TRUST ACROSS POLITICAL CONFLICTS: EVIDENCE FROM A SURVEY-EXPERIMENT IN DIVIDED SOCIETIES

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ABSTRACT

In this study, we report on an on-line survey-experiment carried out on national samples in Spain and Portugal in which we implemented multiple trust games. The results confirm that citizens’ interpersonal trust is heavily affected by partisan identities favoring in-group members trust over that of the out-group identifiers. This finding seems to be robust in both countries under study, although the partisan effect on trust seems to be stronger in Spain, a more polarized party system. The Spanish case also shows that partisanship is the political identity affecting interpersonal trust the most, followed by other important political divides such as the left-right ideological dimension and the national/regional cleavage. Additionally, trust gaps between political in and out-groups widen depending on the intensity of citizens’ political or social identities and their degree of politization.

Key Words: Social trust, Trust games, partisanship, cleavages, group identities
Social trust is allegedly the central element in a complex virtuous circle, in which the prevalence of attitudes and norms of reciprocity and generalized morality among individuals in a given political system tends to facilitate collective action and favor good governance, which in turn create favorable conditions for social and political trust to flourish (Almond & Verba, 1963; Coleman, 1990; Putnam, 1993; Putnam, 1995; Fukuyama, 1995; Kumlin & Rothstein, 2005). Additionally, large number of studies has found social trust to be positively correlated with indicators of democracy and of its quality (Inglehart, 1988 & 1990; Muller & Seligson, 1994; Kaase, 1999; Putnam, 1993; Putnam, 2000; Brehm & Rhan, 1997; Uslaner, 2002; Delhey & Newton, 2005; Welzel & Inglehart, 2006). However, the issue of whether we should conceive of social trust primarily as cultural feature or the results of some contextual elements remains debated (Nannestad, 2008: 423-25).

Two main groups of literature on the topic consider that individual social trust is exogenous to the social and political context. The first one defends that social trust is a general predisposition of an individual towards the other which constitute a personality trait developed primarily during childhood (Rotter 1980; Uslaner 2002). The other, more frequently defended, is that social trust is a society cultural attribute (Almond & Verba, 1963; Newton 2001) which is linked to basic forms of early socialization and reinforced by people participation into civic life (Putnam 1993; Putnam 2000). Despite their differences, in these two definitions, trust develops externally from the political system and both are based on the fact that this attitude exhibits general individual and aggregate stability through time, making it, arguably, one of the “thickest” social attitudes observable on the basis of social-scientific surveys (Mishler & Rose, 2001).

However, social trust could also be endogenous to the social or political context (Coleman, 1990; Levi 1998; Sztompka, 1999; Della Porta, 2000; Rothstein, 2005; Nannestad, 2008). The effect of the social context apparently is related to the level of fractionalization of the society (Delhey & Newton, 2005; Putnam, 2007). For instance, it seems that heterogeneous social contexts decrease individual likelihood of trusting strangers (Alesina & LaFerrara, 2002) and important ethnic divisions (Huddy, 2001, Huddy, 2013; Habyarimana, Humphreys, Posner, & Weinstein, 2011) might also affect individual or collective social trust.

The effect of the political context has been centered, instead, on the idea that social trust is fostered by particular contemporary institutional arrangements that diminish risks of social
cooperation, establish fair treatment of different social groups and reduce incentives and opportunities for political and administrative corruption (Jackman & Miller, 1998; Letki & Evans, 2005; Delhey & Newton, 2005; Kumlin & Rothstein, 2005; Seligson, 2006; Torcal and Magalhaes 2006). However, the effect of the political context might be also related with the politization of relevant political divides. For instance, partisanship seems to condition interpersonal trust among university students in the USA, creating social a trust gap between those who shared the same party identity and those identified with different parties (Carlin & Love, 2013). The logic behind this argument is consistent with the effect of the fractionalization of the social context: people tend to cooperate with others with similar characteristics or belonging to same social groups, defining the boundaries of other’s people trustworthiness (e.g. Bowles & Gintis, 2011).

The present study extend this last argument by showing that individual social trust is affected in an important degree by salient political divides and the identities they generated. This effect seems to depend on the intensity of the individual’s political identities, but also on the country levels of political polarization of the party system. Finally, the effect of political identities is conditioning by party identification, that is, it depends on the individual level of polarization of the existing political identities.

We attempt to demonstrate this by presenting the results of an innovative survey-experiment carried out on national samples in Spain and Portugal. We start by discussing the concept of interpersonal trust and how this might be influenced by the activation of political conflicts, introducing our main hypotheses. Then, we present the survey-experiment by which we collected the data employed in the study. Finally, we present the most important results and discuss their theoretical and empirical implications.

WHY SHOULD WE EXPECT TRUST TO BREAK DOWN ACROSS POLITICAL DIVIDES?

Trust involves a relationship of dependency between one individual, the ‘trustor’, which makes herself vulnerable by placing resources at the disposal of another party, the ‘trustee’ (Coleman, 1990). This informal commitment is associated with the expectation that the act will pay off in terms of the trustor’s goals. Then, this evaluation is the result of beliefs on the
other person’s trustworthiness, as well as of a rational calculation based on previous experience of returns relative to the costs (Yamagishi & Yamagishi, 1994). Yet, the final decision is conditioned by the structure of the situation in which the interaction takes place and by the reputation of the other part (Bacharach & Gambetta, 2001). This might be especially relevant for ‘particular trust’. However, when it comes to “general trust” and contrary of what it happens with ‘particular trust’, the context of the interaction could be too loose and the information about the other counterparts could be absent. So how citizens make their trusting decisions when there are not base on the information collected by repetitive personal interactions or a reduce set of individuals?

According to classical socio-psychological arguments, people tend to associate with others who are similar to themselves, because it is easier to predict their actions and motivations (Messick & Mackie, 1989; Brewer, 1999; Yuki, Maddux, Brewer, & Takemura, 2005). Anything that increases distance among citizens is therefore potentially harmful to social decisions (Akelrof, 1997). In this respect, two compatible perspectives help us to understand how trust relationships operate in daily life. The social identity theory maintains that identities shape attitudes and behaviors, leading people to favor ‘in-group’ members over the ‘out-group’ (Tajfel, 1978; Brewer, 1981). In this way, people develop psychological attachments that in turn shape their view and evaluation. On the other hand, cognitive heuristics theories argues that people use stereotypes in order to reduce the complexity of decisions, anticipating the behavior of others involved in the same situation (Tversky & Kahneman, 1974). Consistent with these two theoretical arguments, we should expect that social trust expressed towards those sharing identities is likely to be the same or higher than that of the one displayed towards unknown people. By the same token, trust towards those having different identities is going to be lower.

Survey and experimental research have explored the relationship between trust and social distance or social adscriptive features. This is the case for the effect on trust of gender (Croson & Gneezy, 2009), ethnic heterogeneity (e.g. Putnam, 2007; Habyarimana, Humphreys, Posner, & Weinstein, 2011), or religious diversity (Fershtman & Gneezy, 2001; Johansson-Stenman, 2013). There also studies showing the conditional effect on trust of

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2 The difference between ‘general’ and ‘particular’ trust is that the former extends beyond the boundaries of face-to-face interaction and it incorporates people out of a specific personal setting (Uslaner, 2002).
proximity (siblings, friends, etc) or national identities (Buchan & Croson, 2004). So, how different political identities emerging from distinct political divides might affect general (anonymous) social trust?

In representative democracies, political parties still constitute the key-agents for political conflict and aggregation of interest and a main actor in shaping peoples’ opinions and behaviors (Sniderman & Levendusky, 2007). This takes place at least by means of four interrelated processes: their capacity of providing a source of identification and attachment (Greene, 2004); their ability to frame the debate across specific issues; by providing a powerful informational cue (Popkin, 1991); and, finally, by setting the levels of political and ideological polarization of party systems (Druckman et al., 2013). Therefore, partisanship could be a powerful identity to set in-group and out-group members boundaries of political communities, constituting an important informational cue to other people’s trustworthiness (Carlin & Love, 2013). When party identity enters in a real strategic interaction when no other information is at hand, people may trust other people based upon the direction of their respective party identity. However, this might not be the same for all individuals or all the political systems. Individuals with more intense party identification might be more influenced by it when it comes to define boundaries and making trusting decisions. The same can also be said about the levels of polarization of the party system. More polarized party systems might increase the effect of party identification by boosting the salience of party identities and its effects on interpersonal trust.

**H1:** Citizen’s partisanship affects trust decisions leading people to favor in-group members over the out-group.

**H2:** This effect is likely to vary across national contexts according to different levels of party system polarization.

Are also other political or social divides important to explaining individual social trust? In many European democracies, the left-right dimension is generally regarded as the primary axis of party competition in Europe (Aldrich et al., 2010: 5) and the main mechanism that voters use to choose a party to represent them (Blais et al., 2004; Mair, 2007; Freire, 2008). While partisanship is recognized as relevant, it is generally seen as a less useful cue for voters than other functional informational short-cuts available to them (Downs 1957; Shively, 1979;
Thomassen & Rosema, 2009). Most importantly, the left-right scheme is associated to sets of values and it may be used as a reference point to identify groups in the socio-political realm (e.g. Kitschelt & Hellemans, 1990; Bartolini, 2000). Additionally, there are some important cleavages that could shape the nature of party and political competition in many democracies such as social class and the center-periphery (regional) cleavages (Lipset & Rokkan, 1969; Bartolini & Mair, 1990). Are these divides and the identification they produce around them also relevant to explain the individual decision to trust? Are they also equally important as party identification?

The answer to this question might depend of the politization of some of these cleavages in a political system (Przeworski & Sprage, 1989; Chhibber & Torcal, 1997; Torcal and Mainwaring, 2003). Some divisions and identities might have a negative higher impact on trust towards people outside of group, depending on the saliency and politization of the main cleavages. Other social divisions, instead, may not favor the development of a distinct set of beliefs and group identities failing to gain any salient political content (Simon & Klandermans, 2001, Huddy, 2001, Huddy, 2013):

\[ H3: \text{The in-group/out-group discrimination applies to other basic identities related to salient politicized conflicts, such as social class, regional and ideological identity,} \]

\[ H4: \text{However, party identification should have the strongest effect on trust, since it is the main heuristic used to articulate political conflicts in any political community.} \]

Moreover, political identities do not only have direction but also different degrees of intensity (Campbell et al., 1960), and political cohesion and discrimination rest on the development of strong identities (Fowler & Kam, 2007; Carlin & Love, 2013). Thus, the intensity of the identity might have a \textit{direct impact} on the difference between trust towards same and different identities and people with strong identities should magnify this effect between his group and the others.

\[ H5: \text{The intensity of basic identities widens the trust gaps produced between the in-group and the out-group (direct effect).} \]
Finally, as we said, the level of the conflict produced by identities might depend on their level of politicization. As already noted above, parties may play an important role in fostering divisive positions, by framing issues and opinions and polarizing conflicts (Druckman et al., 2013; Torcal & Mota 2013). In brief, partisanship might be not only the most negative influential factor in producing individual distrust towards others, but may be the most relevant interactive element in producing the effect of other forms of identification already present in the society.

**H6: Citizen’s partisanship interacting with other basic identities increases the trust gaps between the in-group and the out-group (interactive effect).**

**RESEARCH STRATEGY: EXPERIMENTAL PROCEDURE AND DATA**

Most survey research settles on the same question to measure social trust (Uslaner, 2001: 575; 2002: 54), which was invented by Elisabeth Noelle-Neumann and first used in Germany in 1948 and then picked up by American researchers (Rosenberg, 1956). Despite its general use, namely in the World Value Survey and the European Value Survey, this way of measuring social trust presents many problems. There have been some attempts to improve this measure with new scales. Yet, some studies have pointed out that trust questions are too generic and the answers would elicit only expressed preferences without any reference to the group or the stakes respondents have in mind when making such an assessment (e.g. Miller & Mitamura, 2003; Delhey, Newton, & Welzel, 2011). An alternative relies on the use of the experimental method implementing specific trust-games which provide behavioral measures, framing more clearly the type of situation, the stakes and the reference group (e.g. Camerer, 2003).

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3 The wording of the classic question is ‘Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?’ For methodological discussion about trust see Newton (2007); and Nannestad (2008).

4 For a discussion of the measurement problems of this question and the contaminating presence of the trust-versus-caution dimension in the measurement see Miller & Mitamura (2003).

5 More recently, the ESS has moved from a dichotomous measure to an 11-point scale, where 10 means that ‘most people can be trusted’ and 0 that ‘you can’t be too careful’. As we did early on in the chapter for confidence in parliament, we compare in table 12 the aggregate levels of interpersonal trust in three points in time (1990, 1999 and 2004) for all countries encompassed both by the WVS/EVS and the ESS studies.
2003; Ostrom & Walker, 2003). The main shortcoming is that experiments often rely on subjects of self-selected students, with resulting problems of external validity. By embedding experiments in a survey questionnaire we may combine a better trust measurement and the possibility of identifying the causal effect of different political divisions with the collection of data on a wider sample of subjects, ensuring variation on some key-individual characteristics.\(^6\)

In the present study, we use data collected from an online panel samples of the Spanish and Portuguese populations representative by quota, applying an original survey-experiment.\(^7\) Respondents were recruited by active invitation among the registered users. Self-registering was not allowed, so the problem of selection was more limited. The sample was designed using gender, age, education, and size of habitat quotas and in both countries this includes a range of people between 18 and 65 years old.\(^8\) Although this is not a probability sample, this procedure provides a variety in key demographics that minimizes the possibility that the results are being driven by heterogeneous effects of the stimuli on a specific population group. In addition, studies using samples from this same online panel have shown that the resulting estimations produce results very similar to those obtained using the probabilistic sample of other programs as the European Social Survey in Spain (Revilla, Saris, Loewe, & Ochoa, 2013). The data are part of a broader panel survey conducted in different waves, however, since some of them are focused on a different topic, we use only those including trust experiments, that is, the first wave for Portugal (May 2012) and the first and the third for Spain (February-March 2012 and May-June 2013).

The design of the survey experiment proceeded as follows. In the first step, interviewees were asked to play a specific version of the one-shot trust-game (Berg, Dickaut, & McCabe,

\(^6\) For other important examples of “nation-wide” trust experiments, which however do not use the web in their implementation, please refer to Fehr, Fischbacher, von Rosenbladt, Schupp, & Wagner (2003) or Ermisch and Gambetta (2010).

\(^7\) The research has been conducted with the support of an on ‘line public opinion firm, named NetQuest. For more information, please refer to: \url{www.netquest.com}.

\(^8\) In short, the sample consisted of citizens with Internet access either at home or at work, which in 2010 in Spain were around 86% in that age range while this were over 77% in Portugal, as provided by the European Social Survey, round 5. Data can be accessed at: \url{www.europeansocialsurvey.org}. A smaller age range could have been used, but at cost of reducing individual variation on some important characteristics.
A trust game is a sequence of moves between two actors where both are fully informed about its structure and payoffs. This is played by two randomly assigned anonymous players, who do not know each other before participating to the game, nor they exchange any information during its implementation. Player 1, who moves first, is given an endowment (being this money or not) and told he/she can share some, none, or all of it with Player 2, who is also given the same endowment. Then, Player 1 is told that any sum shared will be tripled before giving it to Player 2, and that Player 2 will be given the same options – to return some, none, or all of it to Player 1. Trust is elicited as the amount Player 1 sends to Player 2. The amount of money returned by Player 2s, instead, measures trustworthiness, which is not the topic of this research. It is worth noting that, since Player 2 has no incentive to return any amount, the dominant strategy would imply Player 1 to keep the sum of money she/he receives at the beginning, passing none to the other player. Nevertheless, as many studies have shown, trust is widespread and reciprocated by players (Johnson & Mislin, 2011).

In our survey-experiment, instead of real money, both players began each game with an amount of virtual money equal to 5. There is an initial anonymous game for all Players 1 with a theoretical Player 2 where no information about him/her is provided, aiming to measure baseline anonymous trust. There also subsequent games with different players, in which participants are given some additional information on the other person’s political or social identity. This way, subjects received treatments as they were informed about the identity of the other subsequent players. For instance, in Portugal, after the anonymous first game, we told the interviewee that the new player identified with the Partido Socialista (PS) or the Partido Social Democrata (PSD). In Spain, participants were informed, instead, that the new player identified with the Partido Socialista Obrero Español (PSOE) or Partido Popular (PP). Then, in the other games, respondents were informed that the new players were part of a social class (high, middle or low social class), they had a regional origin (Basque, Catalan, Madrilenian, Andalusian) and they identified with a political ideology (Left, Centre, Right).

In their meta-analysis of 162 trust-games on students and non-students sample Johnson & Mislin (2011) shows that in Europe the proportion of the endowment sent by Player 1s ranges between 0.22 and 0.78 with a mean of 0.53 and a standard deviation of 0.12. In the anonymous game Player 1s sent on average a proportion between 0.52 and 0.64 across the surveys. The value is within a standard deviation of that mean, thus, we might conclude that our research elicit levels of trust comparable to others studies, confirming the reliability of its results.
(for a closer look at the structure of the game as well as at the experimental protocol used refer to Appendix A).\textsuperscript{10}

It is important to emphasize that Player 1 and 2 as well as the treatments have been assigned in a random order. Moreover, this information about the different players was the only information provided during the entire course of the experiment. This has allowed us to test to what extent the players biased their trust decision by following group differentiation and political clues. This has also given the opportunity to measure trust gaps, which represents the individual difference of trust towards members of the same social and political group from those of the politically rivals. To control for any minimal group dynamics throughout the experiments, in both countries a subset of subjects played an additional set of games involving a minimal-group treatment.\textsuperscript{11} This provides a further test of the robustness of the effect of the different treatments and it discards the possibility of a pure treatment effect. Lastly, we only consider the information for the decisions taken by Player 1s, with the following sample sizes: Portugal 480 and Spain 634 and 432.\textsuperscript{12}

Finally, after the experiment, participants were administered different survey questions. In this way, it was possible to assess respondents’ positions on the four dimensions of interest such as partisanship, regional identification, ideological self-placement and indicators of wealth and education to identify their social and economic status.\textsuperscript{13}

RESULTS

\textit{The effect of partisanship and other politicized identities on trust}

\textsuperscript{10} For a closer look instead at the experimental protocol please look at the online supplementary material.

\textsuperscript{11} Participants were told they were assigned to one of the two groups, green and blue and that the other player belonged to the same or to a different group.

\textsuperscript{12} The subsequent waves in Spain suffered the problem of panel attrition. However, a comparison of means of anonymous trust has been performed distinguishing respondents in term of participation across wave. This has revealed no significant differences, suggesting the absence of a randomization bias due to trust in participating to the study. Sample characteristics are available from the authors.

\textsuperscript{13} Questions and response sets have been taken from different national and international surveys as the General Social Survey (GSS), the European Social Survey (ESS) or the Centro de Investigaciones Sociológicas (CIS).
If our first hypothesis (H1) is correct the number of points sent to in-group partisans should be similar or higher than anonymous trust, while the number of points sent to rival partisans should be far lower. Figure 1a displays mean trust allocations by partisanship in both Spain and Portugal. It can be seen clearly that trust among same party identities tends to be higher than trust between different ones, confirming this first hypothesis. In Spain, the difference between in-group and out-group members is slightly higher for PP identifiers (2.4 out of 5 available points) than for people who identifies with PSOE (2.2) and both of them are strongly significant (Wilcoxon paired signed-rank test, p<0.001). Briefly, PP identifiers tend to favor their fellows against their counterparts more than what PSOE identifiers actually do. A similar pattern can be identified also in Portugal. Indeed, the value is higher for PS identifiers (1.3) than for PSD partisans (1.1). However, although the differences between opposing partisan identities are significant (p<0.001), the treatment effect is more moderate in this case. This responds to the fact that Spain is a case of high levels of polarization. According to the Dalton’s index (2008), Spain presents a polarization index of 4.86 for the period 2006-2011, whereas this figure for Portugal is only 3.42, providing a first validation of our second hypothesis (H2).

Another important thing that can be noted is that partisanship has an effect both on in-group and out-group trust (figure 1b), building up trust among similar identities, while it largely destroys trust among different ones (Wilcoxon paired test between trust towards co- and rival identities on the one hand and trust in strangers on the other is significant, p<0.001). This is a remarkable finding, as some studies on social identities tend to consider the two processes of group cohesion and discrimination as separated and with different underlying explanatory mechanisms (e.g. Brewer 1999). In our case, partisanship acts at both levels, being a salient source of separation within society.

14 These data were computed using the ‘Comparative Study of Electoral system’ (CSES). Additionally, these data about polarization is confirmed with the party Manifesto data for 2009: ‘Party Manifesto’ (2009): Spain 4.98 and Portugal 4.45.
The preceding results are extended if we take the means of the trust gaps, namely the average trust difference between member of one’s in-group and the out-group. By looking at figure 1c, in fact, we might see that the gap is largely higher for Spain (2.5 out of 5) than Portugal (1.2), confirming once more our second hypothesis (H2) that the partisan effect varies across national contexts and this takes place according to the levels of polarization of the two countries’ party systems. At this point it is reasonable to ask whether the effect of partisanship on trust has actually to do with salience and party polarization more generally. Indeed, a wide range of psychological studies on minimal group effects has demonstrated that it might be easy to create group-based discrimination by providing a piece of information to be used as a reference point (Tajfel, 1978). Thus, instead of using partisanship as a heuristic, our treatments may simply constitute a benchmark to create minimal groups. For this reason, we also show results for the minimal group treatment. In this respect, as expected by theory, this creates trust discrimination (Wilcoxon paired test, p<0.001); yet, the difference between the two color teams is significantly much smaller than the others, suggesting that partisanship is conveying additional cues beyond simple in-group/out-group identities, indeed.

But, what about the left-right divide? What effect has on social trust? If we now focus on the Spanish case and we look at figure 2a, trust discrimination between in-group and out-group members according to respondents’ ideological position is confirmed in particular when considering left and right categories. Left wing citizens show a higher gap between fellows and their opponents (around 1.6, Wilcoxon paired test, p<0.001) than the right wing ones (0.8 Wilcoxon paired test, p=0.001). The ‘Centre’ position seems to act as a ‘genuine moderate orientation’15, at least in relation to its effect on trust. Those who identify with the ‘Centre’ position relate with in-group members as they do with anonymous participants while they distrust left and right wing respondents similarly. Finally, right wing people do not bias negatively their trust towards people from the Centre, so they do not perceive them as being member of an out-group.16 These results confirm the significant effect of the ideological divide on trust, but it also shows to have more moderate effect than partisanship.

[Figure 2 about here]

15 See on this discussion for instance Knutset (1998).
16 The difference between the trust by right wings towards their in-group and people from the Centre is not significant (Wilcoxon paired test p=0.321).
However, as we noted above, the nature of party systems may reflect other potential divides or conflicts in the society (Lipset & Rokkan, 1969; Bartolini & Mair, 1990). In the case of the center-periphery conflict, Spain is a multi-national and multi-linguistic society (Linz & Montero, 2001), which has resulted in the development of a multi-level party system polarized according to the center-periphery conflict (Gunther et al., 2004). In order to estimate its effect on social trust, we focus our attention on the division between the main cultural minorities, namely Basques and Catalans, and the Spanish group, in this case represented by Madrilenians and Andalusians (figure 2b).\(^\text{17}\) As we can see with this political/identitarian divide, trust among same regional identities tends also to be higher that trust between different ones. The difference in the trust among identities is a significant 0.7 out of 5 for Basque and Catalans and 0.8 for Madrilenians and Andalusians (in both cases a Wilcoxon paired test is significant with a p<0.001); although it is also lower than that of the partisanship.

Finally, it is worth asking whether social class produce the same type of pattern on interpersonal trust as the one generated by partisanship. Figure 2c displays that the same effect is not found for social class. First, regardless the socio-economic status, respondents tend to trust more people from lower classes. Then, only lower social class citizens favor their fellows over the out-group suggesting that social class identification produces a different dynamic on interpersonal trust than partisanship, beyond the in-group/out-group discrimination. These results seem to respond to the general secondary role given to the class conflict in Spanish politics since the restoration of democracy and despite its recent politization (Cainzos, 2001).

Briefly, people in a politically divided society tend to bias their trust along the most relevant political identities. This is particularly true for those conflicts for which the level of politicization may have been much higher and have played an important role in orienting people’s preferences in Spain, namely the partisan, the territorial and the ideological conflicts (e.g. Gunther et al., 2004; Balaguer & Sanz, 2010; Torcal & Mota, 2013). Our third hypothesis is therefore confirmed, since the in-group/out-group discrimination applies to

\(^{17}\) We decided to join the two regional groups after observing homogeneous effects on trusting behaviors. This has also allowed to increase statistical efficiency in the analysis.
other basic identities related to other salient politicized conflict, with the exception of the social class division.

Differently from partisanship, in Spain, both the regional and the ideological conflicts favor discrimination but they don’t result in more bonding trust among co-members, while social class does not produce any group-based difference in terms of interpersonal trust. When looking at figure 3, showing the trust gaps according to different conflict divides, we can observe that although territorial identity is an important element to describe the political underpinnings of trust in Spain, its magnitude is lower than the one produced by the ideology.18

[Figure 3 about here]

Generally speaking we might conclude that political conflicts affect interpersonal trust in a different ways and with varying strength, but partisanship confirms to be the strongest sources of bias across groups, at least in Spain. This gap is even higher to the one reported by Carlin and Love (2013) in their research in the US context, which was already very remarkable. Moreover, partisanship is far more divisive than ideology although the last one constitutes the label *par excellence* to describe political competition and conflict, validating our fourth hypothesis (H4). Overall, the trust gaps found in our research are among the largest in the literature, which refer to other social and ethnic divisions (e.g. Fershtman & Gneezy, 2001).

*Trust gaps: a multivariate analysis*

To evaluate the second part of our argument on what factors widen or reduce the size of the trust gaps produced by the different conflicts, we have estimated a series of multivariate regression models having as the dependent variables the partisan, the regional and the ideological trust gaps measured by taking the difference between trust towards co- and rival members of the different political groups. We assess the effect of the intensity of identities (H5) by including variables that measure the strength of partisanship, regional identity and ideology. On the other hand, we test the role of parties in politicizing identities (H6) by

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18 In a Wilcoxon paired ranked-sign, all mean differences among gaps are significant at 0.001.
adding several interactions terms. More specifically, in the model for the regional trust gap we include an interactive variable created between the intensity of regional identities and dummy variables for partisanship with a statewide party or with a regional one. In the model for the ideological trust gap, instead, another term has been created between the intensity of ideology and a dummy for partisanship. Then, following previous work (e.g. Alesina & LaFerrera, 2002; Croson & Gneezy, 2009; Cardenas and Carpenter, 2008), all the models include as independent variables, classic predictors of trust behaviors, such as socio-demographics (gender, age, education and domicile). We have also added as further controls an indicator of political sophistication, the level of political interest (Carlin & Love, 2013) and the level of trust towards strangers measured by the anonymous trust game to control the effect of some psychological component in respondents’ behavior (for a description of question wording and operationalization see Appendix B).

First, we start with the partisan trust gap in Spain and Portugal. It is worth noting that for both countries we also perform a baseline model for trust in strangers (anonymous game), in order to provide further evidence on the effect of partisanship on trust. As can be seen in table 1, partisanship has no effect on trust towards strangers, meaning that this matters only when some information on the other person’s identity is introduced during a strategic interaction. When this happens, people close to some party, in our case PP and PSOE for Spain and PS and PSD for Portugal, tends to trust the in-group more than others. Additionally, this varies with the intensity of the identity, leading strong partisans to bias their trust more heavily. In Spain, compared to weak identifiers, they sent around 1.1 reward points (out of a total of 5) more to co-partisans, while in Portugal the amount of tickets is lower and equal to 0.5. This confirms once again the lower salience of partisanship in forming group identities in this country. The estimation is highly significant in particular for Spain and it is robust to the controls included.

[Table 1 about here]

Additionally, it is worth noting the role of gender for trust towards strangers (Croson & Gneezy, 2009), suggesting women to be less trustful than man in both countries. However, this relationship reverses when considering the partisan trust gap and, as we will see later on, it disappears for the other gaps. Age seems also to play some role when the partisan information is introduced in a trust situation, but the effect are mixed across the two national
contexts. Lastly, political sophistication plays no role vis-à-vis the partisan trust gap, contradicting previous research (Carlin & Love, 2013).

When looking at table 2, showing results for the regional and the ideological trust gaps, we can draw similar conclusions regarding the role of identities. If we consider model 1 for the regional trust gap the strength of the identity captured by the variable regionalism turns out to be positively related to the gap and statistically significant, although the magnitude is lower compared to the model for the partisan trust gap. In brief, the more respondents feel attached to their own region or Comunidad Autonoma (CCAA) the more their trust towards in-group members, sending around 0.2 reward points more. It might be interesting to notice that for the regional trust gap also the place of living seems to play a role. This is in fact negatively associated, meaning that people who live in a more urban environment show lower discrimination in regional terms. To conclude this part, the intensity of the identities has also an important direct effect when considering the ideological gap. As reported by model 1, people with extreme ideologies tend to favor their fellows more than people with moderate positions (0.8 reward points more). Overall, our fifth hypothesis (H5) is also confirmed, suggesting a direct impact of the intensity of identities in increasing the trust gaps produced between the in-group and the out-group by different political conflicts.

[Table 2 about here]

This brings us to the last part of our analyses in which we want to check for any potential interaction between identities and partisanship. More specifically, our sixth hypothesis (H6) is that some identities may have an effect on trust because they reach political content and this might be due to the abilities of parties to frame issues and lead the dynamics of competition within a particular social context. In other words, there might be an interactive effect of partisanship and other existing identities, increasing their negative impact on trust towards others. To confirm this in model 2, we might look at the interaction terms we have included between the strength of each identity and different dummy variables measuring partisanship. In the case of the regional trust gaps, as our results show, the statistical coefficient for the interactive term of the intensity of the regional identity and partisanship with a regional party is positive and significant. In other words, the trust discrimination between regional identities becomes more severe when people feel closer to their CCAA, but this is significantly stronger among people who identify with regional parties, which are
responsible for more divisive positions in territorial terms. On the other hand, the interaction effect of partisanship with statewide parties, which usually promote more centralizing positions, is not significant.

The politicizing effect of parties is encountered also in model 2 for ideology. The interaction effect between extreme ideologies and partisanship is in fact positive and significant, suggesting a higher discrimination between ideological identities among people that identify with a party than non-partisans. In brief, the impact of the different conflict depends on the intensity of the basic identity, but also on the level of politicization of that particular conflict. Parties are largely responsible of this by promoting and polarizing existing conflicts among citizens. In order to check the robustness of our results we have also performed a similar analysis for social class, showing that in this case partisanship does not interact with social class identities. This provides further confirmation of our final hypothesis and the idea that the effect of identities vis-à-vis interpersonal trust and the creation of an in-group/out-group dynamic depends on the level of politicization and whether they represent any underlying political conflict. 19

DISCUSSION AND IMPLICATIONS

Modern democratic life is structured around political competition among different groups and by joining groups people acquire a system of beliefs and an orientation in daily life, reducing risk decisions and enabling citizens’ participation in the public sphere. However, the main claim of this article is that when groups are distant and underlying political identities are salient, society may divide in blocs, with resulting problems for interpersonal trust among people. The main actors responsible for this process are political parties, which contribute to politicize group identities and promote existing conflicts within a specific polity.

In this way, the present study tries to address the controversial role of political organization and parties in the creation of interpersonal trust, a key-component of cooperation. Indeed, while some studies have often praised the role of political parties in bringing people together and fostering cooperation among them (Putnam 2000), under certain circumstances peoples’

19 Results for the model involving social class are reported in Appendix B.
attachment to different parties may shape opinion quality (Anduiza, Gallego, & Muñoz 2013; Druckman et al., 2013) and enhance group-based trust (Uslaner 2005). In this respect, experimental studies have shown that partisanship seems to increase in-group at the expense of out-group trust (Carlin & Love, 2013). Yet, this effect has been usually tested in single countries, without comparing it to other potential sources of identification and division.

By analyzing data from an original survey-experiment carried out in Spain and Portugal between 2012 and 2013, this article provides compelling evidence that people tend to favor others with the same party identity and discriminate those with a different one. Our design, which embeds several trust-game experiments into a survey questionnaire, has allowed us to investigate the effect of a change in the information about the other person’s party identity on trust behavior, while holding all other intervening factors constant. In this way, we have demonstrated that the partisan effect applies to diverse national contexts, producing gaps between co-ad rival partisans and that these gaps may vary depending on the level of polarization of the party system under examination. Moreover, the effect of partisanship has been evaluated against the minimal group condition confirming partisanship to convey additional cues beyond simple in-group/out-group identities.

Then, by focusing on the Spanish context and following other influential contributions (Simon & Klandermans, 2001, Huddy, 2013), we have also considered the potential role of other existing identities in affecting trust behaviors. In this way, we have revealed the size of different group-based types of trust, confirming partisanship to be the strongest source of discrimination, followed by the ideological and the regional divisions. On the other hand, economic cleavages, which are usually considered a driving factor of political competition, does not produce the same dynamic. Overall, the effects produced in terms of gaps are remarkable and among the largest when compared to other similar studies (e.g. Fershtman & Gneezy, 2001; Carlin & Love, 2013).

Another interesting contribution is related to how to explain the differences in the impact of the different political divisions on trust behaviors. On the one hand, our analysis points at the direct effect of the intensity of identities, demonstrating strong identifiers to magnify differences among same and different identities (Fowler & Kam, 2007; Huddy, 2013; Carlin & Love, 2013). This holds true to different statistical checks and other intervening factors. On the other, we have theorized an interactive effect of partisan identities on other group
identities, promoting and polarizing the conflict among citizens. In this way, we show the role of political parties in the process of identity crystallization and group conflict (Huddy 2001).

Finally, in this article we join a growing strand of research, which employ behavioral games to study other-regarding preferences (Camerer, 2003). As done in some initial efforts (e.g. Anderhub, Muller, & Schmidt, 2001), we contribute to this area of investigation by taking lab experiments to the Internet with the aim of collecting data on online panels of respondents. Although our sample is non-probabilistic, at least it ensures more variation than common experimental research on the same topic, aiming at more robust results. To our knowledge, this is among the first attempts in this direction, which has still margin for improvement in future research.

Overall, this study contributes to the debate on the impact of party politics and political divisions in the creation of interpersonal trust among people, raising critical concerns about their negative effect when identification processes are strong and polarized.

REFERENCES


Figure 1: Experimental trust and the partisanship treatment in Spain and Portugal.

a) Average tickets different Player 1s sent to Player 2s in different trust games (PP vs. PSOE; PS vs. PSD)

b) Trust towards co- and rival partisan identities

c) Comparing the average partisanship trust gap to the minimal group treatment
Figure 2: Experimental trust by social class, regional identities and ideology in Spain.

a) Ideological identities: average tickets different Player 1s sent to Player 2s in different trust games (Left vs. Centre vs. Right) and average trust towards co- and rival ideological identities

b) Regional identities: average tickets different Player 1s sent to Player 2s in different trust games (Basque/Catalan vs. Madrilenian/Andalusian), and average trust towards co- and rival regional identities

c) Social class identities: average tickets different Player 1s sent to Player 2s in different trust games (high vs. middle vs. low social class), and average trust towards co- and rival social class identities
Figure 3: Regional and ideological trust gaps in Spain.
Table 1: Multivariate OLS models: partisan trust gap in Spain and Portugal.

<table>
<thead>
<tr>
<th></th>
<th>Spain</th>
<th>Portugal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trust in Strangers</td>
<td>Partisan trust gap</td>
</tr>
<tr>
<td>Gender (ref: man)</td>
<td>-0.545*** (0.105)</td>
<td>0.618** (0.013)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.004 (0.005)</td>
<td>0.035*** (0.013)</td>
</tr>
<tr>
<td>Education (ref: primary or none)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower secondary</td>
<td>0.209 (0.394)</td>
<td>0.361 (0.995)</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>0.064 (0.353)</td>
<td>1.085 (0.922)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>0.267 (0.355)</td>
<td>1.176 (0.939)</td>
</tr>
<tr>
<td>Urban area (ref: less than 100000 inhabitants)</td>
<td>0.097 (0.104)</td>
<td>-0.119 (0.268)</td>
</tr>
<tr>
<td>Partisanship (ref: no partisan)</td>
<td>0.037 (0.109)</td>
<td>-0.062 (0.107)</td>
</tr>
<tr>
<td>Trust in strangers</td>
<td>0.146 (0.110)</td>
<td></td>
</tr>
<tr>
<td>Political knowledge</td>
<td>0.001 (0.179)</td>
<td></td>
</tr>
<tr>
<td>Political interest (Ref: low interest)</td>
<td>0.025 (0.298)</td>
<td></td>
</tr>
<tr>
<td>Left/Right scale</td>
<td>0.036 (0.093)</td>
<td></td>
</tr>
<tr>
<td>PP identifier</td>
<td>0.046 (0.538)</td>
<td></td>
</tr>
<tr>
<td>PS identifier</td>
<td></td>
<td>0.156 (0.382)</td>
</tr>
<tr>
<td>Strong partisan identity (ref: weak identity)</td>
<td>1.101*** (0.312)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.698*** (0.411)</td>
<td>-1.697 (1.212)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.044 (0.412)</td>
<td>0.148 (1.212)</td>
</tr>
<tr>
<td>N</td>
<td>619</td>
<td>181</td>
</tr>
</tbody>
</table>

Note: p-values: * p < 0.10; ** p < 0.05; *** p < 0.01; Robust standard errors in parenthesis.
Table 2: Multivariate OLS models: regional and ideological trust gaps in Spain.

<table>
<thead>
<tr>
<th></th>
<th>Regional trust gap</th>
<th>Ideological trust gap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Gender (ref: man)</td>
<td>0.198</td>
<td>0.184</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.142)</td>
</tr>
<tr>
<td>Age</td>
<td>- 0.007</td>
<td>- 0.006</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Education (ref: primary or none)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower secondary</td>
<td>- 0.487</td>
<td>- 0.491</td>
</tr>
<tr>
<td></td>
<td>(0.701)</td>
<td>(0.674)</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>- 0.211</td>
<td>- 0.256</td>
</tr>
<tr>
<td></td>
<td>(0.634)</td>
<td>(0.610)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>- 0.284</td>
<td>- 0.320</td>
</tr>
<tr>
<td></td>
<td>(0.637)</td>
<td>(0.612)</td>
</tr>
<tr>
<td>Urban area (ref: less than 100000 inhabitants)</td>
<td>- 0.360**</td>
<td>- 0.349**</td>
</tr>
<tr>
<td></td>
<td>(0.145)</td>
<td>(0.140)</td>
</tr>
<tr>
<td>Trust in strangers</td>
<td>- 0.076</td>
<td>- 0.073</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td>(0.048)</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>0.040</td>
<td>0.038</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(0.080)</td>
</tr>
<tr>
<td>Political interest (ref: low interest)</td>
<td>- 0.072</td>
<td>- 0.072</td>
</tr>
<tr>
<td></td>
<td>(0.151)</td>
<td>(0.146)</td>
</tr>
<tr>
<td>Basque/Catalan identity</td>
<td>- 0.518***</td>
<td>- 0.465***</td>
</tr>
<tr>
<td></td>
<td>(0.174)</td>
<td>(0.168)</td>
</tr>
<tr>
<td>Intensity of regional identity (CCAA)</td>
<td>0.218***</td>
<td>0.096</td>
</tr>
<tr>
<td></td>
<td>(0.080)</td>
<td>(0.104)</td>
</tr>
<tr>
<td>Partisanship (ref: no partisan)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional party</td>
<td>0.468*</td>
<td>2.157</td>
</tr>
<tr>
<td></td>
<td>(0.272)</td>
<td>(1.595)</td>
</tr>
<tr>
<td>Statewide party</td>
<td>- 0.091</td>
<td>- 0.657</td>
</tr>
<tr>
<td></td>
<td>(0.157)</td>
<td>(0.427)</td>
</tr>
<tr>
<td>Partisanship with regional party*Intensity of regional identity (CCAA)</td>
<td>0.608*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.362)</td>
<td></td>
</tr>
<tr>
<td>Partisanship with statewide party*Intensity of regional identity (CCAA)</td>
<td>0.213</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td></td>
</tr>
<tr>
<td>Ideology (ref: Centre)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left ideology</td>
<td>0.540***</td>
<td>0.571***</td>
</tr>
<tr>
<td></td>
<td>(0.204)</td>
<td>(0.203)</td>
</tr>
<tr>
<td>Right ideology</td>
<td>- 0.465***</td>
<td>- 0.413*</td>
</tr>
<tr>
<td></td>
<td>(0.220)</td>
<td>(0.220)</td>
</tr>
<tr>
<td>Partisanship (ref: no partisan)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extreme ideological identities (ref: moderate)</td>
<td>0.836***</td>
<td>- 0.183</td>
</tr>
<tr>
<td></td>
<td>(0.193)</td>
<td>(0.495)</td>
</tr>
<tr>
<td>Extreme ideological identities*partisanship</td>
<td>1.209**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.527)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.874</td>
<td>1.181</td>
</tr>
<tr>
<td></td>
<td>(0.781)</td>
<td>(0.769)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.084</td>
<td>0.088</td>
</tr>
<tr>
<td></td>
<td>(0.789)</td>
<td>(0.784)</td>
</tr>
<tr>
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<td>239</td>
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</tr>
<tr>
<td></td>
<td>388</td>
<td>388</td>
</tr>
</tbody>
</table>

Note: p-values: * p < 0.10; ** p < 0.05; *** p < 0.01; Robust standard errors in parenthesis.
APPENDIX A

Structure and payoffs used in the game and the experimental protocol.

The structure of the game and payoffs used in the experiment

P1 stands for Player 1 and P2 for Player 2. P1 payoffs listed first in brackets. The picture illustrates the hypothetical case in which P1 sends all the endowment or nothing.
EXPERIMENTAL PROTOCOL FOR WAVE 1 IN SPAIN

Game instrument for subjects in the role of Player 1

*General instructions*

Estamos interesados en estudiar cómo la gente forma e interpreta sus preferencias sociales. Con el fin de responder a esta pregunta, le pedimos que participe en una breve encuesta online. En concreto, le pedimos que juegue siete juegos sociales y responda a una serie de preguntas a continuación.

Esta encuesta tiene una duración aproximada de 25 minutos. Alrededor de unas 1000 personas de toda España participarán en el estudio.

Para comenzar vas a participar en un breve juego en el que jugarás con otras personas que te asignaremos de forma aleatoria. Nunca llegarás a interactuar personalmente con ellas. Además, nunca sabrás la identidad de las otras personas y estas personas nunca sabrán la tuya. Las personas con las que serás asociado/a viven en España.

En este juego, hay dos jugadores: "Jugador/a 1" y "Jugador/a 2". Tú eres el Jugador/a 1.

El Jugador/a 2, al igual que tú, ha recibido 5 puntos NetQuest por participar en el estudio.

El juego consiste en lo siguiente:

1. Tienes la posibilidad de dar hasta 5 puntos NetQuest al Jugador/a 2.
2. Cualquiera que sea la cantidad de puntos que des al Jugador/a 2, nosotros multiplicaremos esta cantidad por 3 y la cantidad triplicada se le entregará al Jugador/a 2.
3. Debes decidir el número de puntos que quieres dar al jugador/a 2, en caso de que quieras darle alguno.
4. El/la Jugador/a 2 tiene la opción de devolverte una parte de la cantidad triplicada, aunque él/ella no está obligado/a a hacerlo.
5. El/la Jugador/a 2 se quedará con los puntos que le des (en caso de que decidas darle alguno), más los puntos que nosotros le dimos al comienzo del juego, menos los puntos que él/ella decida darte (en caso de que el/la jugador/a 2 decida darte alguno).
6. Te quedarás con los puntos que decidas conservar más los puntos que el/la jugador/a 2 decida darte (en caso de que él o ella decida darte alguno).
7. A continuación, el juego se termina.

**Pantalla siguiente**

Para aclarar cómo funciona este juego, considera los siguientes ejemplos

---

20 This is only a draft and shorter version of the experimental protocol, encompassing instructions only for partisanship. For reasons of clarity, the questionnaire has not been included. Finally, it should be remarked that, although games are listed by following a precise order, people played them following a random process. For player 2 instead only the general instructions are included in the protocol.
<table>
<thead>
<tr>
<th>Supón que decide dar al otro jugador/a:</th>
<th>Entonces el jugador/a 2 recibirá:</th>
<th>Supón que el otro jugador/a te devuelve:</th>
<th>Entonces conseguirás: (5 - # entregado + # recibido)</th>
<th>Y el otro jugador/a conseguirá: (5 + # recibido - # devuelto)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 puntos</td>
<td>0 puntos</td>
<td>0 puntos</td>
<td>5 - 0 + 0 = 5 puntos</td>
<td>5 + 0 = 5 puntos</td>
</tr>
<tr>
<td>1 puntos</td>
<td>3 puntos</td>
<td>2 puntos</td>
<td>5 - 1 + 2 = 6 puntos</td>
<td>5 + 3 - 2 = 6 puntos</td>
</tr>
<tr>
<td>3 puntos</td>
<td>9 puntos</td>
<td>0 puntos</td>
<td>5 - 3 + 0 = 2 puntos</td>
<td>5 + 9 - 0 = 14 puntos</td>
</tr>
<tr>
<td>3 puntos</td>
<td>9 puntos</td>
<td>9 puntos</td>
<td>5 - 3 + 9 = 11 puntos</td>
<td>5 + 9 - 9 = 5 puntos</td>
</tr>
<tr>
<td>5 puntos</td>
<td>15 puntos</td>
<td>7 puntos</td>
<td>5 - 5 + 7 = 7 puntos</td>
<td>5 + 15 - 7 = 13 puntos</td>
</tr>
</tbody>
</table>

**Pantalla siguiente**

[Preguntas para comprobar que se ha entendido el juego]

P0.0 ¿Has entendido cómo se juega el juego?

• Sí
• No

**Pantalla siguiente**

Permítenos unas preguntas para comprobarlo.

P0.1 Supón que das 5 puntos NetQuest al otro jugador/a, ¿cuántos puntos obtendrá el otro jugador/a?

• 5+0=5
• 15+0=15
• 15+5=20

**Pantalla siguiente**

P0.2 Supón que ahora el otro jugador/a te devuelve 15 puntos NetQuest, ¿cuántos puntos tendrás al final del juego?

• 5
• 15
• 13

**Pantalla siguiente**

Juego 1. INSTRUCCIONES

Una vez que ha entendido el juego, cuando esté listo para tomar una decisión con respecto al primer Jugador/a 2 que, como usted, ha recibido 5 puntos NetQuest por participar en este estudio. Usted no sabrá quién es esta persona ni durante ni después de la encuesta (ni la otra
persona sabrá quién es usted). Ahora seleccione, por favor, la cantidad de puntos NetQuest que usted quiere dar al Jugador/a 2 y pase al siguiente juego.

- 0
- 1
- 2
- 3
- 4
- 5

Pantalla siguiente

Juego 2. INSTRUCCIONES

Este juego se juega de la misma manera que el primer juego. Como en el juego anterior, en este juego, hay dos jugadores: "Jugador/a 1" y "Jugador/a 3". Usted es el/la jugador/a 1.

El Jugador/a 3 también ha recibido 5 puntos NetQuest por participar en este estudio. Le recordamos, de nuevo, que usted no sabrá quién es esta persona ni durante ni después de la encuesta (ni la otra persona sabrá quién es usted). En este juego, sin embargo, hemos optado por darle la siguiente información acerca del Jugador/a 3:

El Jugador/a 3 se identifica políticamente con el PSOE.

Cuando esté listo para tomar una decisión, seleccione, por favor, la cantidad de puntos NetQuest que usted quiere dar al Jugador/a 3 y pase al siguiente juego.

- 0
- 1
- 2
- 3
- 4
- 5

Pantalla siguiente

Juego 3. INSTRUCCIONES

Este juego se juega de la misma manera que el primer juego. Como en el juego anterior, en este juego, hay dos jugadores: "Jugador/a 1" y "Jugador/a 4". Usted es el/la Jugador/a 1.

El Jugador/a 4, como usted, ha recibido 5 puntos NetQuest por participar en este estudio. De nuevo, usted no sabrá quién es esta persona ni durante ni después de la encuesta (ni la otra persona sabrá quién es usted). En este juego, sin embargo, hemos optado por darle la siguiente información acerca del Jugador/a 4:

El Jugador/a 4 se identifica políticamente con el PP.
Cuando esté listo para tomar una decisión, seleccione, por favor, la cantidad de puntos NetQuest que usted quiere dar al Jugador/a 4 y pase al siguiente juego.

- 0
- 1
- 2
- 3
- 4
- 5

[***]

*Game instrument for subjects in the role of Player 2*

Estamos interesados en estudiar la opinión de gente como tú en temas relacionados con nuestro sistema político y nuestra sociedad. Con tal fin, te pedimos que participes de nuevo en una breve encuesta online. Algunas de las preguntas ya te fueron formuladas con anterioridad. No te preocúpes al respecto. No hace falta que recuerdes que respondiste. Otras preguntas son, en cambio nuevas, pero creemos interesantes.

Esta encuesta tiene una duración aproximada de 7-8 minutos. Alrededor de unas 1000 personas de toda España participarán en el estudio.

Para comenzar vas a participar en un breve juego en el que jugarás con otras personas que te asignaremos de forma aleatoria. Nunca llegarás a interactuar personalmente con ellas. Además, nunca sabrás la identidad de las otras personas y estas personas nunca sabrán la tuya. Las personas con las que serás asociado/a viven en España.

*Pantalla siguiente*

En este juego, hay dos jugadores: "Jugador/a 1" y "Jugador/a 2". Tú eres el jugador/a 2.

El jugador/a 1, al igual que tú, ha recibido 5 puntos NetQuest por participar en el estudio.

El juego consiste en lo siguiente:

1. El/la Jugador/a 1 tiene la posibilidad de darle hasta 5 puntos NetQuest.
2. Cualquiera que sea la cantidad de puntos que el/la Jugador/a 1 te dé, nosotros multiplicaremos esta cantidad por 3 y, por tanto, tu recibirás esta cantidad triplicada.
3. Debes decidir el número de puntos que quieres devolver al Jugador/a 1, en caso de que quieras darle alguno.
4. El/la jugador/a 1 se quedará con los puntos que tú le devuelves (en caso de que decidas devolver alguno), más los puntos que nosotros le dimos al comienzo, menos los puntos que él/ella decida darte (en caso de que el/la Jugador/a 1 decida darte alguno).
5. Te quedarás con los puntos que nosotros te dimos al comienzo del juego, más los puntos que el/la jugador/a 2 decida darte (que nosotros triplicaremos), menos los puntos que tú le devuelves (en caso de que decidas devolver alguno).
6. A continuación, el juego se termina.
**Pantalla siguiente**

Para aclarar cómo funciona este juego, considera los siguientes ejemplos

<table>
<thead>
<tr>
<th>Suponga que la otra persona le da:</th>
<th>Entonces tu recibirás:</th>
<th>Suponga que tú decides devolverle:</th>
<th>Entonces, la otra persona conseguirá: (5 - # entregado + # recibido)</th>
<th>Y tu te quedará: (5 + # recibido - # devuelto)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 puntos</td>
<td>0 puntos</td>
<td>0 puntos</td>
<td>5 - 0 + 0 = 5 puntos</td>
<td>5 + 0 = 5 puntos</td>
</tr>
<tr>
<td>1 puntos</td>
<td>3 puntos</td>
<td>2 puntos</td>
<td>5 - 1 + 2 = 6 puntos</td>
<td>5 + 3 - 2 = 6 puntos</td>
</tr>
<tr>
<td>3 puntos</td>
<td>9 puntos</td>
<td>0 puntos</td>
<td>5 - 3 + 0 = 2 puntos</td>
<td>5 + 9 - 0 = 14 puntos</td>
</tr>
<tr>
<td>3 puntos</td>
<td>9 puntos</td>
<td>9 puntos</td>
<td>5 - 3 + 9 = 11 puntos</td>
<td>5 + 9 - 9 = 5 puntos</td>
</tr>
<tr>
<td>5 puntos</td>
<td>15 puntos</td>
<td>7 puntos</td>
<td>5 - 5 + 7 = 7 puntos</td>
<td>5 + 15 - 7 = 13 puntos</td>
</tr>
</tbody>
</table>

**Pantalla siguiente**

[Preguntas para comprobar que se ha entendido el juego]

P0.0 ¿Has entendido cómo se juega el juego?
- Sí
- No

**Pantalla siguiente**

Permítenos unas preguntas para comprobarlo.

P0.1 Supón que el/la Jugador/a 1 te dé 5 puntos NetQuest. ¿Cuántos puntos obtendrás?
- 5 + 0 = 5
- 15 + 0 = 15
- 15 + 5 = 20

**Pantalla siguiente**

P0.2 Supón que ahora tu le devuelvas 15 puntos NetQuest, ¿cuántos puntos tendrás al final del juego el/la Jugador/a 1?
- 5
- 15
- 13

[***]
APPENDIX B

Question wording and variables coding used in the analyses, other supplementary graphs of descriptive statistics and multivariate model for social class trust gap.

Gender: (1) ‘female’; (0) ‘male’

Age: age of respondent between 18 and 65.

Education: For Spain: (1) Sin estudios; (2) Educación Primaria (hasta los 12 años); (3) Primera etapa de Educación Secundaria (hasta los 14 años); (4) Segunda etapa de Educación Secundaria / Bachillerato antiguo / FP Grado Medio / BUP / COU / ESO; (5) Formación Profesional de Grado Superior / Bachillerato; (6) Educación superior / Diplomaturas / Licenciaturas / Masters / Doctorados; Recoded into: (1) Primary or lower (1, 2); (2) Lower secondary (3); (3) Upper secondary (4, 5); (4) Tertiary (6). For Portugal: (1) Sem estudos; (2) Escola Primária; (3) 6ª Classe / 6º ano; (4) Ciclo preparatório; (5) Ciclo preparatório; (6) Escola Industrial/Comercial; (7) 7º,8º,9º anos unificados; (8) 7º ano antigo/ Propedêutico; (9) 10º,11º,12º anos unificados; (10) Cursos de 2/3 anos com inicio a seguir ao 5º/9º anos; (11) Faculdade (completa ou incompleta); (12) Cursos com inicio a seguir ao 11º/12º anos unificados ou 7º ano antigo; Recoded into: (1) Primary or lower (1, 2, 3, 4); (2) Lower secondary (5, 6, 7); (3) Upper secondary (8, 9, 10); (4) Tertiary (11, 12).

Urban area: (1) up to 5.000; (2) between 5.001 and 20.000; (3) between 20.001 and 100.000; (4) ‘more than 100.000. Recoded into: (1) more than 100.000; (0) otherwise.

Trust in strangers: experimental measure, number of points sent to anonymous players from 0 to 5.

Political sophistication: 3 Fact-based questions about political figures or institutions. “Could you please tell us who has the highest number of members in the Congress?”. For Spain (1) the Socialist party (PSOE); (2) the Popular Party (PP); (3) Others; (4) I don’t know; “Could you please tell us who is currently the Minister of Justice?”: (1) Esperanza Aguirre; (2) Alberto Ruiz-Gallardón; (3) María Dolores de Cospedal; (4) I don’t know. “Could you please tell us what institution has the right to decide about law’s constitutionality?” (1) the King; (2) the Prime Minister; (3) the Constitutional Court (4) the Council of Ministers; (5) I don’t know. Recoded: Political knowledge scale created by summing correct answers. For Portugal: “Could you please tell us which party has currently the higher number of deputies in the Parliament?” (1) the Socialist Party (PS); (2) the Socialist Democratic Party (2); (3) Other; (4) I don’t know. “Could you please tell us who is the current Mister of Justice?”: (1) Isabel Alçada; (2) Paula Teixeira da Cruz; (3) Alberto Martins; (4) I don’t know. “Could you please tell us what institution has the right to decide about law’s constitutionality?”: (1) the Prime Minister; (3) the Constitutional Court (4) the Council of Ministers; (5) I don’t know.

Political Interest: “How interested would you say you are in politics are you?”: (1) Very interest; (2) Quite interested; (3) somewhat interested; (4) not at all interested. Recoded into: (1) high interest (3, 4); (0) low interest (1, 2).

Party identification: two questions, “Is there any particular political party you might feel closer to than all other parties?” ‘yes/no’; “Which one?” (choice among a list of party labels). Recoded into two dummies for Spain: (1) PP; (0) other; (1) PSOE; (0) other. Recoded into two dummies for Portugal: (1) PS; (0) other; (1) PSD; (0) other.

Intensity of partisan identity: “How close do you feel to this party?” (1) or, not at all close; (2) not close; (3) quite close; (4) very close. Recoded into: (1) strong partisan (3, 4); (0) weak partisan (1, 2).
**Intensity of regional identity:** Linz–Moreno scale of subjective national identity: (1) I feel only Spanish; (2) I feel more Spanish than Catalonian/Basque/Andalusian/Madrilenian; (3) ‘I feel as Spanish as Catalonian/Basque/Andalusian/Madrilenian; (4) I feel more Catalonian/Basque/Andalusian/Madrilenian than Spanish; (5) I feel more Catalonian/Basque/Andalusian/Madrilenian than Spanish.

**Ideological identity/extreme vs. moderate identities:** “In politics people sometimes talk of “left” and “right”. Where would you place yourself on this scale, where 1 means left and 10 means right?” Scale from 1 (Left) to 10 (Right). Two variables: (1) Left (1, 2, 3, 4); (2) Centre (5); (3) Right (6, 7, 8, 9, 10). (1) Moderate (4, 6, 7); (2)= (2, 8); (3)= (2, 9); (4) Extreme (1, 10).

**Social class scheme (NetQuest):**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>No education</th>
<th>Primary</th>
<th>Lower secondary</th>
<th>Upper secondary</th>
<th>Tertiary (1)</th>
<th>Tertiary (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>E</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Land owner</td>
<td>E</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Entrepreneur (small company - agriculture sector)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Entrepreneur (middle company - agriculture sector)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Entrepreneur/merchant (less 5 employees)</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Entrepreneur/merchant (no employees)</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Entrepreneur/merchant (more than 5 employees)</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Self-employed</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Craftsman</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Manager/Director of a public/private company (more than 25 employees)</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Manager/Director of a public/private company (less than 25 employees)</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Officer in company or public administration (high level)</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Officer in company or public administration (middle level)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Foremen</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Seller/dealer/businessperson</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Office worker</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Specialized worker/policeman</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Worker/domestic worker</td>
<td>E</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Subordinate employee</td>
<td>E</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

Note: A: high; B: Middle-high; C=Middle; D=Middle-low; E=Low
Figure A1: Descriptive partisan trust gap in Spain and Portugal (2012)

Figure A2: Descriptive statistics: regional, ideological and social class trust gap in Spain (2012-2013).
Table A1: Multivariate OLS regression model: social class trust gap in Spain.

<table>
<thead>
<tr>
<th></th>
<th>Social class trust gap</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Gender (ref: man)</td>
<td>-0.261</td>
<td>-0.233</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.218)</td>
<td>(0.217)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.005</td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>Urban area (ref: less than 100000 inhabitants)</td>
<td>-0.221</td>
<td>-0.237</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.211)</td>
<td>(0.210)</td>
<td></td>
</tr>
<tr>
<td>Trust in strangers</td>
<td>-0.181</td>
<td>0.033</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.085)</td>
<td>(0.085)</td>
<td></td>
</tr>
<tr>
<td>Political knowledge</td>
<td>0.085</td>
<td>0.079</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.129)</td>
<td>(0.128)</td>
<td></td>
</tr>
<tr>
<td>Political interest (ref: low interest)</td>
<td>-0.479**</td>
<td>-0.431*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.229)</td>
<td>(0.229)</td>
<td></td>
</tr>
<tr>
<td>Social class (ref: middle)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low social class</td>
<td>0.872***</td>
<td>0.964**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.314)</td>
<td>(0.468)</td>
<td></td>
</tr>
<tr>
<td>High social class</td>
<td>-1.855***</td>
<td>-1.069***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.236)</td>
<td>(0.390)</td>
<td></td>
</tr>
<tr>
<td>Partisanship (ref: no partisan)</td>
<td>0.073</td>
<td>0.665*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.233)</td>
<td>(0.379)</td>
<td></td>
</tr>
<tr>
<td>Low social class*partisanship</td>
<td></td>
<td>-0.120</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.627)</td>
<td>(0.484)</td>
<td></td>
</tr>
<tr>
<td>High social class*partisanship</td>
<td></td>
<td>-1.251***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.621)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.379</td>
<td>-0.199</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.581)</td>
<td>(0.621)</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.292</td>
<td>0.296</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>301</td>
<td>301</td>
<td></td>
</tr>
</tbody>
</table>

Note: p-values: * <0,10; ** <0,05; *** <0,01; Robust standard errors in parenthesis.