POLARIZATION CONTAMINATES
THE LINK WITH PARTISAN
AND INDEPENDENT INSTITUTIONS:
EVIDENCE FROM 138 CABINET SHIFTS

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POLARIZATION CONTAMINATES THE LINK WITH PARTISAN AND INDEPENDENT INSTITUTIONS: EVIDENCE FROM 138 CABINET SHIFTS [(*)]

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Abstract

Increasing political polarization implies that each election expands the gap between the supporters of the losing side and the winning party. This asymmetry in how citizen's feel about the outcome of elections could propagate to the institutions under partisan control but also to those designed to be isolated from electoral pressures – such as courts or central banks. Leveraging three decades of surveys covering European 27 countries, we exploit 138 cabinet shifts between 1991 and 2019 to estimate the effect of a growing divide between winners and losers on attitudes towards both types of institutions. We find that trust in either type institutions drops around elections but that the magnitude of the drop varies substantially across contexts. The polarization of parties explains most of this variance, suggesting that, in a polarized environment, partisan hostility can contaminate attitudes towards the political system as a whole creating the conditions for democratic backsliding.

Keywords: institutions, trust, polarization.

JEL classification: D72, D73.

Resumen

La polarización política implica que los ciudadanos tienen preferencias muy asimétricas entre los partidos que se presentan a las elecciones y, por tanto, los resultados electorales se traducen en una mayor distancia entre los Gobiernos elegidos y los votantes que apoyaron a la oposición (es decir, los «perdedores»). En este trabajo se plantea que la asimetría entre ganadores y perdedores podría extenderse hacia las instituciones, incluso aquellas diseñadas para estar aisladas de las presiones electorales —como tribunales o bancos centrales—. Basándonos en tres décadas de encuestas que cubren 27 países europeos, explotamos 138 cambios de gobierno entre 1991 y 2019 para estimar el efecto de la polarización política en las actitudes hacia ambos tipos de instituciones. Para ambos, encontramos que la confianza cae entre los perdedores de las elecciones y el tamaño de la brecha es sistemáticamente mayor en sociedades más polarizadas. Estos resultados sugieren que la hostilidad partidista podría contaminar el vínculo entre los ciudadanos y las instituciones, e incluso extenderse al sistema en su conjunto.

Palabras clave: instituciones, confianza, polarización.

Códigos JEL: D72, D73.

1 Introduction

The impact of political polarization is pervasive and appears in virtually all dimension of the political, economic, and social life of individuals. Partisan conflict influences economic decisions at the individual level (Gerber and Huber 2009; Gillitzer and Prasad 2018), personal relationships (Iyengar et al. 2019; Iyengar, Konitzer, and Tedin 2018), and even factual perceptions (Alesina, Miano, and Stantcheva 2020; Bullock and Lenz 2019; Guirola Abenza 2021). This paper contributes to the understanding of the effect of polarization by looking at how it impacts the way in which individuals feel about institutions even when they are designed to be isolated from partisan conflict—as in the case of courts and central banks.

Recent events indeed suggest that polarization has spillovers for the link between voters and institutions which could endanger the latter's efficacy (Hetherington 1998) and legitimacy (McCoy and Somer 2019). For instance, in the aftermath of the 2020 American election, the Capitol Hill attack of January 6th evidenced that polarization could create support for direct challenges to electoral institutions. Americans are in fact increasingly divided along partisan lines in their trust in their government (Hetherington and Rudolph 2015), their court system (Hasen 2019), or their view of the Federal reserve (Bianchi, Kind, and Kung 2019). However, it is unclear whether these trends are directly caused by polarization. At the same time, much of the the existing evidence on polarization and its effects is concentrated in the American case (McCarty, Poole, and Rosenthal 2006) and it is, thus, not apparent whether those findings translate to other political and institutional contexts (Boxell, Gentzkow, and Shapiro 2020; Gidron, Adams, and Horne 2020).

In this paper, we empirically show that discontent with institutions is a foreseeable outcome of polarization. As the distribution of political preferences in society becomes more polarized, the stakes of losing elections grows larger (Przeworski, Rivero, and Xi 2015) and with it, the animus against the party in office by electoral losers. By studying the "linkage" (Kitschelt 2000) between voters and institutions—a variety of attitudes capturing the relationship between citizens and the state that encompasses institutional trust, satisfaction with democracy and perceptions of representation—we explore two hypotheses. First, that attitudes towards the winner of electoral contests propagate towards institutions under the control of the new party in office. Second, and more importantly that it also extends to institutions that are designed to be isolated from the electoral pressures.

We test these hypotheses examining how incidence of ideological proximity towards the party in office on different measures of linkage. In particular, we combine country level data on elite-polarization with survey evidence on 14 items measuring the linkage with different institutions in 27 European countries over three decades (1991–2019). This dataset allows to identify the effect of partisanship from the discontinuity created by 138 cabinet shifts. This large number of cross-sections opens the opportunity to examine how gaps in the perceptions of left and right supporters vary in a window around a cabinet shift—while isolates our estimate of the effect of the distance towards the party in office from other confounding factors.

We find, in line with previous literature (Anderson et al. 2005; Keele 2005), that polarization has a large effect on perceptions of institutions whose control changes with the result of elections, such as the government or the parliament. We also find evidence that this effect varies substantially across contexts (both between and within countries), and extends to institutions outside government control, such as the European Commission, the courts or the European Central Bank.

We read our findings as underlining the threats of polarization. In a democracy, a healthy link between citizens and institutions is, in part, an aim in itself. The

fact that this link varies abruptly with the party in office suggests that citizens experience elections as traumatic events, with substantial welfare costs. Also, as argued by Hetherington and Rudolph (2015), this gap in trust can affect policy-making and result in gridlock and economic uncertainty (Alesina and Drazen 1991; Azzimonti and Talbert 2014). Finally, this biased the perception of institutions could blind citizens to their deterioration and they may then be willing to tolerate corruption (Blais, Gidengil, and Kilibarda 2017) or violations of democratic rules (Graham and Svolik 2020)—and be less reactive to democratic backsliding (Levitsky and Ziblatt 2018; McCoy and Somer 2019).

Our contribution speaks to the emerging body of research examining polarization and its spillover effects in comparative perspective (Boxell, Gentzkow, and Shapiro 2020; Gidron, Adams, and Horne 2020; McCoy and Somer 2019). Similarly, it also connects to the literature on the winner-loser gap (Anderson et al. 2005; Blais and Gélineau 2007) and its effect on trust and satisfaction with democracy. Based on similar findings, Hetherington and Rudolph (2015) have argued that rising polarization in America undermines trust in government and institutional performance. This paper extends this argument in two directions: it establishes the empirical generality beyond the American context and also shows that it affects a wider range of institutions.

In the next section, we start discuss the channels through which partisanship can affect the link with institutions, both when they are controlled by a particular party and when they are not. After that, we present the data and the identification strategy along with the empirical results. In the final section we discuss some implications and directions for further research.

2 Polarization and partisan gaps in institutional perceptions

Our argument, in a nutshell, is this: the linkage between citizens and all political institutions, regardless of their level of control or independence from the government, depends on the perception of the party holding the executive office. In a polarized context, the ideological proximity between citizens and the party holding office can cause a partisan gap between supporters of the incumbent and the opposition in which opinions about the government contaminate individual attitudes towards all institutions. In other words, as the distance between an individual and the party in government grows, their trust and satisfaction with all political institutions will decline—not only for institutions that capture and process partisan conflict (like parliaments) but also for institutions that are designed to be isolated from it (like courts or Central Banks). In the next pages, we consider each of the separate pieces of the argument in turn.

2.1 Polarization and trust gaps towards partisan institutions

Attitudes towards institutions controlled by the incumbent (a "partisan institution") can be affected in two ways: directly, if citizens connect the institution to the incumbent; or indirectly, if, as a result of a biased perception about the incumbent, citizens' hold distorted perceptions of the outcomes of that institution.

The direct channel is staightfoward when an institution is controlled by the incumbent. Such institutions, like parliaments, embody partisan conflict—their process and outcomes are linked to the distribution of partisan forces seating on them. For these, the mechanism is straightforward: "[in the US] polarization in partisans' feelings [...] has caused trust in government to polarize because people do not tend to trust things that are run by people they do not like" (Hetherington and Rudolph 2015, 38). As a consequence, those who lost the election

will distrust the government more than winners (Anderson and LoTempio 2002) because they feel further away from the party that controls it (Keele 2005). In other words, institutions that are seen as controlled by a party will inherit the evaluations of the party itself, and in a polarized environment these evaluations will exhibit large partisan gaps.

To some extent, this is the result of a methodological challenge. As Gershtenson and Plane (2007) note, "[d]espite considerable scholarly attention paid to political trust, there is no consensus on how to measure the underlying concept" (page 1). Indeed, it is likely that the two dimensions (trust in the office vs. trust in the office-holder) are indeed linked in the respondent's mind (Cook and Gronke 2005; Hibbing and Theiss-Morse 1995) but survey items often prompt either one or the other. We know that respondents often make assessments of their trust in government with a specific party or politician in mind and, in fact, Hetherington and Rudolph (2015) have argued that trust in government can be considered as a heuristic of how people feel about politics in general. This makes it difficult, both conceptually and methodologically, to distinguish between a relatively benign survey response effect, or the more worrying case in which voters' link with the institution is contingent on the party that controls it.

This same mechanism and dilemma appears in closely related areas of research, like the "winner-loser gap" literature (Anderson et al. 2005; Blais and Gélineau 2007) which documents that trust and satisfaction with democracy depend on citizens' proximity with the winner of the election (Curini, Jou, and Memoli 2012; Mayne and Hakhverdian 2017). Respondents may either interpret the "functioning of democracy" as referring to the political system or simply to the outcome of the last election— i.e., the winning party. Of course, the implications in terms of the potential endorsement by individuals of violations of democratic norms are widely different between the two scenarios (Przeworski, Rivero, and Xi 2015; but see Broockman, Kalla, and Westwood 2022).

A more indirect channel goes through partisan bias (Bartels 2002; Bullock and Lenz 2019) in the assessments of institutions. These assessments impact how individuals evaluate institutions and previous research has emphasized that trust is closely related to perceptions about the performance, processes, and probity of institutions (Citrin and Stoker 2018; Hetherington and Rudolph 2015; Van der Meer 2010). For that reason, overall levels of trust fall in response to events that send signals about those dimensions, like economic crises (Margalit 2019; Miller 1974; Polavieja et al. 2013; Rose et al. 2013; Torcal 2014) or corruption scandals (Chanley, Rudolph, and Rahn 2000; Keele 2007). However, it is also known that partisan bias influences the perception of such events (Blais, Gidengil, and Kilibarda 2017), an influence that is amplified in polarized contexts (Guirola Abenza 2021; Mian, Sufi, and Khoshkhou 2021). As a result, we expect polarization to accentuate a bias in perceptions, which should in turn increase the difference in attitudes towards institutions between supporters of the party in government and the rest.

In either case, polarization and control will interact to accentuate partisan gaps in attitudes towards institutions—but, how could such gaps emerge in the absence of control?

2.2 Polarization and attitudes towards independent institutions

Several institutions are designed to minimize the influence of government incumbents in their operations. The control of courts, central banks, and supranational institutions does not completely shift with government changes, and the same is true for institutions like the police or the court system which are not controlled by any particular actor. We refer to these institutions as independent institutions. But, if they are not controlled by the incumbent, how could they be exposed to the effects of polarization?

One possibility is that political trust is a one-dimensional attitude (Marien and Hooghe 2011) that is comprehensive about all institutions (Verba and Nie 1987) and that affects other related dimensions from satisfaction with how the democracy is working or the perception of being represented. In this view, the partisan gap in trust would affect the relation of the individual with "the state as a whole." In other words, "[c]itizens that have no trust at all in the political system will also distrust the current incumbents, and strong distrust in the politicians in office can spill over to trust evaluations of the institutions and the political system." (Marien and Hooghe 2011, 4). Or, in the vocabulary of Easton (1957), partisanship may not only affect the *specific* support towards the incumbent, but the *diffuse* support for the political system, and thus spread to institutions outside governments' influence. As a result, partisan feelings towards the party in government could then mediate in the relationship with other institutions or the political system as a whole. This mediating role is especially likely for the link with supranational institutions at least to the extent that their representation depends on their national government (Hobolt and Tilley 2014; Hooghe, Marks, and Marks 2001).

Another possibility is that either individuals misunderstand the true nature and effect of the safeguards protecting these independent institutions or they disagree with the notion that, say, the decisions of a nominally independent central bank or court are truly independent from the results of elections. This idea bodes well with the general low levels of information of the public about politics in general and institutions in particular (Carpini and Keeter 1996; Lupia, McCubbins, and Arthur 1998), the systematic differences in trust across different levels of political sophistication (Turper and Aarts 2017), and with the strategic incentives that politicians have to shift blame to independent (Torcal 2014) or multilevel institutions (Hobolt and Tilley 2014).

Finally, it is possible that citizens, even fully understanding what institutions do and under what constraints, are dissatisfied with the outcomes of institutional independence. They may be frustrated when they realize, for example, that democracy and the rule of law do not prevent a party that they regard as evil or corrupt from implementing its policies. Or they may interpret the goal of independence with a partisan bias. Perhaps they expect that, for instance, that Central Banks or the European Commission must curb specific government policies that *they* disagree with or that courts should prosecute officials that *they* consider corrupt. Inaction to protect electoral losers thus exposes them to criticism (Hernández-Huerta and Cantú 2021) and to a decrease in the voters' trust. With increased polarization, independent institutions may thus be regarded as either accomplices or opponents of the government, and thus affected by partisan attitudes.

Through these three mechanisms, proximity to the party in office could make attitudes towards independent institutions contingent on which party holds office, even in the absence of direct control.

2.3 Empirical implications

Our previous discussion suggests two testable hypotheses to assess how polarization affects the linkage between citizens and institutions. The first one is that polarization should increase the gap in the attitudes that individuals report about institutions between those who feel close and those who do not feel close to the incumbent. In other words, as the difference between the parties alternating in office grows, so will the gap in their supporters' attitudes towards institutions.

The second prediction is that this gap may emerge even in the absence of control by the incumbent. As polarization increases, differences in attitudes towards institutions directly controlled by the incumbent will be wider than for those that are independent—but even these are not zero.

From an empirical point of view, this requires, first, identifying the impact of distance towards the incumbent party on attitudes from that of alternative confounders and, second, evaluating how it varies with the context of polarization and with the party's control of the specific institutions according to their degree of independence.

Cabinet shifts offer a perfect ground to evaluate these predictions. These are events that shift the control of institutions but presumably leave unchanged other institutional features that may affect attitudes towards institutions. We thus rely on a design analogous to differences-in-differences over a large number of cabinet shifts to identify how the causal effect varies across multiple items implying different degrees of control and polarization contexts based on the size of the cabinet left-right swing.

3   Data and methods

3.1   The dataset

Comparative data on polarization across countries and contexts is scarce. We meet this challenge by combining country-level data on parties and elections with individual survey data for 27 European countries between 1991 and 2019. With that, we can connect the timing of the cabinet shifts and the distance between the incoming and outgoing incumbent with individual attitudes.

We measure elections, electoral results, and party polarization using data from the ParlGov database (Döring and Manow 2020). For each cabinet, ParlGov indicates which parties are present in the legislature, whether they are part of the government or in the opposition, their seats, and a 1–10 measure of their left-right orientation. This measure is based on multiple expert surveys covering all our survey time-span and is time-invariant for each party.

Using the ParlGov data, we compute the position of the single-party cabinets on the left-right axis. In the case of coalitions, we use the average of the coalition members weighted by their share in the legislature. This measure allows us to identify the moment in which the cabinet shift takes place, as well as the distance between the incoming and outcoming cabinets—our measure of polarization. Because the ParlGov ideological measure of individual parties is time-invariante, shifts in the cabinet's position come exclusively from changes in the parties that are part of it. We discuss the potential limitations of this design below.[1]

Our measures of *linkage* comes from the Eurobarometer. This is a large survey conducted regularly by the European Commission, which is explicitly designed to ensure comparability over time and across European countries (European Commission 2020). In particular dataset combines 72 waves conducted between 1991 and 2019. We selected 27 major democracies that experienced at least one cabinet change in the span covered by the survey, amounting to a sample size of 1,844,225 observations. Our variables of interest from these surveys are left-right self-placement of individuals and a diverse set of items measuring attitudes towards institutions.

The Eurobarometer measures ideology using an item of self-placement on a 1 (left) to 10 (right) scale. We recode these measures classifying every respondent as being on the left (1–4), center (5), right (6–10), or none (non-response). Our design will rely on the comparison of the left and right groups as natural contenders in the election. Recoding the eleven potential responses into a few groups makes the analysis more robust since it minimizes the possibility that

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[1] The country of North Macedonia is not included in the ParlGov dataset but present in our survey data. For the span covered by our data, it experienced a single cabinet shift, in 2017-04-30, when the Dimitriev cabinet (conservative) was replaced by the first Zaev (social-democrat), which we coded as 4 and 6, respectively.

respondents move between these from one group to another before and after the cabinet shift and makes the categories more easily comparable across countries.

The items measuring the linkage with institutions cover a broad range of institutional designs that imply different degrees of control. It is possible to broadly distinguish three groups. On one extreme, we have trust towards institutions that are directly linked to the winner of the elections—which we label "partisan institutions." These include the government itself, the parliament, political parties, and local authorities. Following our hypothesis, these institutions should be affected by the distance between individuals and the ruling party both directly (through control) and indirectly, and thus the partisan gap should be larger.

On the other extreme are trust attitudes towards institutions whose control does not shift with changes in the cabinet. These include the European Parliament, the European Commission, the EU, the European Court of Justice (ECJ), the European Central Bank (ECB), and domestic courts—"independent institutions." These are not directly affected by cabinet shifts, and consequently, the trust reported by respondents could only change through the indirect channels mentiond above, and, as a result, the impact of polarization should be smaller than for more partisan ones.

Finally, we examine linkage through items that measure perceptions about the representative system. The Eurobarometer asks about the extent to which individuals perceive that their voice counts ("To what extent do you feel that your voice count in your country/the EU") and how satisfied they are with the functioning of democracy ("How satisfied are you with the functioning of democracy in your country/the EU?") in their own country and in the European Union. These items do not refer to a particular institution but they capture a notion of proximity with the political system as a whole. On the one hand, we would expect that the identity of the party in office would not affect how individuals feel about the system. However, because the main outcome of the domestic political system is the party holding office, the satisfaction with domestic democracy and the sentiments that their voice counts could react to its change.

The response options vary across items: in most of them respondents report their attitudes about a particular institution in a binary mode (f.i., whether the individual tends to trust vs. not to trust), while others allow for multiple ordinal response. To facilitate the aggregation, we transformed all answers to a continuous score based on their empirical distribution. We rely on countries' empirical cumulative distribution to map ordinal scores onto a 0–1 scale and then map them back into the quantiles of the normal distribution. The resulting score is therefore a cardinal measure of where the respondent stands in the country's distribution about that item. The descriptive statistics of the outcome variables are show in table 1.

In our analyses, we also use controls for gender, age (recoded in five categories), education (in four categories), occupation (in 18 categories). As detailed below, these are meant to capture potential confounders related to heterogeneous interests, values and information.

Figure 1 shows cabinets' position on the left-right scale. The average cabinet shift in our sample is of 1.8 in absolute value, corresponding to the typical cabinet shift in Great Britain. The size of these shifts is relatively stable over time within countries, ranging from relatively highly polarized like Sweden, Spain or Italy—where the typical shift implies close to a 3 points swing on the left-right scale—to low polarized countries such as Latvia, Ireland or Belgium—0.5 to 0.6 points.

3.2   Identifying the effect of polarization

Identifying the effect of polarization on attitudes towards institutions is not straightforward. Their observed correlation with ideology may reflect feelings

towards the ruling coalition, but also pre-existing differences in trust between supporters of both parties. However, a design around cabinet shifts can separate the partisan gap from the effect of potential confounders.

	Missing (%)	Yes (%)	20th p.	Mean	80th p.
	Trust in domestic institutions				
Government	12.35	39.5	27.0	38.6	54.3
Courts	11.21	50.9	36.2	48.7	62.7
Local Autorities	22.06	51.9	37.4	51.6	65.8
Parliament	13.35	40.1	20.6	37.9	53.9
Parties	13.63	20.6	13.5	20.4	29.0
	Trust in European institutions				
E. Central Bank	27.53	60.8	53.8	61.5	71.7
E. Court of Justice	25.14	70.8	65.3	70.5	78.0
E. Parliament	20.32	60.7	55.0	61.8	67.2
E. Union	17.19	53.0	45.4	54.5	61.1
E. Comission	24.03	59.2	53.0	60.9	67.7
	Satisfaction with democracy				
Home country	11.25	55.0	35.5	52.5	69.5
European Union	21.16	55.5	49.7	58.2	69.1
	My voice counts				
Home country	2.82	59.3	43.1	59.0	74.9
European Union	6.16	43.0	29.6	42.6	54.2

Table 1: Summary statistics of the outcome variables. The table displays the percent of cases with missing values (first column), the percent of cases who trust the corresponding institution or who gave a positive answer (second column), the 20th and 80th percentile of the distribution of responses (third and fifth column), and the average of the distribution of responses (fourth column).
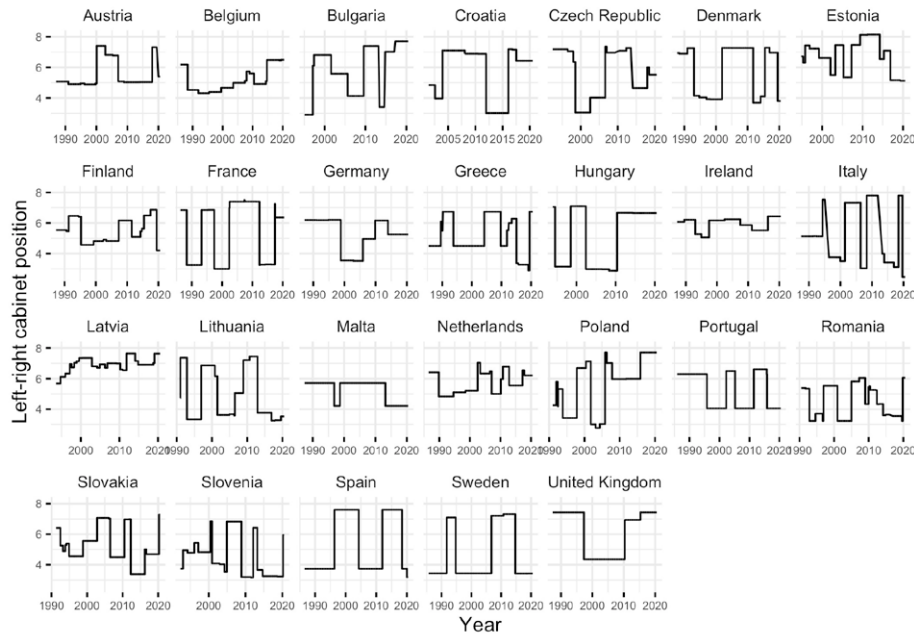

Figure 1: Cabinet shifts and left-right orientation over time. The figure shows the orientation of cabinets on the left (1) right (10) scale at each point in time. For multiparty cabinets, this position is the average of the parties participating, weighted by their seats in the legislature.

We can group potential confounders under the tryptic *interests*, *values*, and *information*. These categories shape how citizens perceive and evaluate institutions. Consider, for example, how citizens develop trust in a Central Bank. Left and right citizens may, first of all, vary in the importance they give to the Bank's mandate—f.i., inflation vs. unemployment. This may be because voters from the left and from the right vary in their exposure to unemployment and thus have different *interests* that are affected by central bank decisions. Alternatively, they may hold *values*—f.i., preferences based on ideological stances about democratic control— that are independent of how institutions impact their personal situation. Finally, left and right citizens may also differ in their *information* or priors about the institution's mandate or even about the character and competence of its leadership. These differences are likely to correlate with ideology, for example, if left-wing voters are less educated than their right-wing counterparts—independently of how they feel towards the party in office. Such confounders could thus blur the causal link between distance towards the incumbent and trust that we are trying to identify.

Cabinet shifts generate a discontinuity that we can leverage to filter the effect of potential confounders and identify the causal impact of distance towards the ruling party. At that specific moment in time, the party in office changes but the interests, values, and information of citizens remain constant. We exploit this discontinuity to identify the impact of distance towards the ruling party on attitudes towards institutions.

In particular, for each country, we estimate the following equation in the time window around cabinet shifts:

$$y_{it} = \alpha_t + X_{it}^T \beta_t + Pol_{it}\gamma + Cabinet_t Pol_{it}\beta_P + e_{it} \tag{1}$$

where y_{it} is the value of one of our trust items for individual i observed in cross-section and country t. The variable $Cabinet_t$ is a dummy that takes a value of 1 if the data was collected after the cabinet shift and 0 before. Because we only want to capture changes that imply a shift in the control of the executive office, we only consider cabinet shifts that are associated with a change of at least 0.1 points in the left-right orientation of the cabinet. With that, we remove elections that leave the same party or coalition in office.

The key parameter of interest is β_P. It captures the change in the coefficient of ideology Pol_{it} taking place around the shift in the cabinet–i.e., the causal effect identified by our design. As mentioned above, ideology is a categorical variable that classifies respondents in left, center, none, and right. We set "left" to be the reference category and retain the change in the distance with respect to "right" as the treatment effect.

The model also includes a set of individual-level controls listed above (X_{it}). We allow its effect β_t to vary from one cross-section to another and include a survey fixed effect α_t. Allowing for time-varying effects in observables makes the specification flexible and controls for potential time-varying confounders.

The correlation between the respondents' ideology and unobserved traits such as the interests, values, and information of the individuals pose a threat to the identification of β_P as a causal effect. The inclusion of time-varying observables controls will partially account for some of these problems. However, there is heterogeneity in these traits that could bias the identification. However, if β_P is estimated in a short window around a cabinet shift, it will isolate the causal effect of partisanship on trust. This will be true if those confounders that are not captured by our controls—but correlated with left-right placement—remain fixed across the threshold of the election.

We think that this is a reasonable identifying assumption if the time period around the election is not too large. We use a window of 21 months. While differences in values or information may, for example, make the trust of voters

in the parliament or a central bank differ, we see no reason why this may change with a cabinet shift unless driven by attitudes towards the party that comes into office.

4 Results

4.1 The evolution of partisan gaps

A first look at the impact of polarization on linkage is shown in figure 2 and figure 3. The vertical axis shows the OLS coefficients of right-wing ideology (with respect to left), conditional on their observable characteristics, evaluated at each survey, while the horizontal axis represents the date of the survey. The vertical lines represent cabinet shifts color-coded by the direction of the change: red vertical lines show cabinet shifts to the left and blue vertical lines represent shifts to the right. Figure 2 shows the results for partisan institutions and figure 3, the results for independent institutions. The coefficients illustrate the difference in attitudes towards institutions between left-leaning and right-leaning respondents with similar observable characteristics. An upward trend means an increase in distrust of respondens self-placed on the right of the ideological scale compare to those on the left.

In both figures, the gap in attitudes between left and right respondents systematically jumps around cabinet shifts (vertical lines). This is consistent with our hypothesis that the distance from the party in office affects such attitudes. However, it is apparent that the size of those jumps varies between countries. For example, shifts are visually larger in countries such as France, Spain, and Sweden than in Ireland, the Netherlands, or Belgium. In other words, while the partisan gap in attitudes seems to flip signs everywhere, its size varies across countries.

A comparison across types of institutions in the two figures also yields interesting insights. Shifts are visible even for institutions that are outside the control of the incumbent, although the jump in coefficients is smaller. That is, for instance, the case of Spain: in figure 3 (independent institutions), most coefficients are range between -0.7 and 0.41, while for partisan institutions (figure 2) the range grows and extends from -0.9 to 1.1.

In summary, the regression coefficients shows that there are discontinuities in the coefficient of the expected sign around cabinet shifts and these shifts affect both independent and partisan institutions. At the same time, the shifts vary across contexts and appear to be larger for independent institutions. We now turn to inspect the reasons for this variation.

4.2 Explaining the variation in partisan gaps

What drives the variation in partisan gaps across contexts? In figure 4, we show the bivariate correlation between changes in trust attitudes and the context of polarization. The figure shows in the vertical axis a shift in trust resulting from the estimation of equation 1 around the neighborhood of a cabinet shift. The horizontal axis depicts the estimate of the size of the cabinet shift on the left-right axis calculated as an average of the parties' left-right score weighted by the seats of the parties. In other words, each point relates the size of the cabinet shift (our measure of polarization) to the magnitude of the swing in trust.

A negative association within each panel means that left-leaning respondents increase their relative distrust towards institutions when the cabinet shifts to the right—with higher correlations implying that the institution is more strongly affected by cabinet shifts. In the next section, we model this relationship using a Bayesian hierarchical model.

The correlation has the expected sign for all items: a left-leaning electoral swing undermines right-wing supporters' trust relative to left-wing ones. For example, the 2006 shift in Italy from Berlusconi to Prodi meant a 4.29 left-wing shift in the orientation of the cabinet. This change decreased the relative trust of right-wing voters in government by 0.8 and in the European Court of justice by 0.13 standard deviations.

As expected, the correlation, measured by the portion of variance explained by the size of the shift, is stronger for the institutions under tighter partisan control: trust in government ($R^2 = 0.78$), in parliament ($R^2 = 0.62$), parties ($R^2 = 0.52$), satisfaction with democracy at home ($R^2 = 0.5$), and voice count at home ($R^2 = 0.34$). On the other hand, the correlation is smaller but still strong for institutions whose control is unaffected by elections. Namely, the European Union ($R^2 = 0.32$), the European Courts of Justice ($R^2 = 0.16$), the European
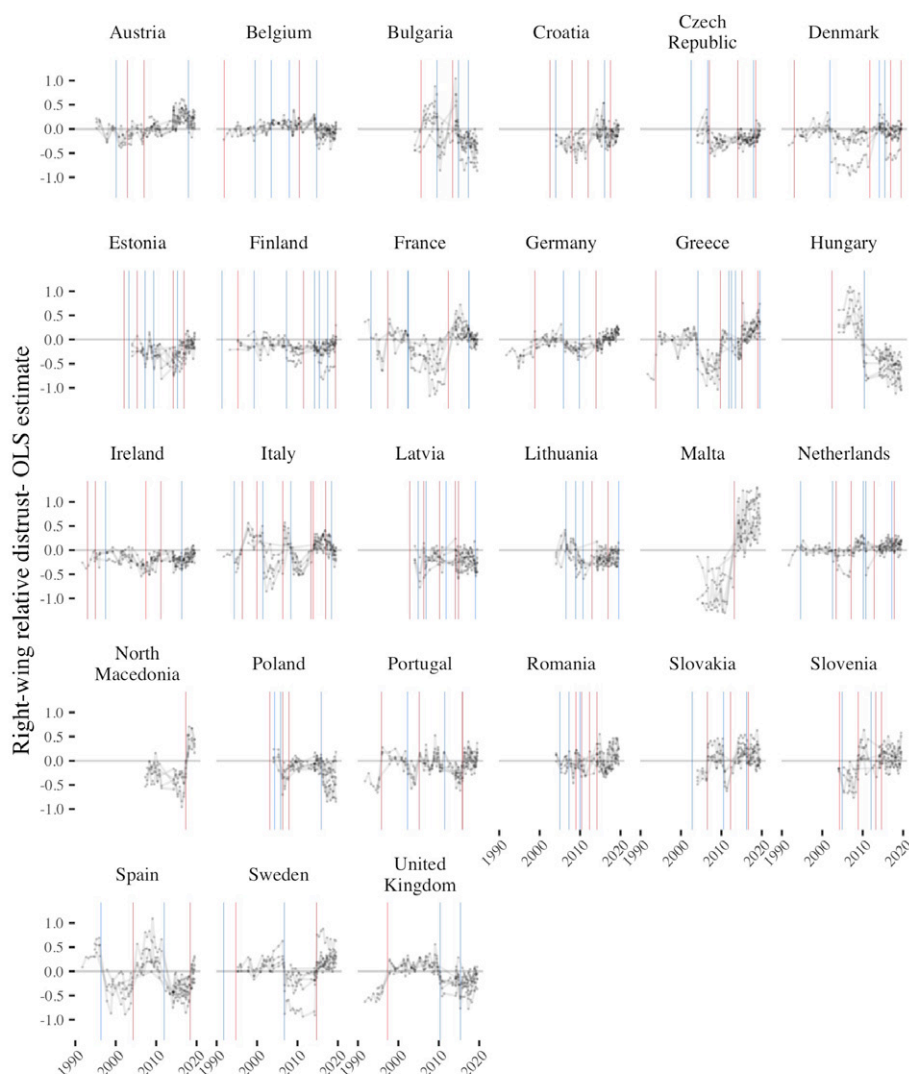
Figure 2: Estimates of the evolution of attitudes towards partisan institutions across the cabinet shifts. Each dot represents the size of the coefficient of the OLS regression for a particular item. Items corresponding to the same institutions are linked by the line. Red vertical lines indicate cabinet shifts towards the left. Blue lines represent cabinet shifts towards the right.

Commission ($R^2 = 0.29$), and the European Central Bank ($R^2 = 0.28$). For these institutions, the effect is only large enough to be statistically significant in more polarized contexts.

Bivariate correlations thus confirm our two main hypotheses: polarized contexts are associated with larger swings in attitudes towards institutions, and this association holds, although been weaker, for independent institutions.
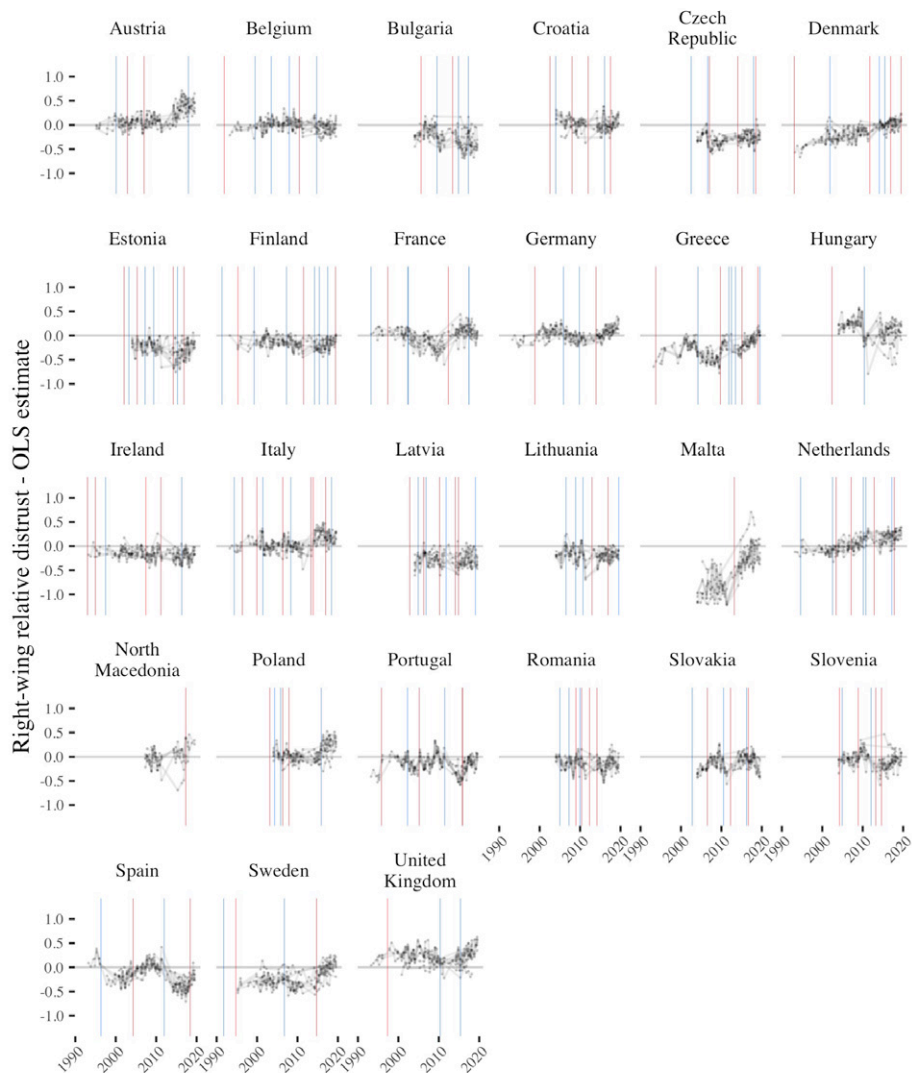

Figure 3: Estimates of the change in attitudes towards independent institutions around cabinet shifts. Each dot represents the size of the coefficient of the OLS regression for a particular item. Items corresponding to the same institutions are linked by the line. Red vertical lines indicate cabinet shifts towards the left. Blue lines represent cabinet shifts towards the right.
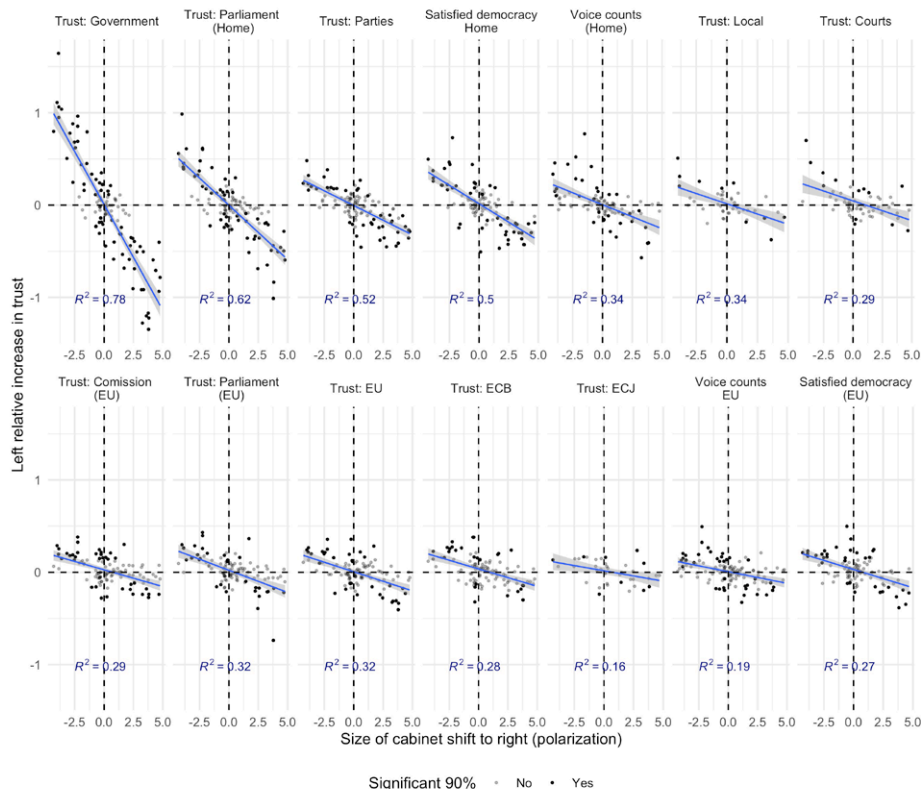
Figure 4: Correlation between the shift in attitudes and polarization. The vertical axis a shift in trust resulting around the neighborhood of a cabinet shift. The horizontal axis depicts the estimate of the size of the cabinet shift on the left-right axis calculated as an average of the parties' left-right score weighted by the seats of the parties.

4.3 Putting it all together

We now turn to look at whether this link holds within countries and to quantify its association more precisely. The estimates of a hierarchical model in equation equation 3 are shown in figure 5.[2]

This modeling approach allows to include country-item specific intercepts to account for potential country-level confounders, such as differences in the party system or electoral institutions which may affect our measure of polarization. The model has other advantages. Given that we estimated the coefficient in a separate first step, the modelling approach allows us to weight coefficients based on the precision of the estimate and thus accurately take into account the estimation uncertainty.

For ease of presentation, we only show the median of the posterior distribution of the coefficients for the left-right shift and the item intercept. The item intercept shows the average size of the change for that item, while the left-right shift coefficient shows how sensitive the item is to the left-right swing. The top panel of the figure represents the estimates from the model without country-specific random effect, while the bottom panel represents the specification with country-item specific intercept. The horizontal lines indicate the 95% credible interval. The line is colored in red when the credible interval does not include zero.

The general message from figure 5 confirms what we saw in the previous section: the correlation between cabinet shifts on the left-right axis and swings in institutional perceptions is larger for institutions that are more exposed to partisan control, namely government, parliament, and parties.

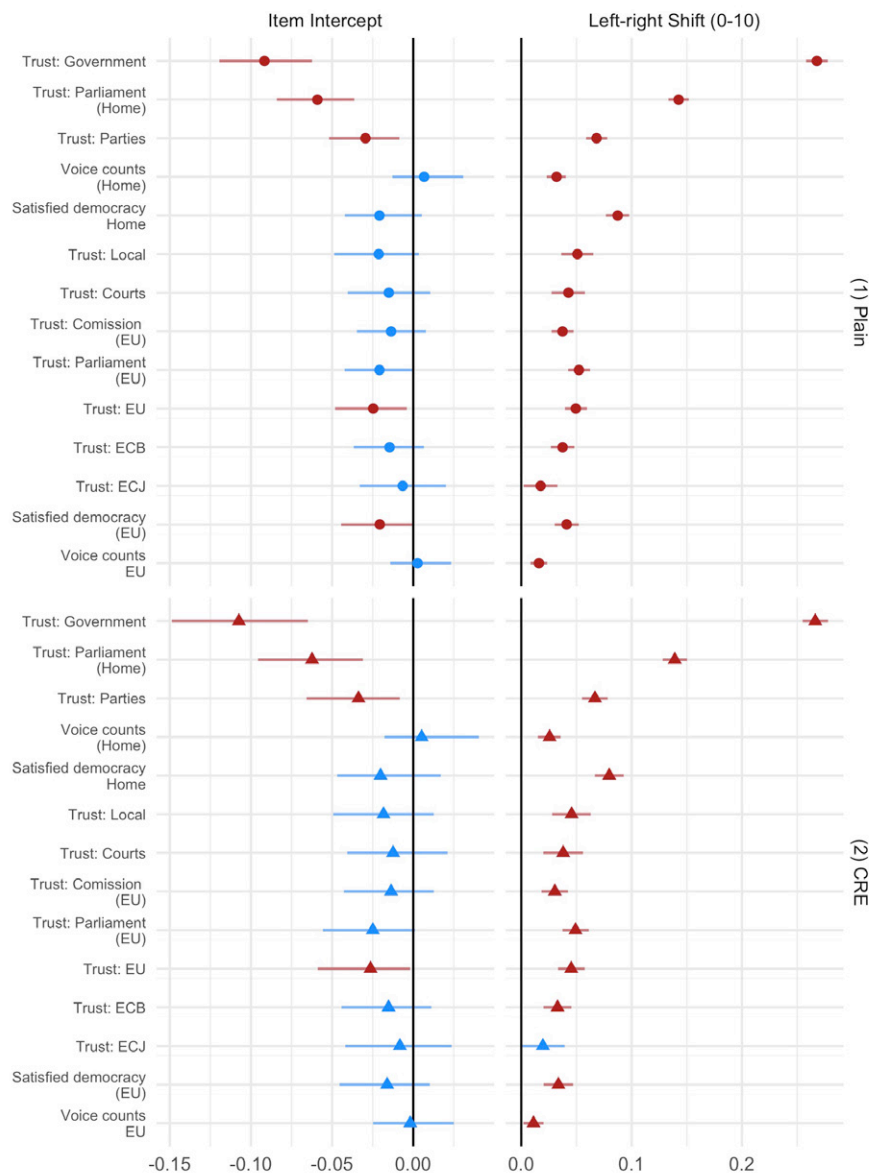[2]More information about the model can be found in the appendix.

Figure 5: Estimates from the multilevel model. For the posterior distribution of the item intercepts and the coefficient of the left-right swings, points show the median of posterior estimates, and the horizontal bars the length of the 95% interval. The top panel shows the *Plain* specification without country effects. The bottom panels show the *CRE* specification *with* country random effect.

The typical cabinet shift in a highly polarized country like Italy, Spain, or Sweden can be close to 3 points on the left-right scale. For such cases, our model predicts a swing of 0.49 standard deviations in the trust in the national parliament. In contrast, in a low polarized country, like Belgium or Ireland, the cabinet would only shift left by 0.6 points and result in a swing of 0.15 standard deviations.

It is noticeable that the trust in independent institutions is also sensitive to the level of polarization, although the size of the effect is smaller as the institution becomes more independent. For highly independent institutions, such as the European Central Bank (ECB), the typical cabinet shift in a country with low polarization with a 0.6 left-right shift would hardly have any effect (0.02 standard deviations). However, in highly polarized countries a 3 points shift could have a more sizable effect (0.11 standard deviations).

It is also worth noting that the correlation between cabinet shifts and changes (figure 5, top panel) in attitudes holds within countries and is virtually left unchanged by the inclusion of country-item specific intercepts (figure 5, bottom panel). The estimates of the coefficient of the left-right distance are therefore not driven by country-specific institutions, such as the electoral rules or the party system.

4.4   Discussion and limitations

The above results support our main hypotheses. First, supporters of the incoming and outgoing parties change their attitudes towards institutions in opposite directions in the aftermath of a cabinet shift. Second, when the cabinet shift takes place in a polarized context, the distance between the two cabinets is larger and increases the size of the effect. Finally, this impact contaminates independent institutions although the effect is significantly smaller.

The empirical design is subject to two limitations. The first one is that we can not—and do not—claim that countries where our measure of left-right polarization and partisan gaps are small are not polarized in a different dimension. Our measure of left-right polarization, and our use of respondents declared left-right position implies that we can only capture that particular axis. For countries where the relevant cleavage is not the left-right dimension, we would expect cabinet shifts to have a similar effect, but unfortunately we are not able to observe them.

The second limitation is that our measure of left-right position is unique for each individual party. As a result, it can not track changes in polarization within each country driven by swift in parties' left-right stance. All the within-country variation in polarization comes from changes in the composition of the governing coalition –thus, from changes in party cooperation. We opt for this measure because, as argued by Fortunato and Stevenson (2013), changes in party cooperation within cabinets is both easier to measure and particularly visible to voters since its reveals (through their behavior) their willingness to compromise on their declared left-right positions. This limitation is likely to bias downward the size of the estimated coefficients since, while parties arguably change their positions, and voters are sensitive to such changes, but this link would not be captured in our data.

5   Conclusions

In this article, we investigated what polarization means for the linkage between citizens and institutions. Starting from the premise that a polarized mass public has highly asymmetric feelings about the outcome of elections, we showed that partisan gaps in attitudes propagate towards independent institutions—i.e., institutions that not under government control. We investigated for this hypothesis by looking at the effect of cabinet shifts across a large number of countries to identify the impact of the ideological distance between citizens and governments on trust on an array of partisan and independent institutions.

It is unsurprising that changes in the color of the government impact the citizens' evaluation of these institutions. What is perhaps less evident is that the size of this change varies substantially across contexts and extends even to institutions that are outside of the scope of government control. In some countries, like in Ireland, Belgium, or Finland, we find that citizens on the left and on the right experience cabinet-shifts without much consternation. In others, such as Spain, Sweden or Italy, the day after the election is experienced more traumatically. Those on the losing side start to perceive all institutions, regardless of their level of independence, as less trustworthy. What can explain these differences across contexts?

This difference can be attributed to the levels of polarization. The difference between Belgium or Finland and Spain or Sweden is that, in the former, parties take either more moderate positions in the left-right scale or cooperate with others in the same government—which means that cabinet shifts result in smaller ideological swings.This confirmed our hypothesis that in polarized societies, the winner-loser gap in trust can be particularly large, and complicate citizens relationship with the State.

Our data do not allow to conclude that polarization undermines democracy or democratic institutions. Attitudes towards them are intrinsically hard to study through existing survey data. And, in spite of recent advances in this direction, they are unlikely to predict citizens behavior in the event of a challenge to democracy. However, partisan gaps suggest that identity and ideology can make institutions, especially independent ones, politically contentious under polarization. The absence of a cross-partisan support for existing institutions is a necessary, if not sufficient, condition for those willing to mobilize ideology and identity to challenge their functioning (Guriev and Treisman 2019; Levitsky and Ziblatt 2018).

The link between polarization and trust attitudes could explain why antiestablishment or populist attitudes often go in hand with the support for radical parties. Such attitudes do not necessarily arise from the weakness of democratic ideals or their populism (Mudde 2007). Citizens could thus be in favor of democracy of an idea, but chronically dissatisfied with any existing one because they are unwilling to accept the rule of a party that is far away from their preferences.

The results presented here suggest three main challenges from a normative perspective and link to current discussions about democratic backsliding. In the first place, independently of whether their preferred holds office, citizens should feel represented by institutions, and not see them as corrupt or illegitimate. However, the fact that citizens drastically change their view when their party lose elections suggests that they experience them as traumatic events drastically change their link towards the state and thus have a troubled relationship with institutions.

Second, as argued by Hetherington and Rudolph (2015), distrust of institutions is likely to interfere with policy-making. In the American case, this is well documented, as polarization translates into legislative gridlock or partisan judicial nominations (Hasen 2019). Many independent institutions, such as the European Commission or Central Banks, ground their influence on their soft influence through communication. This influence critically depends on their perception as neutral actors acting within their mandate. A polarized public, as we show, is likely to have asymmetric trust in those institutions. Political elites could thus potentially contesting their decisions as not being neutral, and undermine their communication strategies.

Finally, there is a worrying implication for political stability. If citizens do not trust institutions, they will not stand up for their defense. As argued by Svolik (2019), citizens can be blinded by partisanship and lack a common ground to assess the performance of institutions. As a consequence, in polarized contexts, citizens are more likely to not disapprove corruption (Blais, Gidengil, and Kilibarda 2017), violations of democratic rules (Graham and Svolik 2020) or even the dismantling of independent institutions, opening the door to democratic instability (Levitsky and Ziblatt 2018).

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A   Appendix: Detailed description of the hierarchical model

Our first step delivered a JxS matrix of $(\beta_P)_{j,cs}$ for each item j and country c and cabinet shift s with several missing entries since not all items are observed for all cabinet shifts. In this second step we need to relate them these to the context of polarization measures of polarization. A bivariate correlation between this and each of these entries the cs provides a first idea of the strength of their link. However, a deeper analysis poses three challenges.

Firstly, we expect the impact on trust to vary across items but to be driven by a common partisan effect. Looking at items separately could thus suggest a weaker relationship than expected or exaggerate its heterogeneity, especially for those items with a small number of observations. We thus want to achieve an efficient estimate of the common effect across all trust items and of the specific effect.

Secondly, measurement error compounds the challenge of combining estimates across the J items. Given the limitation of our sample size for several cabinet shifts (especially earlier ones), the estimate of $\beta_{P,j,cs}$ could statistically be non-significant, but it is unclear whether this should be interpreted as the absence of an effect or as the result of an noisy estimate.

Finally, we want to understand whether the link between polarization and shifts in trust holds both across and within country to go beyond bivariate correlations. Our measure of polarization –especially elite cooperation– partly reflect country-specific institutions. Thus, bivariate item specific correlation could simply reflect cross-country institutional differences or driven by specific countries.

We address these three challenges in the framework of a Bayesian hierarchical model with measurement error. This model has three layers. Firstly, we weight each estimate of $\beta_{P,j,cs}$ based on its precision:

$$\hat{\beta}_{P,j,cs} \sim N(\beta_{P,j,cs}, \hat{\sigma}_{P,j,cs}) \tag{2}$$

equation equation 2 models the distribution of the OLS estimated value of partisan bias $\hat{\beta}_{P,j,cs}$. The estimate for item j for country c under cabinet shift t is distributed around its true value $\beta_{P,j,cs}$ and standard deviation $\hat{\sigma}_{cjt}$ (obtained from the standard error of the OLS).

In a second layer, we want to model the link between the true value of $\beta_{P,j,cs}$, and the measure of elite disagreement:

$$\beta_{P,j,cs} \sim N(\alpha_j + \alpha_{jc} + Z_{ct}^T \theta_j, \Sigma_{P,j,cs}) \tag{3}$$

where the mean of true value of $\beta_{P,j,cs}$ is modeled to depend linearly on our measures of elite disagreement Z_{ct}^T. Similar to what would happen if this relation was examined separately for each item, we allow this link to be heterogeneous across items. This is captured by the the item specific intercept α_j and its slope θ_j. In addition, in certain specifications we want to account for the effect of θ_j within the same country, to capture unobserved heterogeneity. We will therefore include a country-item varying intercept α_{jc}.

To estimate equation 3 and equation 2 we aggregate their information across items. This allows to compare them, but also to estimate θ_j more efficiently. We therefore add an additional layer:

$$\theta_j \sim N(\theta, \tau) \alpha_j \sim N(\alpha, \xi) \alpha_{jc} \sim N(\alpha_j, \sigma_{\alpha,j})$$

where item-specific parameters (mean α_j and slope θ_j) are modeled as deriving from a common distribution. In the case country-item intercept will be included,

they will be distributed around the item specific mean α_j. This block aggregates the information of item specific parameters (its intercept α_j and its link with covariates θ_j). The model partially pools Stegmueller (2013) information across items, based on their informativeness (i.e., their covariances and precision). The priors about item-specific estimate of (α_j, θ_j) are thus informed by the estimates of other items. The cross-item distribution of (α, θ) can be interpreted as the optimal measure of the "common" bias, given the informational constraint.

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