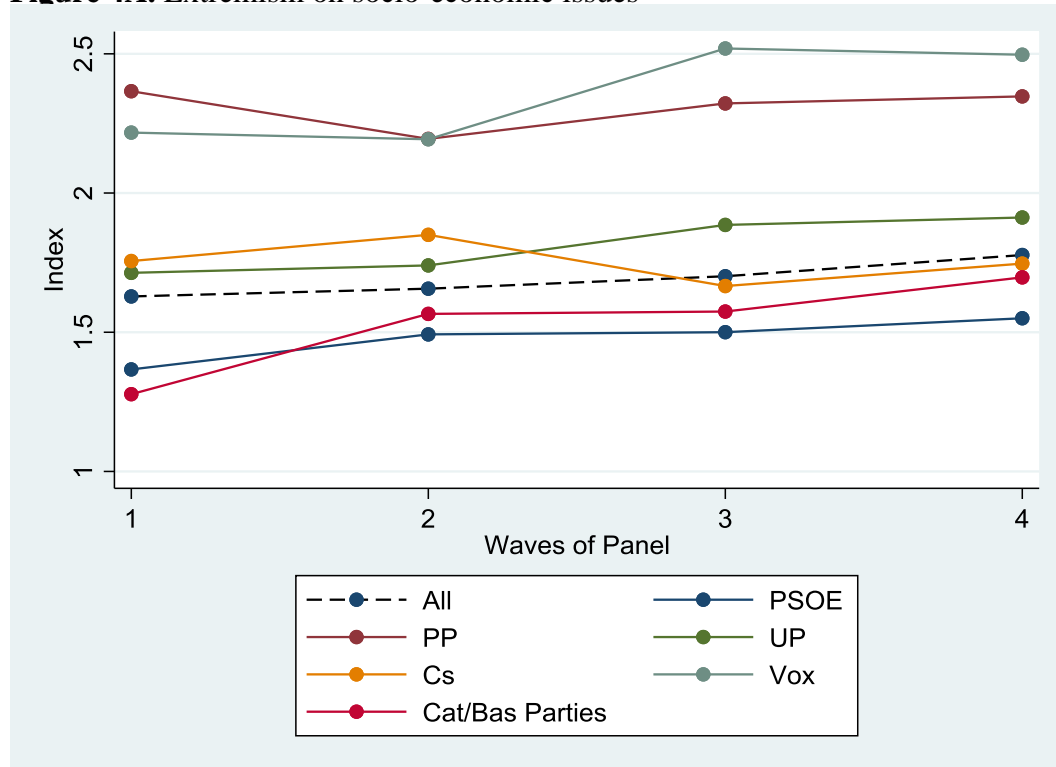
Note: Partisan groups are defined by the reported party identification in Wave 4.  
Source: E-DEM panel dataset.

**Figure 3A. Extremism on immigration**



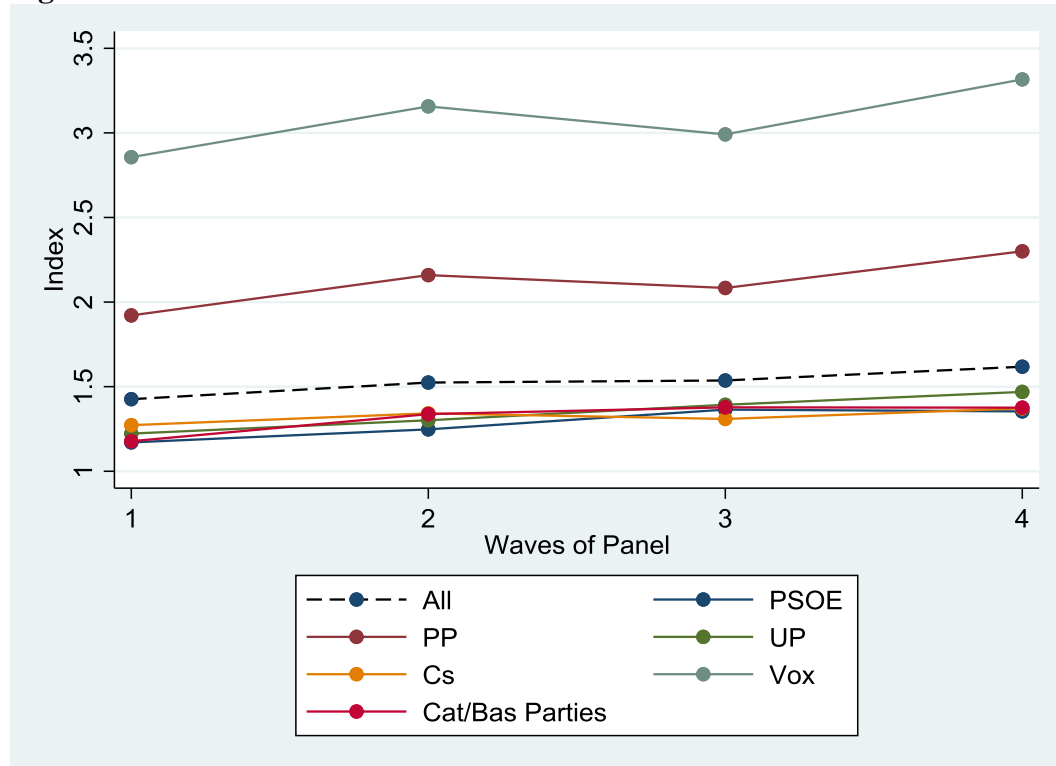
Note: Partisan groups are defined by the reported party identification in Wave 4.  
Source: E-DEM panel dataset.

**Figure 4A.** Extremism on socio-economic issues



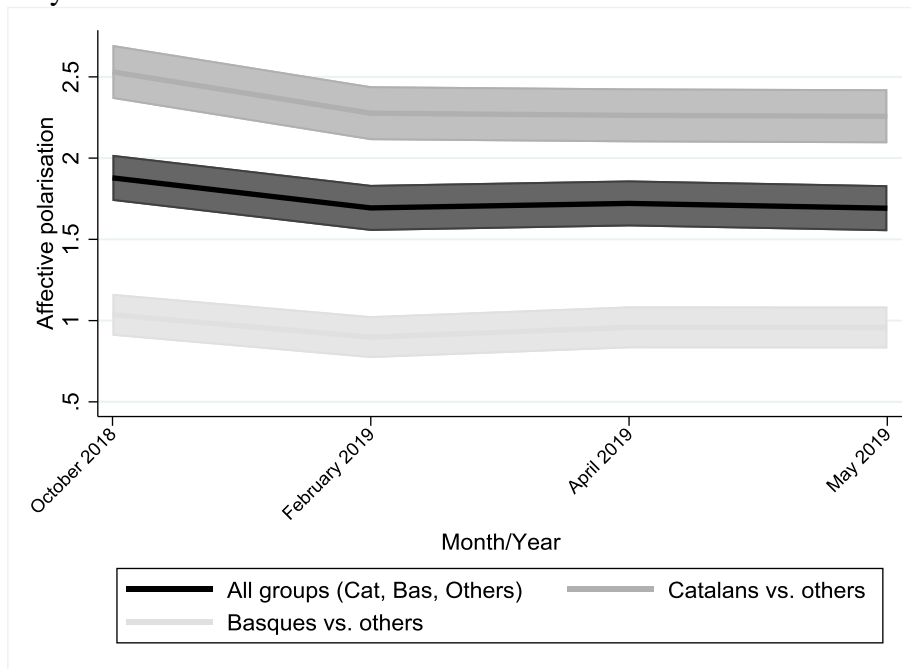
Note: Partisan groups are defined by the reported party identification in Wave 4.  
Source: E-DEM panel dataset.

**Figure 5A.** Extremism on socio-cultural issues



Note: Partisan groups are defined by the reported party identification in Wave 4.  
Source: E-DEM panel dataset.

**Figure 6A.** Territorial affective polarisation in Spain, October 2018–May 2019



Notes: 95% confidence intervals.

Source: E-DEM panel dataset.

## References

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