The nature, sources, and consequences of citizens' anti-establishment sentiments:

Evidence from two Latin American countries[*]

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Abstract

While recent studies examine anti-establishment parties and candidates, fewer focus on citizens' anti-establishment sentiments, which we define as an intense and angry animosity toward political elites and distrust of political parties. What drives these sentiments? What are their causal effects on political attitudes and voting behavior? We answer these questions using survey data from Colombia and Peru around the 2022 elections, combining experimental and observational approaches. We find that anti-establishment sentiments are widespread, span the ideological spectrum, and stem mainly from perceptions of corruption and broken promises by leaders. They do not make citizens less democratic, but they do reduce their trust in institutions. We find electoral advantages for candidates who employ anti-establishment appeals, which then weaken citizens' punishment of anti-democratic candidates. In Colombia, where voting is voluntary, we also find mobilizing effects of anti-establishment sentiments. Overall, we advance the understanding of citizens' disillusionment with politicians, a pervasive global phenomenon.

1 Introduction

Around the world, 70% of citizens believe that "The main divide in our society is between ordinary citizens and the political and economic elite" (Ipsos 2021). Against this background, there has been much discussion of how anti-establishment sentiments might affect democracy, as they are often associated with generalized distrust, discontent, populism, and even conspiratorial beliefs (Uscinski et al. 2021). However, while several studies have examined the presence of anti-establishment parties and candidates (Engler 2020; Abedi 2004; De Vries and Hobolt 2020), *citizens'* anti-establishment sentiments have received far less attention. In this project, we aim to investigate their nature, sources, and consequences.

The study of anti-establishment sentiments—which we define as an intense, angry animosity toward the elites and a distrust of political parties—grows out of the richer and older literature on populism. While populism involves anti-elitism, it also divides the world into good and evil and is "people-centered" (Mudde 2004), features that we do not consider intrinsic to anti-establishment sentiments. Indeed, the literature distinguishes between populists and anti-establishment parties and candidates (e.g., Schedler 1996; Barr 2009; for a discussion see Engler, Pytlas and Deegan-Krause 2019). Yet, most scholarship on anti-establishment politics has focused on the "supply side," i.e., parties or candidates (De Vries and Hobolt 2020; Engler 2023; Pop-Eleches 2010; Hanley and Sikk 2016), and we know less about the citizen perspective: Where do *citizen* anti-establishment sentiments come from? How do they translate into political attitudes and voting behavior? These are our two research questions, which we show may have broader implications for our understanding of

democratic stability.[1]

Based on existing studies, we develop a conceptualization and measurement of anti-establishment sentiments and then discuss their expression in citizens' political preferences. We then combine survey and experimental data to, first, assess the nature and sources of citizen anti-establishment sentiments and, second, test how they influence their political attitudes and voting behavior.

Our empirical strategy is twofold. First, we conduct a baseline survey with a comprehensive set of questions on political attitudes to better understand citizens' anti-establishment sentiments. We also include open-ended questions asking respondents about their opinions of politicians and what makes them angry about them. We analyze these responses using text analysis to gain insights into the sources that drive anti-establishment sentiments.

Second, we exploit the fact that the open-ended question asking respondents to name the reasons why they are *angry* at politicians increases the salience of anti-establishment sentiments to explore their consequences. Namely, we randomize this open-ended priming question to experimentally test the effects on individuals' political attitudes and proxies for behavior.

We further investigate the extent to which citizens reward candidates who make anti-establishment appeals. We embed a candidate-choice (conjoint) experiment in which respondents are asked to choose between candidates with varying attributes, including whether they use anti-establishment appeals. By cross-randomizing these two survey experiments, we can account for differences in the way citizens evaluate candidates' attributes when anti-

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[1]Some exceptions studying the factors that shape citizens' anti-establishment sentiments include Uscinski et al. (2021); Hawkins et al. (2018).

establishment preferences are heightened versus when they are not. Both experiments are "light-touch" interventions compared to real life, where citizens are constantly exposed to negative speech about politicians in the media, social networks, their everyday conversations, and even by politicians themselves. Thus, our survey experiments provide causal evidence on the main political consequences of anti-establishment sentiments, but we expect our estimated effects to be small compared to those of a real campaign or a more generalized anti-establishment wave.

We conducted this study in the weeks before Colombia's May 2022 presidential elections and Peru's September 2022 local elections. According to Ipsos' indices for 25 countries (2021), Colombia and Peru rank first and second in dissatisfaction with the political class, and third and fourth in populism and anti-elite sentiment, respectively.

Our conceptualization of anti-establishment sentiments includes anti-elitism, distrust of political parties, and anger as inherent components. Our data show that all three are widespread in Colombia and Peru, and that they are positively and highly correlated. Moreover, anti-establishment sentiments characterize a broader class of individuals than populism, although the two are correlated as expected, but moderately. We find that the main drivers of anti-establishment sentiments are perceptions of politicians' corruption and broken promises.

The experiments yield three main sets of results. First, contrary to common associations, we do not find that anti-establishment sentiments directly erode democratic attitudes or change preferences for direct (as opposed to a representative) democracy. We do, however, find evidence of reduced trust in institutions among individuals treated in the prime experiment. Second, we find a mobilizing effect of anti-establishment sentiments in Colombia, where voting is voluntary: treated individuals are more likely to request information about

their polling station and, although less robust, more likely to vote. We do not find such effects in Peru, where voting is compulsory. Finally, our conjoint experiment suggests that candidates using anti-establishment appeals have a marginal electoral advantage, driven mostly by respondents whose anti-establishment sentiments were already high at baseline levels or enhanced with our prime treatment. Importantly, the appeal of anti-establishment rhetoric makes treated subjects less likely to punish anti-democratic attitudes. This suggests that the enticing nature of candidates' anti-establishment rhetoric may undermine their willingness to act as a democratic check. The implications of this set of results for democracy—as we discuss in Section 7—may be gloomy.

This paper contributes to the literature examining the rise of anti-establishment attitudes around the world in several ways. First, we develop a conceptualization of citizens' anti-establishment sentiments. Existing definitions of anti-establishment sentiments focus primarily on candidates, and thus on their appeals, location, and often mostly on electoral strategies (e.g., Barr 2009; Abedi 2004). However, we lack a unifying concept that thoroughly captures the expressions of citizens' anti-establishment sentiments. Moreover, we also provide evidence that this class of sentiments 1) describes a broader range of citizens than populism (most people may have "anti-elite" sentiments, not the Manichean cosmogony of populism); and 2) affects political attitudes and behaviors closely tied to democracy. A growing literature has examined these differences for parties, primarily in Central and Eastern Europe, showing that while anti-establishment rhetoric is present in many parties there, they do not always combine it with other elements constitutive of populism. Instead, they often resort to other rhetorical and campaign strategies such as technocracy or clientelism (Engler, Pytlas and Deegan-Krause 2019; Engler 2023). This paper thus contributes to these

studies by providing *"demand-side"* evidence along these lines: anti-establishment citizens are found across the ideological spectrum, are not always populist, and behave differently than non-anti-establishment citizens. Shedding light on these differences then advances our understanding of the politics of discontent and its consequences.

Second, we provide evidence that corruption and broken campaign promises arouse citizens' anger against political elites, thereby suggesting possible ways to appease them. Third, we contribute novel experimental evidence on how anti-establishment sentiments map onto different political expressions, including proxies for behavioral responses, allowing for a causal interpretation of the results that was lacking in many previous studies. Notably, our cross-randomized experimental design allows us to gain insights into how anti-establishment campaigns shape vote choice and citizens' tolerance of politicians' anti-democratic stances.

Finally, methodologically and building on recent trends in the use of open-ended questions to non-intrusively elicit and study first-order thinking (Ferrario and Stantcheva 2022), we offer and test a method for activating, measuring, and analyzing citizens' anti-establishment sentiments.

Overall, these findings improve our understanding of the sources and consequences of citizen disillusionment with politics, a feature of contemporary democracies, both advanced and less institutionalized.

2 On the Nature of Anti-establishment Sentiments

2.1 Towards a Conceptualization of Citizen Anti-establishment Sentiments

Although the origins of the anti-establishment literature can be traced back to longstanding and rich work on populism, we argue that these are distinct concepts. We posit that anti-establishment preferences describe a broader class of citizens—at the end of this discussion we provide data to support this claim (see Figure 3 below). This section begins with the existing, most widely used definition of populism and then shows how our proposed definition of anti-establishment sentiments differs from it.

Contemporary studies mostly adhere to the *ideational* approach to populism elaborated by Mudde (2004) and advanced by Mudde and Rovira (2017, 2012); Hawkins et al. (2018); Meléndez and Rovira (2019). This approach defines populism as comprising three ideas:[2]

1. a Manichean and moral cosmology, which divides the world into the good and the evil (*Manichean* dimension);

2. the proclamation of "the people" as a homogeneous and virtuous community (anti-pluralism dimension, also called *people-centrism*); and

3. the depiction of "the elite" as a corrupt and self-serving entity (*anti-elitism* dimension).

Anti-establishment sentiments are most closely related to populism's anti-elitism dimen-

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[2]We are interested in characterizing the expression of anti-establishment sentiments among *citizens*. This approach allows us to depart from the existing debates as to whether populism—specifically, populist parties or candidates—is an ideology, a political style, or a collection of ideas (Norris 2020).

sion, i.e., an "us vs. them" conception of politics. Schedler (1996, p. 294) argues that "political establishment parties construct two specific cleavages; they contrapose the political elite against citizens, on the one hand, and against themselves, on the other." This conception tends to blame complex societal problems simply on the immorality or incompetence of the political establishment (van Prooijen and Krouwel 2020). Likewise, Barr (2009) defines anti-establishment politics as that based on rhetorical appeals used in opposition to the elite ("the entire political class"), with candidates or parties that offer themselves as the solution. Abedi (2004) adds that anti-establishment candidates challenge the *status quo* in terms of major policy issues. While we adhere to anti-elitism as a defining feature of anti-establishment sentiments, in our view, positions on political issues are not essential to such sentiments, and it remains an empirical question to assess how they relate to each other, something to which we return in the next section.

The concept of anti-establishment sentiments differs from populism in that it is not necessarily people-centered and Manichaean, making it broader than populism. As Müller (2016, p. 7) puts it, "being critical of elites" is not sufficient for a political actor to be classified as populist. Indeed, using expert surveys, Engler, Pytlas and Deegan-Krause (2019) find that anti-establishment claims from political parties in Europe are not correlated to other populist appeals like people-centrism or general will ("*Volonté Générale*"). Also, for Schedler (1996, p. 292) populists target their attacks toward the economic elite, while anti-establishment candidates mostly target the political elite, although his assessment speaks more to the candidates' rhetoric than to citizens' animosity towards the elites. Our data confirms that citizens indeed distinguish between economic and political elites, and are more dissatisfied

with political elites.[3]

Most of the literature reviewed on anti-establishment politics focuses on the use of these rhetorical devices by political actors, whereas we are primarily interested in anti-establishment sentiments among the public. Furthermore, while the distinction between populist and anti-establishment is present in studies looking at parties and candidates, to our knowledge the literature studying the demand side has not clearly proposed a concept of *citizen* anti-establishment sentiments. This shift in focus then lends itself to a tractable operational definition of anti-establishment sentiments, which in our account includes three components: anti-elitism, distrust of political parties, and feelings of *anger* toward the political elites.

The anti-elitist dimension points to citizens' animosity toward the political elites. Besides, our definition of anti-establishment sentiments includes two additional components not included in populism.First, anti-establishment sentiments include a distrust of political parties, the institution *par excellence* of representative democracies (e.g., Aldrich and Griffin 2018). As argued by Barr (2009) and Schedler (1996), anti-establishment appeals imply contempt for the general political establishment, that is, for the parties that make up a country's party system, encompassing incumbent and established opposition parties alike. At the extreme, in considering parties in Europe, De Vries and Hobolt (2020) posit that, from an anti-establishment perspective, only those that have never held office at the national level can truly be considered what the authors call "challenger parties."

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[3]The correlation between the assessments of both types of elites is 0.47 in Colombia and 0.59 in Peru. Respondents who evaluate the economic elite better than the political elite amount to 42.4% in Colombia and 45.5% in Peru, while only 13.5% and 11.8% assess political elites better, respectively.

Second, and given that anti-elitism and distrust of political parties are so prevalent in our context (Ipsos 2021), we believe it is important to include an additional dimension that can help distinguish ordinary criticism of politics from anti-establishment sentiments: the intensity of feeling, or more specifically, the intensity of *anger* toward political elites.[4] We argue that while dissent and freedom of expression are core democratic principles and part of a healthy democracy, what ultimately distinguishes anti-establishment sentiments from criticism is citizens' relentless animosity toward the political elites who are supposed to represent them. In the next section, we provide evidence of anger as a key differentiating factor.

2.2 How Widespread Are Anti-establishment Sentiments?

We draw on evidence from our baseline surveys to assess the breadth of anti-establishment sentiments. We measure the three components of anti-establishment sentiments as follows:

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Q1. What is your opinion of politicians?

(anti-elitism dimension, with sign switched)

1 = Very negative, 7 = Very positive


Q2. To what extent do you trust political parties?

(distrust in political parties, with sign switched)

1 = Nothing, 7 = A lot
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[4]For example, Marx (2020) exposes citizens from Germany, France, and the U.S. to vignettes with anti-political-elite messages and finds a sharp increase in anger.

Q3. When you think of politicians, to what

extent would you say that you feel angry?

(anger dimension)

1 = Not at all, 7 = Extremely angry

Figure 1 shows the distributions of the answers to these questions for Colombia, Peru, and the pooled sample. Results are strikingly similar in both countries. Regarding anti-elitism (panel a), the average evaluation of politicians in the pooled sample is 2.1, and around half of the respondents grade them with 1, the minimum. Results are no better for trust in political parties (panel b): the average pooled level is 2.04, and more than half of the respondents indicate 1, the minimum trust. Finally, the level of anger against politicians (lower graph), also on a 1-7 scale, has a mean of 5.01 in the pooled sample (recall here that the maximum value was labeled as "*extremely* angry"). While about a third of respondents declare maximum anger, less than 15% declare levels in the 1-2 range.

We conclude that the three components of anti-establishment sentiments are widespread in Colombia and Peru. These distributions also suggest that our ability to elicit respondents' anti-establishment sentiments will be limited by ceiling effects, as half of them choose maximum values for anti-elitism and distrust, and a third choose maximum values for anger.[5] Finally, the similarity between the two countries suggests certain commonalities in Latin America. Hence, our next analyses use a pooled sample.

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[5]Censored regression estimations (Tobit) confirm this is the case (see Section 5.1.2, part 2).

Figure 1: Distribution of the components of anti-establishment sentiments

(a) Image of Politicians

(b) Trust in Political Parties

(c) Anger Towards Politicians
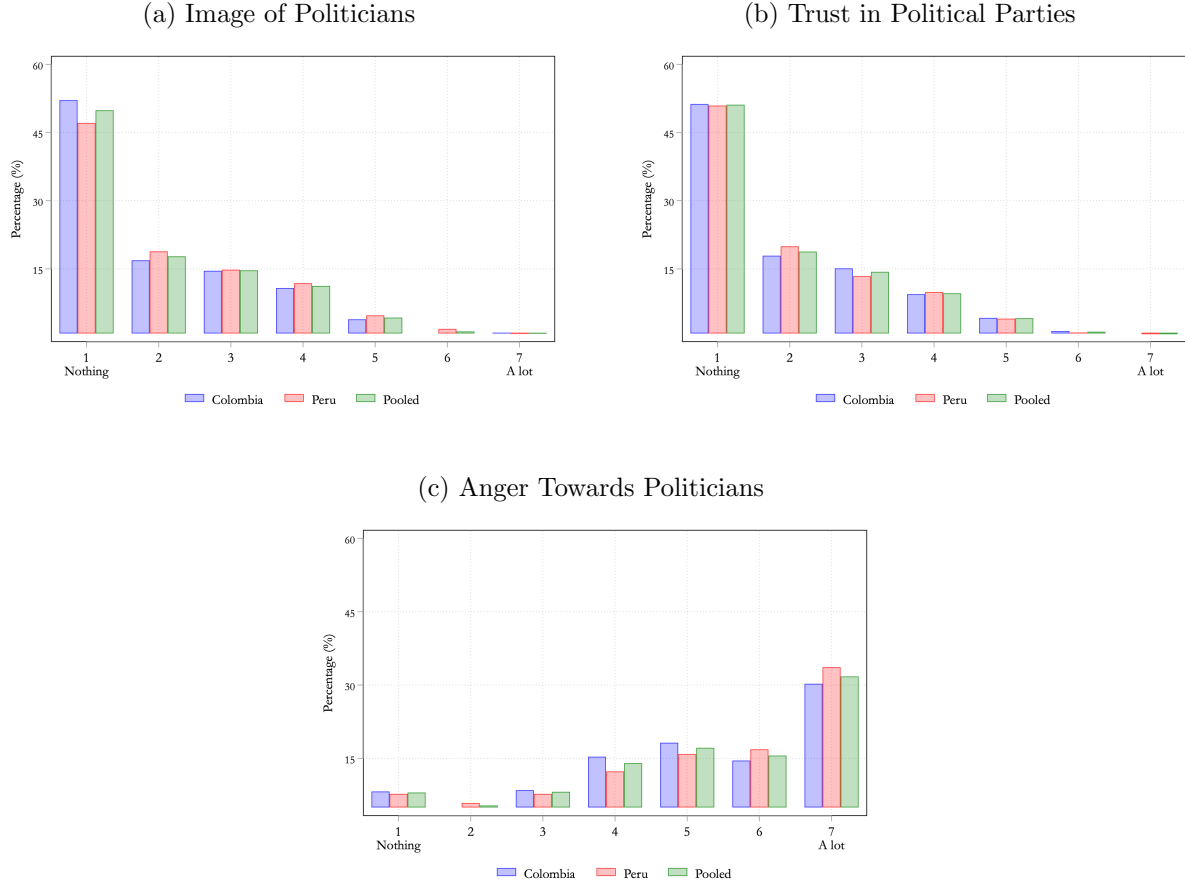
For measurement of anti-establishment sentiments, we collapse their three components into an index, following two approaches:[6]

1. **Mean index** (continuous): We standardize each component and calculate the mean, resulting in a standardized index.

2. **The Sartori approach** (dichotomous): Requires meeting a minimum threshold on

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[6]Wuttke, Schimpf and Schoen (2020) propose the Goertz approach for measuring populism, which calculates the minimum between the three standardized components, and is non-compensatory. Our analyses are consistent with using Goertz indices, although not shown for conciseness.

each of the three components and produces an either-or statement about whether the respondent has anti-establishment sentiments. For the three components, we use 4, the midpoint, as threshold.

Appendix B.1 presents summary statistics for the two indices. Sartori indices reveal that 53.22% of Colombians and 56.03% of Peruvians hold anti-establishment sentiments. The upper part of Table 1 presents the correlations between the three components of anti-establishment sentiments and the two indices for the pooled sample (the correlations by country can be found in the Appendix, Tables B.2 and B.3 and confirm the similarity between our two study sites). Citizens' evaluations of politicians and their trust in political parties are strongly and positively correlated (corr = 0.46) and, as expected, both are negatively correlated with anger toward politicians (corr = -0.22 and -0.2, respectively). The correlation between the mean and Sartori indices is 0.76.

Thus, the three components of anti-establishment sentiments tend to go together: the strikingly negative images of politicians and political parties tend to go hand in hand, and they often involve higher levels of anger. Our data also underscore that the anger component is crucial for distinguishing between types of individuals: while we find a high frequency of anti-elite and party distrustful citizens, it is anger that explains much of the variance in our index (e.g., 74% of our pooled sample would be classified as anti-establishment if we were to include only these two components in the Sartori index).

Table 1: Correlations between different components of anti-establishment sentiments and populism (Pooled sample)

| Variables	1	2	3	4	5	6	7	8	9
1. Image of politicians	-								
2. Trust in political parties	0.466	-							
3. Anger	-0.224	-0.197	-						
4. Anti-establishment index (mean)	-0.776	-0.763	0.652	-					
5. Anti-establishment index (Sartori)	-0.508	-0.451	0.709	0.763	-				
6. *Manichean* dimension	0.017	0.023	0.029	-0.007	-0.010	-			
7. *People-centrism*	-0.108	-0.079	0.123	0.140	0.128	0.145	-		
8. Populism index (mean)	-0.594	-0.256	0.197	0.478	0.339	0.571	0.247	-	
9. Populism index (Sartori)	-0.247	-0.100	0.074	0.194	0.169	0.576	0.123	0.663	-

Note: Both anti-establishment indices (mean and Sartori) were calculated based on the following questions: *what is your opinion of politicians?* (anti-elitism component), *to what extent do you trust political parties?* (distrust in political parties component), and *when you think of politicians, to what extent would you say that you feel angry?* (anger component).

Anti-establishment sentiments and political ideology: While some of the literature refers to anti-establishment sentiments in terms of extremism (e.g., Bötticher 2017), we refrain from doing so. Several studies find a null or weak correlation between these two variables, identifying both anti-establishment citizens and political parties across the ideological spectrum (see Uscinski et al. 2021; Meléndez and Rovira 2019; Škvarenina, Havlík and Dostálová 2021, and Engler, Pytlas and Deegan-Krause 2019; Pop-Eleches 2010; Hanley and Sikk 2016, respectively).

We examine this relationship in Figure 2, which depicts the distribution of the anti-establishment mean index by ideology ("don't know," "left," "center," and "right") for Colombia (Panel a) and Peru (Panel b). These distributions are asymmetric, with important bunching for the higher values of the anti-establishment index, consistent with the large numbers of citizens who show the maximum values of the three components. The distributions of anti-establishment sentiments look fairly similar across ideology groups, with the exception of the Colombian right, which is less anti-establishment, likely related to the fact

that the incumbent president and congressional majority sat on that part of the spectrum when surveyed. Nevertheless, all ideological groups in both countries include people with high and low levels of the index. The Sartori indices show a similar pattern: the prevalence of anti-establishment citizens by ideology and country ranges from 38.64% among the right in Colombia, to 55.76% among the center in the same country, so anti-establishment sentiments are far from being an exclusive feature of any ideology. Altogether, this suggests that being anti-establishment is not the same as being extremist, and revisits existing arguments that anti-establishment parties may benefit from adopting extremist views (e.g., Eguia and Giovannoni 2019).[7]

Figure 2: Distribution anti-establishment indices by ideology and country (density)

(a) Colombia

(b) Peru
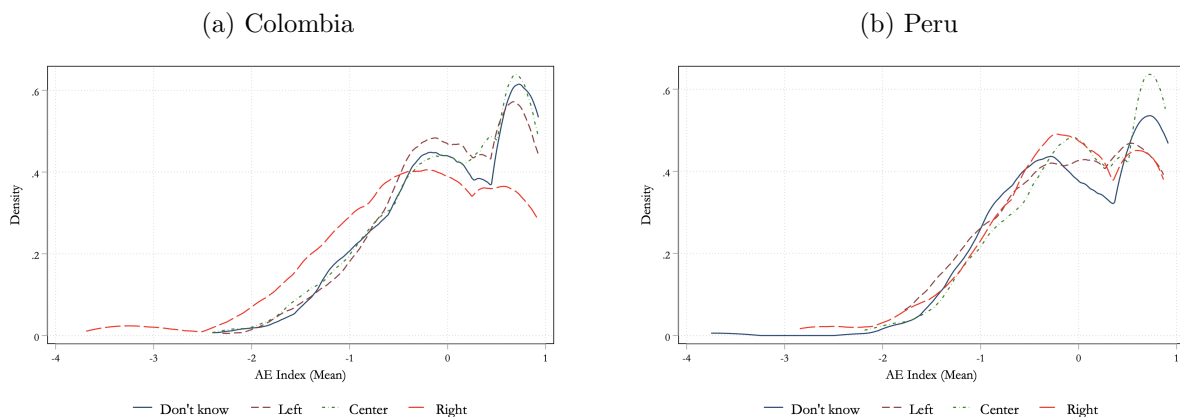
2.3 Are Anti-establishment Sentiments and Populism the Same?

To assess the extent to which citizen anti-establishment sentiments and populism capture intertwined, yet distinct, concepts, Figure 3 depicts the relationship between our index of

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[7]We observe a similar pattern when analyzing respondents' stances toward political and economic policies, with full support along the distribution of different stances. See Figures B.3-B.4 in the Appendix.

anti-establishment sentiments and an index of populism comprising anti-elitism, people-centrism, and Manicheism (Mudde 2004) (both indices are standardized).[8] Sartori indices of populism show that 29.87% of Colombians and 29.86% of Peruvians are populist, more than 20 points less than those who are anti-establishment according to the Sartori index. The correlations between the anti-establishment and populism indices and their components are shown in the bottom panel of Table 1 (and in the Appendix Tables B.2 and B.3 for each country). Unsurprisingly, there is a positive correlation between the anti-establishment and populism indices that share one of the three components (the correlation is .478 for the mean indices and .169 for the Sartori ones). However, Figure 3 shows a great deal of variance: being anti-establishment is no guarantee of being populist, and vice versa. Moreover, the Manichean and people-centered components of populism are barely correlated with the three components of anti-establishment sentiments (maximum correlation is .123). Overall, we have theoretical and empirical reasons to consider anti-establishment sentiments as distinct from populism.

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[8]We proxy people-centrism by agreement with "Politicians must follow the will of the people," and Manicheism by agreement with "Politics is a struggle between good and evil."

Figure 3: Anti-establishment sentiments vs. populism
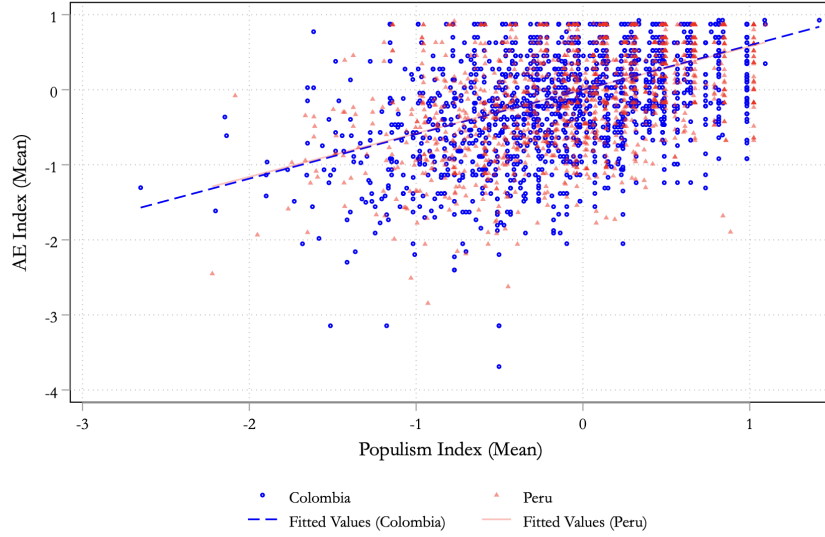
2.4   Anti-establishment Sentiments and Political Behavior

One of the main purposes of this study is to understand how anti-establishment sentiments manifest in citizens' political attitudes and behavior. In this section, we discuss the outcomes in which we expect anti-establishment sentiments to be expressed. Our focus on the demand side allows us to bypass some debates in the supply-side literature, where classifying candidates and parties as anti-establishment is an ongoing debate,[9] but also implies that we will not consider how politicians adjust their strategies to anticipate demand-side reactions.

Attitudes towards democracy: How do anti-establishment sentiments relate to individuals' democratic values? Some evidence suggests that individuals holding anti-establishment sentiments are also less committed to democracy (Droste 2021; Ipsos 2021), although others

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[9]For example, we avoid defining anti-establishment politics based on candidate traits such as charisma (Serra 2018) or age (Hollyer, Klašnja and Titiunik 2022).

find them as likely as others to support democracy (Lupu, Rodriguez and Zechmeister 2021).
Beyond democratic compromise in the abstract, anti-establishment sentiments may lead voters to be less satisfied with actual democracy, specifically with its representative dimensions
(Škvarenina, Havlík and Dostálová 2021). For example, Rovira and Van Hauwaert (2020) argue that populist citizens are "dissatisfied democrats:" they support democracy as a political system, although they are more dissatisfied with how it works, and thus seek to overhaul it. Providing causal evidence will help to clarify the mixed findings on the relationship between anti-establishment sentiments and democratic attitudes.

Drawing on Barr's (2009) discussion on plebiscitarianism and its connection to anti-establishment appeals and populism, anti-establishment sentiments may also intensify citizens' preferences for direct democracy. If citizens are skeptical about politicians' ability to represent their interests (Dalton, Burklin and Drummond 2001; Bowler, Donovan and Karp 2007), or if they view the ruling elites with contempt, they may demand direct democracy mechanisms. Thus, we include questions on support for democracy and its liberal vs. majoritarian dimensions. Finally, and given a context of allegations of electoral fraud and corruption in the region (e.g., Brazil, Colombia, Bolivia), we also test for the effect on trust in elections and the justice system, two constitutive institutions of democracy.

Electoral engagement: We are interested in how anti-establishment sentiments influence citizens' electoral preferences. Droste (2021) finds that anti-establishment (and apolitical) citizens are more likely to abstain from voting in national elections. However, Garbiras-Díaz (2021) finds that in Brazil, where voting is compulsory, voters who would otherwise abstain are more likely to vote for anti-establishment candidates, suggesting a possible mobilizing

effect of anti-establishment appeals. Colombia offers an interesting opportunity to examine such mobilizing effects because voting is voluntary—unlike in Peru—and at least two of the presidential candidates had a clear anti-establishment orientation.

We are also interested in citizen attitudes toward the political offer in an election. However, citizens' vote choices may be difficult to change one week before election day, especially in polarized, high-stakes contexts such as ours, especially the Colombian presidential elections (see details below). Thus, we study the effect of anti-establishment sentiments on voting preferences with a conjoint experiment that sheds light on how citizens evaluate anti-establishment appeals using *hypothetical* candidates.

3   Research Design

We designed a two-wave panel survey with various purposes. First, we use the baseline data to examine anti-establishment sentiments in detail and to obtain pretreatment measures of our outcomes of interest. Second, we embedded two cross-randomized experiments in the follow-up survey. In both waves, we include open-ended questions about how respondents view politicians and what makes them angry about them, which we analyze using text analysis. In Colombia, the first wave of the panel survey was conducted during the second week of May, and the follow-up survey during the week before the presidential election on May 29, 2022. In Peru, the first wave was conducted during the third week of September, and the follow-up during the week before the regional elections on October 2, 2022. Online appendix A discusses the ethics of this research.

3.1 The Prime Experiment

We aim to examine the causal effects of heightened anti-establishment sentiments on individual political preferences. Individuals who harbor anti-establishment sentiments may be very different from those who do not, so a simple comparison of these two groups may be misleading. Thus, we rely on a priming experiment to make individual anti-establishment sentiments more salient, allowing us to causally identify their effects. Priming has become a staple of experiments in social sciences such as political science (Holbrook 2011) because it allows researchers relatively tight control over the psychological process while being easy to administer and non-intrusive (Wittenbrink 2007).

Building on this literature, our treatment aimed to activate anti-establishment sentiments using a non-intrusive open-ended priming question about what makes respondents angry at politicians, which sought to understand the roots of anger at the political elite. We embedded this question in the panel's second wave, randomizing who received it. We used a pre-test survey and a focus group to assess which term to use when referring to the elite. Both instruments were clear in that people do not commonly use the terms "elite" or "establishment" and simply refer to political elites as "politicians."

This type of open-ended survey is novel but promising (Yang and Vignoles 2020; Simonovits, McCoy and Littvay 2022). The goal is to arouse participants' anger by relying on their own views of what makes them angry. Thus, this treatment is unlikely to induce anger in respondents who are not angry at politicians, just as a treatment that asks people to think about what makes them optimistic about politicians, for example, might be unlikely to be effective (according to our baseline survey, on a 1-7 scale, the average level of optimism

about politicians in the pooled sample is 2.7). The control group received a placebo question to ensure that both groups underwent the same cognitive effort task, avoiding inducing differential levels of fatigue between the groups that could eventually explain the differences.

Individuals in both the control and treatment groups then had the space to answer this question, and we forced them to spend at least thirty seconds doing so. The wording of the treatment and placebo questions are depicted in Table 2.

Table 2: Open-ended survey questions

Survey question	Wave	Sample
1. When thinking about politicians, many people say they feel anger, rage, or resentment. Based on your experience in Colombia/Peru, mention at least three things that make you angry or cause anger or resentment towards these politicians. We are very interested in your opinion. Please take at least 30 seconds to answer this question without rushing.	Follow-up	Treatment
2. Before starting with the questions, we would like to know a little bit about you. Tell us what kind of music you like and give at least three reasons why. We are very interested in your opinion. Please take at least 30 seconds to answer this question without rushing.	Follow-up	Control
3. When you think of Colombian/Peruvian politicians, what comes to mind? Please write down at least three things. We are very interested in your opinion on this topic. Please take at least 30 seconds to answer this question without rushing.	Baseline	All

3.1.1 Outcomes and Measurement

We measure our prime's success in activating anti-establishment sentiments with manipulation checks for each of their components (see Section 2.2), which were asked right after the experimental question. We then included the following questions in both waves to measure our outcomes of interest:[10]

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[10]In our pre-analysis plan, we also included questions measuring vote choice, which we omit here. These questions fail to capture substantive differences, likely due to the polarized settings we study, as discussed earlier.

- *Attitudes towards democracy and its institutions:* We ask standard public opinion questions about support for democracy as a system, satisfaction with democracy, and the justification of the president closing the Congress during crises. We also ask respondents about their trust in elections and the justice system, and their preferences for different types of democracy, such as direct vs. representative, and majoritarian.

- *Electoral engagement:* We measure individuals' self-reported intention to turn out to vote in the coming elections and willingness to learn their polling place, which allows us to measure behavior when a (small) cost is introduced.

3.2   Conjoint Experiment

We include a conjoint (candidate-choice) experiment in the second wave with three purposes. First, we are interested in examining how individuals assess a candidate with an anti-establishment platform, both in terms of the marginal effect relative to other candidate attributes—average marginal component effects (AMCE)—and of the average preference for such a rhetorical appeal—marginal means (MMs)—(see Hainmueller, Hopkins and Yamamoto 2014; Leeper, Hobolt and Tilley 2020). Second, we want to examine the extent to which the increase in anti-establishment sentiments due to our prime experiment shapes these assessments. Finally, drawing on ongoing debates about citizens' control over anti-democratic threats (Svolik 2020; Simonovits, McCoy and Littvay 2022), we aim to assess whether respondents' willingness to vote for an anti-democratic candidate changes when that candidate also uses anti-establishment rhetoric. In designing this experiment, we follow recent work by Graham and Svolik (2020), which we extend to include the attribute of our

interest: anti-establishment rhetoric.

Subjects in our study were asked to complete the candidate-choice task at the end of the follow-up survey, and given our interest in assessing how citizens' evaluations of candidates change with heightened anti-establishment sentiment, the prime experiment described always took place first.

We presented respondents with eight pairs of hypothetical candidates. Table 3 presents the attributes and their values along which candidate profiles vary. Following best practices, we presented these attributes in tabular form, randomizing their order across individuals, but keeping it fixed within individuals to reduce cognitive load.

Table 3: Attributes in conjoint experiment

Attributes	Values	
Anti-establishment appeals	**Anti-establishment** **Anti-elite** "I want Colombia/Peru to stop being ruled by a corrupt elite." "Because we no longer want this country to be in the hands of the usual politicians." "We are tired of these traditional politicians. The time has come for us citizens!" **Distrust parties** "We are tired of the traditional parties." "We are going to put an end to the parties' "maquinaria"." "Because the parties no longer represent us." "We cannot stand party politicking anymore." "We are fed up with party politicking." **Anger toward politicians** "I am deeply outraged by how we have been ruled by those who have always governed us." "May indignation with politicians lead to change." "Like you, I am angry with the political class in this country."	**Neutral** "I come to work for all Colombians/Peruvians equally." "I want you to live better." "I want to dream of a better Colombia/Peru." "Together we build a better country." "Come on, let's go!" "For a country of opportunities." "All for Colombia." "Let's work for a Peru for all."
Policy stance: economic issue	**Cash transfers (Colombia only)** The poorest people should receive a permanent and unconditional monthly income from the government (Left-wing). The poorest people should receive a permanent monthly income from the government but excluding people who do not want to work or study (Center). All people in Colombia should receive their income from their own work and not expect it to come from the government (Right-wing). **Taxes (both countries)** The government should increase taxes on top earners and increase social spending (Left-wing). The government should maintain the current level of taxes and maintain current social spending (Center). The government should decrease taxes and decrease the current level of social spending (Right-wing).	**Exploitation of natural resources (Peru only)** The exploitation of all natural resources in Peru (such as minerals and gas) should be in the hands of the State (Left-wing). Private companies should be able to exploit Peru's natural resources, but with more regulation and taxes (Center). The exploitation of all natural resources in Peru (such as minerals and gas) should be in the hands of private companies. (Right-wing).
Policy stance: social issue	**Abortion (Colombia only)** Abortion should always be legal (Left-wing). Abortion should only be legal in case of rape, danger to the mother or malformation of the fetus (Center). Abortion should never be legal (Right-wing). **Immigration (both countries)** The government should allow free entry of immigrants and provide them with social services (Left-wing). The government should allow the entry of immigrants, but not provide them with social services (Center). The government should ban the entry of immigrants (Right-wing).	**Same-sex marriage (Peru only)** Marriage between same-sex couples should be allowed, including the possibility of adoption (Left-wing). Civil union between same-sex couples should be allowed, with property rights but without the possibility of adoption. (Center). In no case should marriage or civil union between same-sex couples be permitted (Right-wing).
Support for democracy	**Anti-democratic** "In a crisis, when Congress won't help, the president should be able to rule alone." "In very difficult times, the president is justified in shutting down Congress in order to rule." "Although many criticize coups, when crime is rampant, the military is justified in taking control." "In times of crisis, it is justified to silence voices critical of the government in order to strengthen the unity of the country."	**Neutral** "In difficult times we have to fight to move forward as a country." "It is important that we seek solutions to Colombians'/Peruvians' problems." "Let's be part of the solution and not part of the problem." "In difficult times we have to bring out the best in ourselves." "Let's get to work, tomorrow is too late." "The time has come for us to work for Peru."
Ideology	1. Left 2. Center-left 3. Center 4. Center-right 5. Right	
Partisan affiliation	1. Running with a party 2. Running as independent[a]	
Sex	1. Woman 2. Man	
Education	1. High-school 2. University degree 3. Graduate degree	
Age	1. Thirty-five 2. Forty-two 3. Forty-nine 4. Fifty-six 5. Sixty-three 6. Seventy 7. Seventy-six	

[a]In Colombia this means registering with a minimum number of firms supporting the candidacy.

We manipulate standard sociodemographic characteristics, as voters may prefer certain population subgroups and, importantly, those markers may correlate with anti-establishment traits (see Dafoe, Zhang and Caughey (2018)). We include age, gender, and education.

Next, we elaborate on the levels of the five main attributes we are interested in: anti-

establishment appeals, policy stances, outsiderness, ideology, and support for democracy.

- **Anti-establishment appeals:** We included this in the form of a "candidate slogan" that was either neutral or anti-establishment. To define the list of anti-establishment appeals, we created statements pointing to each of the three components of anti-establishment sentiments: anti-elitism, distrust of parties, and anger at politicians. This allows us to compare the attractiveness of the three. Neutral statements are vague political statements such as "I'll work for all Colombians" (see Table 3).

- **Policy stances:** We included two types of policies guided by the electoral agenda and for which there is variation: a social policy (randomly selected between abortion and immigration in Colombia, and between same-sex marriage and immigration in Peru) and an economic policy (randomly selected between taxes or cash transfers in Colombia, and between taxes or the exploitation of natural resources in Peru).We randomly selected one of three positions (ranging from more progressive to more conservative) for each policy.

- **Outsiderness:** To make anti-establishment appeals more credible, we included one of the markers that the literature has identified as often associated with this type of rhetoric: presenting oneself as an outsider in terms of political parties (Engler 2020), i.e. running as an independent vs. on an existing party platform.

- **Ideology:** We randomized the candidate's ideology. While other studies have focused on the cleavages that define the relevant social groups, such as partisan identification (mainly in the United States) or ethnicity (mainly in African politics), we argue that

in Latin America, ideology is often a key social marker. Moreover, given the high fragmentation of most Latin American party systems and low partisan identification, ideology plays a key role in vote choice.

- **Support for democracy:** Building on Graham and Svolik (2020), we randomly select a candidate's "famous phrase" from two separate lists, each containing neutral or anti-democratic statements, which also allows us to isolate any possible confounding of anti-democratic stances and anti-establishment appeals. We adapt the anti-democratic statements in Graham and Svolik (2020), as these may not be considered anti-democratic by the Latin American public, and construct our statements as variations of LAPOP's questions about democracy, which we further pre-test to ensure that they are clearly considered as anti-democratic.

To assess whether certain combinations of attributes were seen as impossible, in the pretesting we asked respondents, for each conjoint choice, the likelihood of finding a real candidate like the ones in the exercise. Although respondents often said that the candidate appeared unlikely to them because they did not trust politicians to fulfill promises like the ones in our campaign slogans, no candidates were considered "impossible" due to a combination of attributes. Thus, we allowed all possible combinations. Figure 4 shows an example of how our conjoint looked.

Figure 4: Depiction of the candidate-choice task as seen by respondents on Qualtrics

The following questions are related to your electoral preferences. We will ask you for your views on hypothetical candidates. These are NOT the candidates currently running for president in Colombia, but reflect the types of candidates who could. For each of the following pairs of presidential candidates, which one would you vote for?

	Candidate 1	Candidate 2
political identity	Center	Right
famous phrase	"In difficult times you have to fight to get ahead as a country."	"In a crisis, when Congress won't help, the president should be able to rule alone."
electoral platform	existing party	existing party
campaign slogan	Let's go let's go	We are going to put an end to the party machinery.
Conjuncture proposal	Abortion should never be legal	Abortion should always be legal
Economic proposal	The poorest people should receive a permanent monthly income from the government, but excluding people who do not want to work or study	The poorest people should receive a permanent and unconditional monthly income from the government
Education level	Bachelor	Bachelor
Sex	Man	Man

Which candidate would you vote for to be president?

Candidate 1	Candidate 2
○	○

3.3   Pretesting, Sample, and Implementation

Both waves were pretested with a pilot survey and three focus groups to test the wording of the questions and the correct term to refer to the political establishment. We also pretested the conjoint's relevant attributes and levels, with a particular focus on the policy positions, the anti-establishment appeals (labeled candidate "slogans"), and support for democracy (labeled "famous phrases"). Finally, we conducted extensive pretests to ensure respondents understood the conjoint task.

We conducted the two-wave panel with Netquest, an experienced polling firm with an

established presence in more than twenty countries. We chose to use online panels because they allow us to survey thousands of people at a low cost, permitting large samples in more than one country. Moreover, evidence suggests that these types of non-probability samples are not significantly biased (Hainmueller, Hangartner and Yamamoto 2015) and have shown promising results in replicating samples drawn from probabilistic methods (Lehdonvirta et al. 2021). Online sampling in Latin America faces the problem of low representativeness of lower socioeconomic groups. Thus, we enforce quotas in terms of gender, age, and socioeconomic strata, following Castorena et al.'s 2022 methodology of *sample-matching*.

The surveys were programmed in Qualtrics. In Colombia, the first wave included 2,704 respondents and the follow-up 2,071, resulting in a recontact rate of 76.6%. In Peru, the first wave included 2,058 respondents and the follow-up 1,532, for a recontact rate of 74.44%.

4   Context

4.1   Colombia

In 2022, Colombia was in the midst of an electoral cycle that included legislative elections, primary elections (held on March 13, 2022), and presidential elections. The first round of Colombia's presidential election was held on May 29 and included 8 candidates. Polls showed Gustavo Petro, leftist senator and former Bogotá mayor, leading the race, and former Medellín mayor Federico Gutiérrez trailed him from the right until two weeks before the election, when Hernández took over and finished second (Yanhaas 2022).[11] The runoff

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[11]Petro and Fico had won their primaries by wide margins (66.45% and 36.46%, respectively).

between Petro and Hernández was held on June 19. The presidential term in Colombia is four years, with no re-election.

These elections came at a time of growing social unrest and mass disapproval of the incumbent president, Iván Duque, due to rising poverty and unemployment, and corruption scandals during the pandemic. Polarization has played an increasing role in the political landscape, although the opposing cleavages may vary (Basset 2020). Overall, this context suggests that Colombia is a difficult case for increasing citizens' anti-establishment sentiments, since respondents may have already been exposed to strong anti-establishment rhetoric; moreover, given the highly polarized election, electoral preferences are likely to be hard to move.

4.2 Peru

Since 2000, there have been regional governments in Peru, consisting of a governor, a vice-governor, and a regional council for each of the 24 departments and the constitutional province of Lima. As a unitary and decentralized state, these authorities manage the department with autonomy within their competence. Candidates are elected if they receive at least 30% of the valid votes, and only if this amount is not reached is a second round held. The mayor is elected by a simple majority. Our intervention took place around the last elections, on October 2, 2022, when regional and municipal authorities were elected.

The Peruvian case also shows high levels of citizen disenchantment with the political system. Peru ranks second only to Colombia in Ipsos' "The System is Broken" index of anti-establishment preferences (Ipsos 2021). In addition, the Peruvian party system is known for

its high fragmentation and low institutionalization (Levitsky and Cameron 2003). Regional governments have seen the sprouting of political organizations: in 2002, there were 225 organizations running candidates, which jumped to 368 in 2018. Since 2015, re-election in regional governments is banned. Finally, those who win in the regions have few organic links with the national representation in Congress, even if from national parties.

5   On the Sources of Anti-establishment Sentiments

## 5.1   Where Do Anti-establishment Sentiments Stem from?

In this section, we delve into the sources of anti-establishment sentiments, for which we draw on the richness of respondents' answers to the open-ended question used to elicit anti-establishment sentiments in the second wave.

5.1.1   What Makes Citizens Angry At Politicians?

Figure 5 presents a wordcloud with the most frequent terms used by treated respondents.[12] Clearly, words related to corruption and malfeasance are the most prevalent, followed by terms related to unfulfilled promises.

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[12]Appendix Figure B.1 depicts the original Spanish version of the wordcloud.

Figure 5: Reasons for anger at politicians: Wordcloud from responses to prime
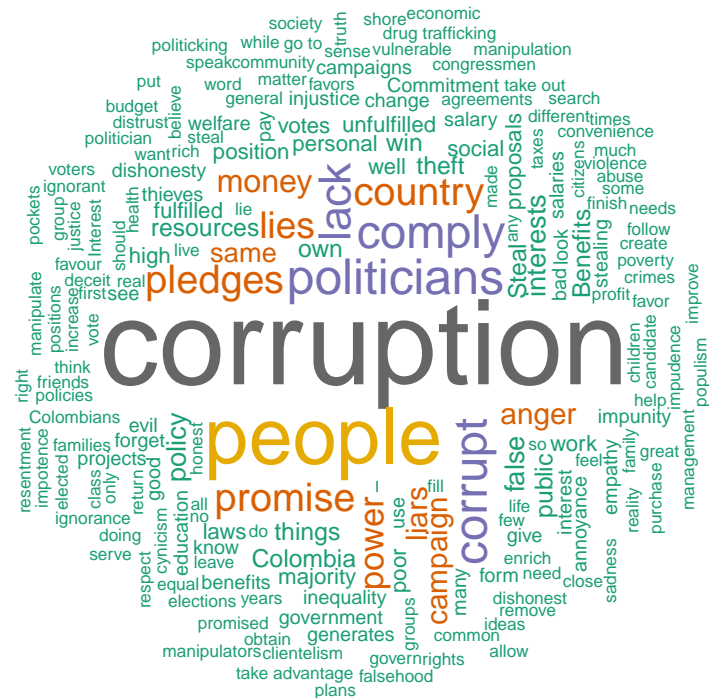

To dig deeper into the reasons given by respondents in a more systematic way, we run responses through unsupervised topic modeling. The results are shown in Figure 6. We find five core topics.[13] The first topic includes words that refer to the failure of politicians to keep their promises, such as campaign, promise, and fulfill. The second topic contains words related to corruption, such as lies, corruption, money, and thieves. In the third topic, the word corruption appears again with the highest prevalence, but now together with a set of words related to the breeding ground that makes corruption even more despicable for citizens: injustice, inequality, and (lack of) opportunities. The next topic of words portrays politicians as a self-interested, self-serving elite, with words like interest, benefit, own, and personal. The final topic is a residual category that includes rather generic words that refer

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[13]This number is the result of the maximum coherence score test, together with our own assessment of the results with different numbers of topics.

to public matters, like people, country, work, or person.

Figure 6: Reasons for anger at politicians: Unsupervised topic modeling of responses to prime

(a) 1st Topic

(b) 2nd Topic

(c) 3rd Topic

(d) 4th Topic

(e) 5th Topic
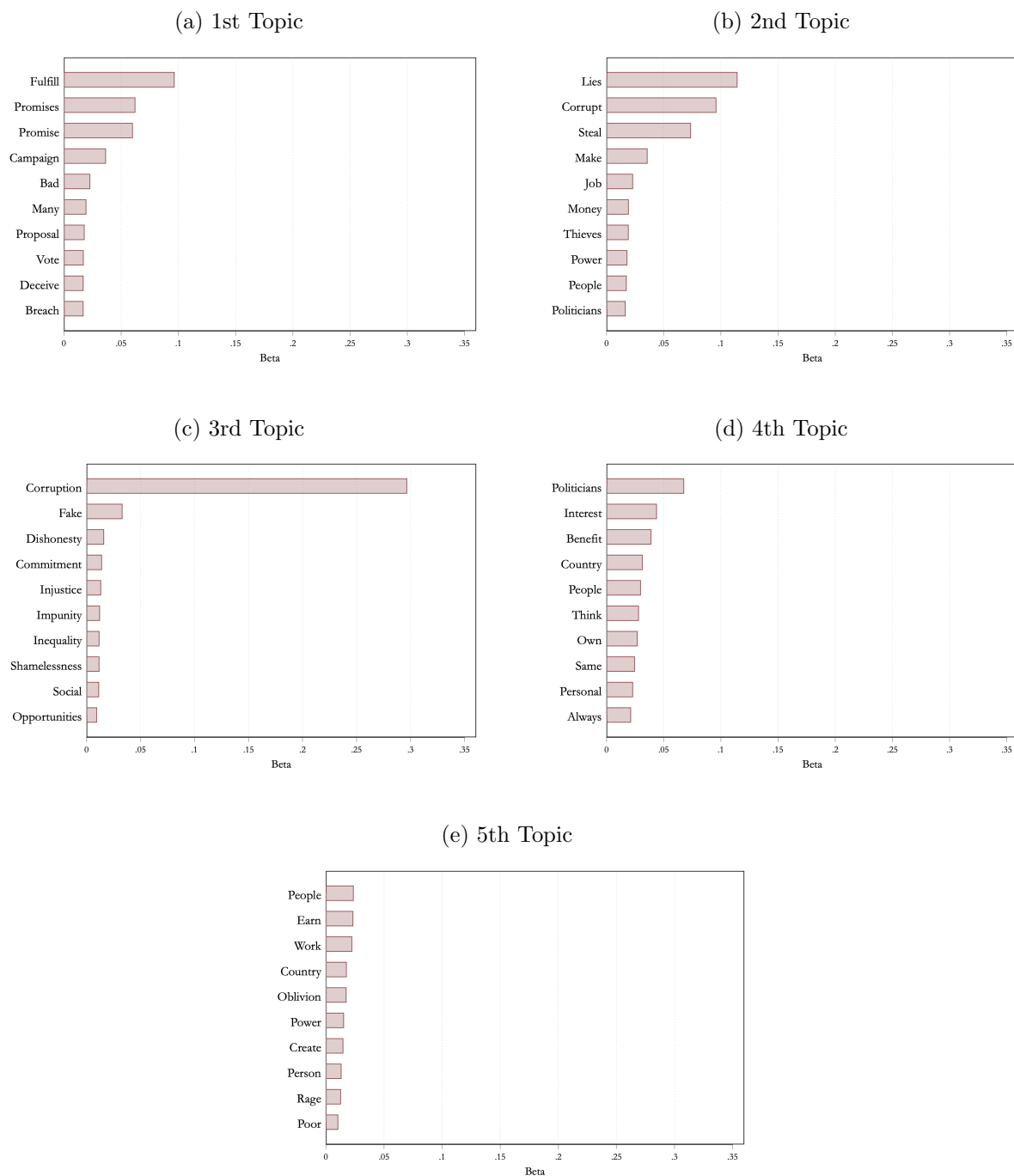
Note: Results of the LDA model using the `topicmodels` library in R. The optimal number of topics was selected based on coherence scores and our assessments of the results. Stemmed words in Spanish were translated into English.

Overall, this evidence points to two fundamental reasons for citizens' anti-establishment sentiments: first and foremost, corruption, followed by politicians' unfulfilled promises.

5.1.2 Face Validity Test of our Method for Activating Anti-establishment Sentiments

The prime experiment's design depends on the extent to which our open-ended question effectively makes anti-establishment sentiments more salient. We provide two tests of such effectiveness.

1. Comparison of baseline vs. treatment responses to open-ended questions In the baseline, we included a question that sought to serve as a benchmark on the underlying attitudes and beliefs citizens have about politicians (see question 3 in Table 2).[14]

We can then compare the answers provided by the treatment group to the open-ended questions between waves: a baseline question asking respondents' general opinion about politicians versus a follow-up treatment question asking what makes them angry with politicians.[15] A successful prime should elicit new words but also words more likely to be associated with discontent with politicians. Figure 7 provides evidence in this vein. Specifically, following Ferrario and Stantcheva (2022), we conduct *keyness* tests that compare the frequency of words used between groups (treated citizens in the baseline vs. in the second wave), using chi-square statistics to assess whether the difference in the prevalence of the keyword is

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[14]Included at the end of the questionnaire to avoid priming.

[15]Respondents in the treatment group spent, on average, 138 seconds answering the prime question, and wrote 17 words (individuals in the placebo spent 126 seconds and wrote 20 words).

statistically significant ($|\chi^2| > 6.63$).

Figure 7: Keyness analysis: treatment vs. baseline questions
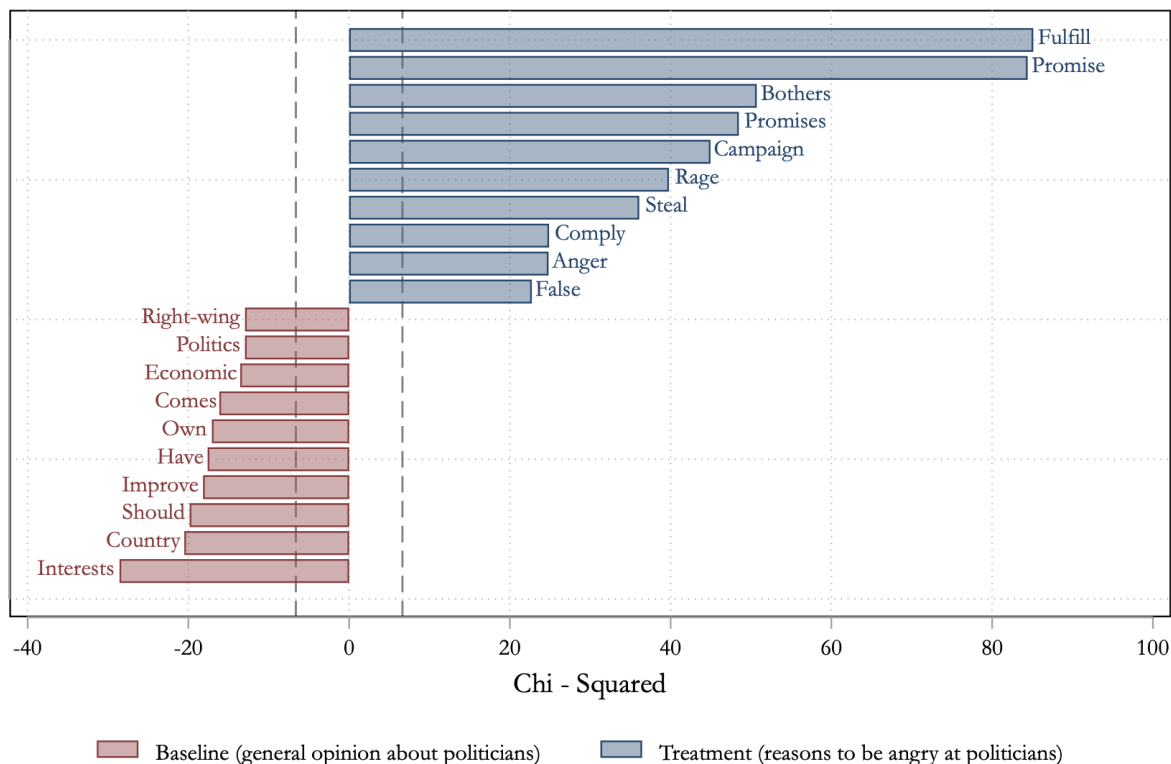
Note: Dashed lines represent a 99% significance level ($|\chi^2| > 6.63$).

We find that new issues emerge with respect to the baseline (where words are more neutral, such as "country," or "to have") and that the treatment question indeed increases anger, as indicated by words like "false," "promises," "campaign," or "steal," and more directly, "anger" or "annoys").[16]

2. Manipulation checks The validity of our instrument for eliciting anti-establishment sentiments also rests on its success in effectively manipulating the theorized components

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[16]Appendix Figure B.2 shows that our prime was successful in eliciting anti-establishment sentiments even among citizens who are in the (baseline) first quartile of the anti-establishment index (mean).

of the anti-establishment sentiment. Estimations use OLS (with robust standard errors),
for three specifications: 1) without controls; 2) including sociodemographic covariates (age,
sex, country region, education level, and socioeconomic stratum), plus the baseline outcome
variable; and 3) specification (2) plus additional baseline variables selected with the double-
post-lasso covariate selector (Ahrens, Hansen and Schaffer 2020).

Figure 8 shows the treatment effects on the three components of anti-establishment sen-
timents and both indices, for specification (2), which come from Appendix Table C.1 (all
dependent variables are standardized using the moments of the control group, except for the
Sartori index, which is binary).

The treatment successfully increases two of the three components of anti-establishment
sentiments. Regarding anti-elitism, citizens' image of politicians worsens by 0.16 standard
deviations (SD) in the pooled sample, while anger increases by 0.22 SD and both effects
are significant at the 99% level (columns 1-3 and 7-9). As discussed in Section 2.2, anti-
establishment sentiments are so widespread that it is impossible to capture an increase in
their anti-elitism, distrust of parties, or anger for the relevant number of respondents who
have already hit the measurement ceiling. In the Appendix Table C.2, we estimate the
treatment effects on the three components of anti-establishment sentiments using a Tobit
model that takes into account that our dependent variables are censored. Indeed, the effects
on the latent variables estimated by Tobit models are much larger than by OLS. In the
pooled sample, the Tobit coefficient for politicians' image is -0.34, compared to -.19 with
OLS, while for anger the Tobit estimate is .61, compared to .44. These results confirm that
our measure of anti-establishment sentiments is subject to ceiling effects, as we expected.[17]

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[17]One possible concern about our treatment is whether it increases anger directed at

Altogether, we find no effects on trust in political parties (columns 4-6 of Appendix Table C.1), although for Peru the specification without controls shows a negative effect of .09 SD, significant at the 90% level. The null effects in this outcome may partly be explained by floor effects, given that most respondents had the minimum level of trust —the Tobit estimates from the Appendix Table C.2 are much larger than the OLS estimates, but still not significant. However, we do find some negative effects of treatment on a related measure: whether political parties are essential for democracy (shown in Appendix Table C.3). Thus, we still have some indications that our treatment may have affected respondents' perceptions of parties.

Despite the null effects on the institutional dimension of anti-establishment sentiments, we conclude that our treatment effectively heightened anti-establishment sentiments, as corroborated by the strong positive effects on both indices of anti-establishment sentiments (columns 13-18): the mean index shows an increase of more than 0.13 SD, while the Sartori index increases by 8.5 percentage points (equivalent to a 16% increase), both significant at the

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politicians or in general. Previous research has found that emotions can affect political behavior (Young 2019), and thus we need to know whether our effects come from anger as a general emotion or as a sentiment specifically directed at politicians, which is part of the anti-establishment sentiment. Indeed, our treatment also affected people's image of ordinary citizens, to a slightly larger extent than the effect we estimate for their image of politicians (Appendix Table C.2, column 5). This is unsurprising since politicians are citizens after all. However, while 50% in the pooled sample rated politicians with the minimum value of 1, only 3% did so for Colombians/Peruvians; thus, the image of politicians was subject to floor effects that ordinary citizens were not. The uncensored estimates (Tobit) actually show a larger effect on the image of politicians (column 2) than on that of Colombians/Peruvians, revealing that our treatment was more effective in worsening people's views of political elites, in line with its designed purpose.

99% level. Overall, these two pieces of evidence suggest that our open-ended question is an effective and non-intrusive method for scholars to manipulate and study anti-establishment sentiments.

Figure 8: Manipulation Checks
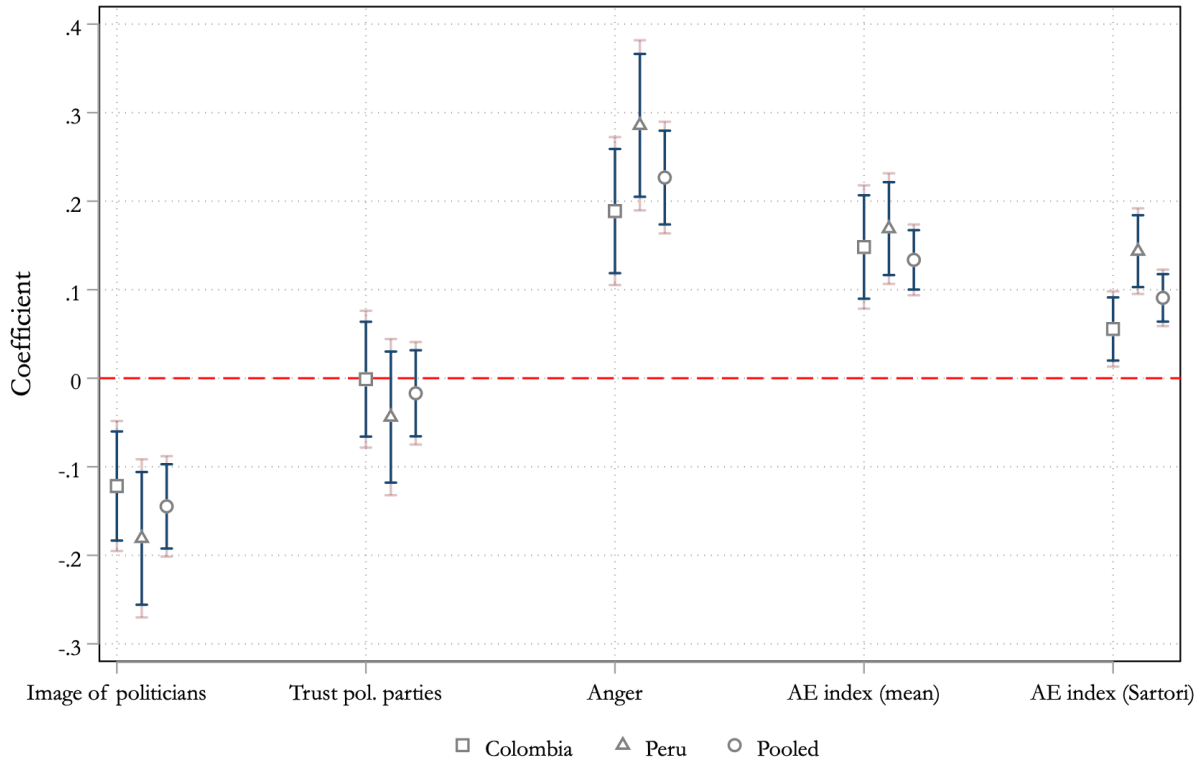
Note: Darker and lighter segmented lines represent 90% and 95% confidence intervals. All outcomes are standardized, except for the Sartori index, which is binary.

6 On the Consequences of Anti-establishment Sentiments

6.1 How Do Anti-establishment Sentiments Translate into Political Attitudes and Electoral Behavior?

We examine three sets of outcomes: democratic attitudes, electoral engagement, and attitudes toward candidates. We present the OLS results for three specifications: unadjusted, with socio-demographic and baseline covariate adjustment (same controls as in the manipulation checks, listed in Section 5.1.2), and with the double-post-lasso covariate selector. Error are robust and all outcomes are standardized (using the statistics of the control group), except for self-reported expected turnout and our behavioral outcome, which are binary.

6.1.1 Effects on Democratic Attitudes

Recent notorious cases illustrate that the governing style of anti-establishment politicians can be at odds with democracy (e.g., Nayib Bukele, Andrés Manuel López Obrador, Donald Trump, or Jair Bolsonaro); however, evidence on how this translates to citizens is scarce.Specifically, is there a causal link between citizens' anti-establishment sentiments and their anti-democratic attitudes? Figure 9, from Appendix Table C.4, shows no effects of increased anti-establishment sentiments across the multiple measures of democratic attitudes: democracy as the best system of government (columns 1-3), the belief that the will of the majority is essential to democracy (4-6), the preference for direct over representative

democracy (7-9), and the belief that Congress is essential to democracy (10-12). The null effects on democratic attitudes are strikingly clear: the effects are never close to significant, nor are they consistent across measures and specifications; thus, we conclude that priming anti-establishment sentiments does not affect respondents' attitudes toward democracy.

Figure 9: Treatment effects on democracy outcomes
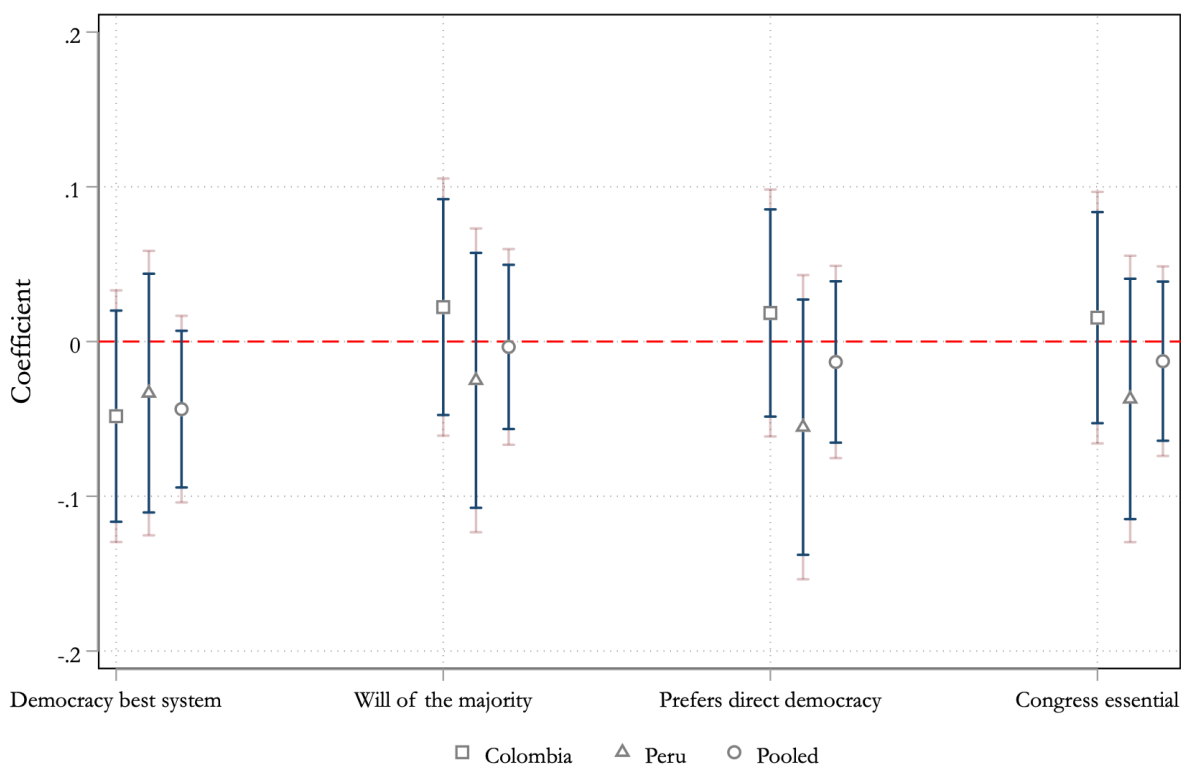
Note: Darker and lighter segmented lines represent 90% and 95% confidence intervals. Outcomes are standardized.

Despite these null effects, we do find evidence of reduced institutional trust among treated individuals. Figure 10, from Appendix Table C.5, shows the effects on trust for two relevant institutions for a well-functioning democracy: elections and the courts of justice. The results for trust in elections (columns 1-3) are always negative, stronger in Colombia than in Peru, but not statistically significant. The effects in the pooled sample are fairly stable around

-0.04, smaller than our estimates of the minimum detectable effect, which was close to 0.13 SD for continuous variables (see our pre-analysis plan here), suggesting that we may lack the statistical power to detect this effect. Moreover, this effect becomes significant at the 90% level in our pooled sample when making the variable binary ($\hat{\beta} = -0.02$, p-value < 0.1; not shown).

In turn, trust in the courts of justice falls when anti-establishment sentiments are heightened, with a negative effect of 0.06-0.07 in the pooled sample (columns 16-18), significant at the 95% level for the specifications with controls. The effects are stronger in Colombia, ranging from -0.08 to -0.11 SD, significant at the 99% level when using controls. In Peru, the effect is not significant, although it is consistent around -0.03, below our minimum detectable effect. The link between our treatment and trust in the courts of justice is consistent with the responses given to the priming question, whereby some of the most frequent ones were related to corruption, law, impunity, and theft, among other terms that could be, from the citizens' perspective, a task delegated to the justice system.

Overall, although not conclusive, these results suggest that anti-establishment sentiments undermine trust in institutions. To the extent that democracy is supported by a set of institutions and requires citizens to trust them, the distrusting effects of anti-establishment sentiments may end up harming democracy even if they do not change citizens' attitudes toward democracy. Indications of a possible effect on trust in elections, the key institution of democracy, make this risk even more patent.

Figure 10: Treatment effects on institutional trust
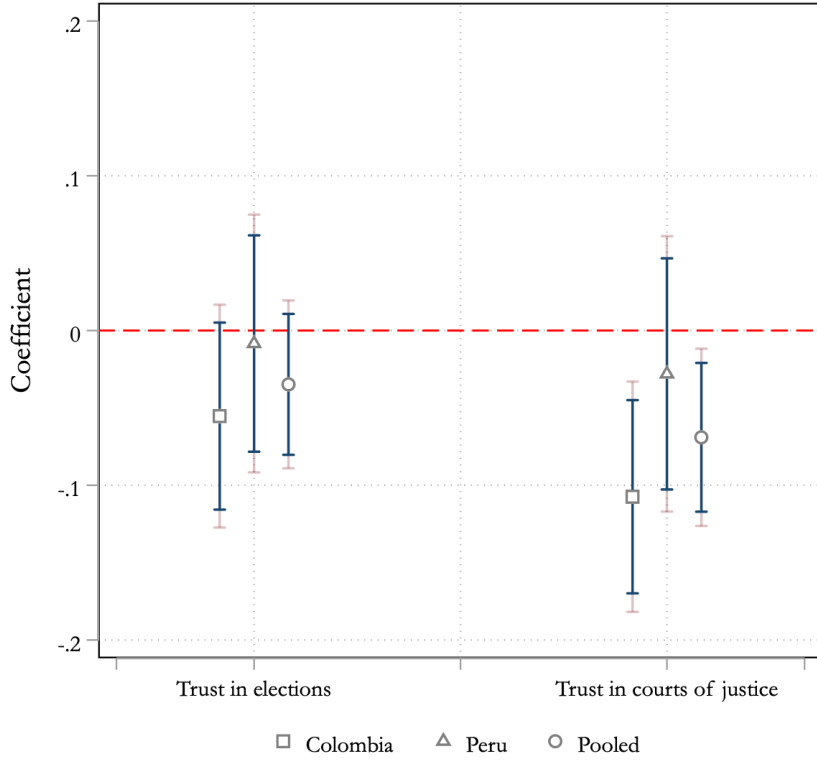
6.1.2 Effects on Electoral Engagement

We now turn to whether anti-establishment sentiments make citizens more engaged in the electoral process. We assess the treatment effects on respondents' intention to vote and on the behavioral proxy of willingness to learn their polling station.

Figure 11, from Appendix Table C.6, presents the results. Columns 1-3, correspond to respondents' answers about whether they are likely to vote in the upcoming election. The estimate for the pooled sample shows no effects, as does the estimate for Peru. In the case of Colombia, however, the second specification yields a 2.2 percentage points increase in the declared probability of voting, significant at the 90% level. Such an effect is smaller than

our estimates of the minimum detectable effect for binary variables, which was close to 4 percentage points, i.e., much larger than, for example, most of the effects of *Get Out the Vote* campaigns surveyed by (Green and Gerber 2019).

The second measure of engagement is whether respondents want to receive information about their polling place. We prefer this behavioral measure because it involves the (small) cost of lengthening the survey, and therefore reveals a stronger intention to vote. The results are estimated among those who did not already know their polling station,[18] and while there are no effects in the pooled sample or in Peru, in Colombia we consistently find that treated individuals are more likely to want to know their polling place and is significant at the 90% level in the unadjusted specification and at the 95% level in the one with controls (excluding the respondents who said they already knew their polling place leaves a sample of N=480, but results are robust to including them). The effect on wanting to receive information about one's polling place in Colombia is about 5-8 percentage points, a politically relevant effect: with a mean of 76% respondents wanting to know their polling place, the effect involves a 9% increase, a massive effect in the *Get Out the Vote* literature.

Overall, while we do not find any consistent evidence for Peru, nor for the pooled sample, our results for Colombia indicate that treated respondents are more willing to learn about their polling place and, by some estimations, more likely to turn out. This mobilizing effect of anti-establishment sentiments in Colombia, with a null finding in Peru, is likely because voting is voluntary in Colombia and compulsory in Peru. When citizens are mandated to

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[18]Note that this implies conditioning on a post-treatment variable, but we believe that the propensity to report already knowing one's polling place is unlikely to be affected by our priming question.

vote, it is less likely to find a mobilizing effect.

Figure 11: Treatment effects on electoral engagement
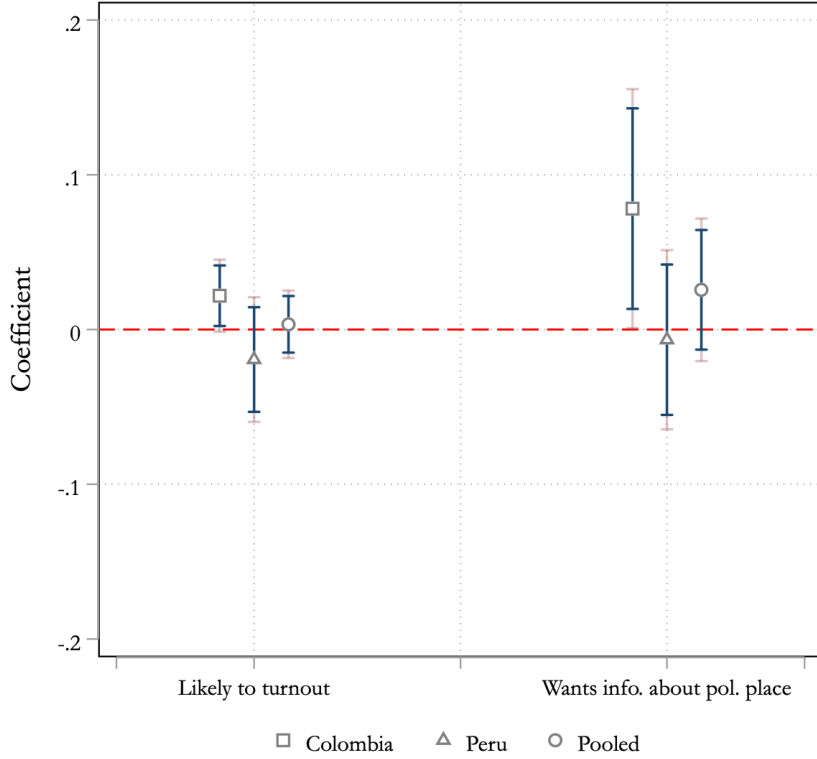
6.1.3 Effects on Citizen Attitudes Toward Candidates

Since it is difficult to change people's minds about high-profile candidates a week before the election, especially in a polarized, high-stakes setting such as the Colombian presidential election, we use our conjoint experiment to assess the effects of anti-establishment sentiments on citizens' attitudes toward candidates in the abstract.

We estimate AMCEs following the strategy discussed in Bansak et al. (2022) (who draw on Hainmueller, Hopkins and Yamamoto 2014), which is standard in the literature (see Appendix D.1 for estimation details). We also estimate MMs, which provide an estimate

of the average level of favorability toward candidates making anti-establishment appeals (Leeper, Hobolt and Tilley 2020).[19]

Figure 12 shows the AMCE estimates for each country and the pooled sample for anti-establishment appeals and, for reference, anti-democratic rhetoric and outsiderness (Appendix Table D.1 presents the full regression results). We find that having an anti-establishment slogan has a positive effect on a candidate's probability of being elected, significant at the 95% level. The results indicate that a candidate's switch from a neutral to an anti-establishment slogan increases her expected vote share by 1.7 percentage points (pp) for the pooled sample. This effect appears small compared to, for example, the effect of adopting an anti-democratic stance (-16.2 pp in the pooled sample), but it is slightly larger than the effect of being an independent (+1.2 pp) or of moving the candidate's economic policy from the center to the right (-2 pp). The AMCE of adopting anti-establishment slogans is even stronger in Colombia and null in Peru. We interpret the latter result in light of Peru's election of an anti-establishment president in 2021, which may have diluted the credibility or persuasiveness of anti-establishment rhetoric. The effect of anti-establishment rhetoric appears more significant if we consider that it simply corresponds to a speech tone in a hypothetical candidate slogan, as opposed to a stance with clearer implications, such as the policy proposals or, more so, the anti-democratic stance of shutting Congress.

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[19]Estimations use the `cregg` package developed by Thomas J. Leeper, available at CRAN.

Figure 12: Conjoints' estimated AMCEs (main attributes)
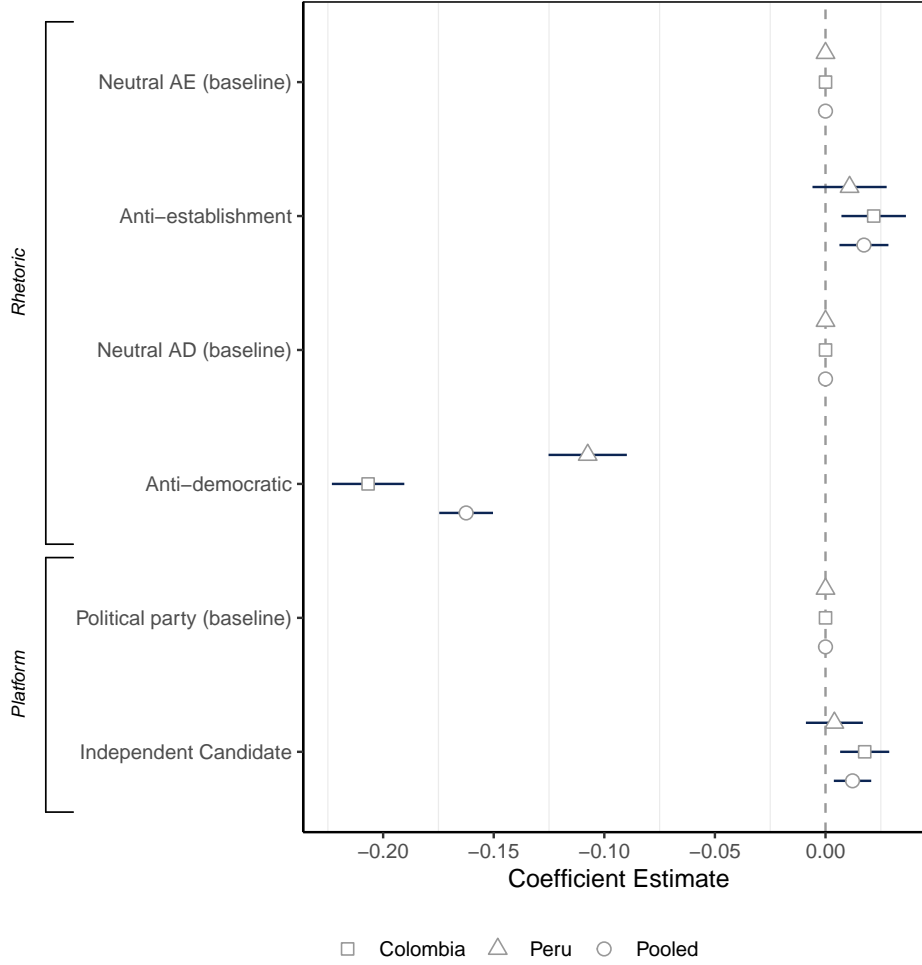
Note: Main results from the conjoint experiment with 95%-level confidence intervals. The specification also includes the candidate's sociodemographic attributes, social and economic policies, and ideology (see Table D.1 for full results).

Further decomposing anti-establishment slogans by the three components (anti-elitism, distrust of political parties, and anger), shown in Figure 13 (see Appendix Table D.2), we find that all three have a positive effect on the candidate's expected vote share, although this effect is not significant for anger. An anti-elite slogan increases the expected vote share relative to a neutral slogan by 3 pp (p-value<0.01), and one expressing distrust of political

parties by 1.8 pp (p-value<0.05). The magnitude and significance of anti-elitism are similar in both countries, but the effect of distrust of parties, while still positive, is only significant in Colombia. The lack of significance in Peru may stem from the volatile nature of their party system, which undermines the credibility of appeals that question parties as an institution.

Figure 13: Conjoints' estimated AMCEs by anti-establishment component
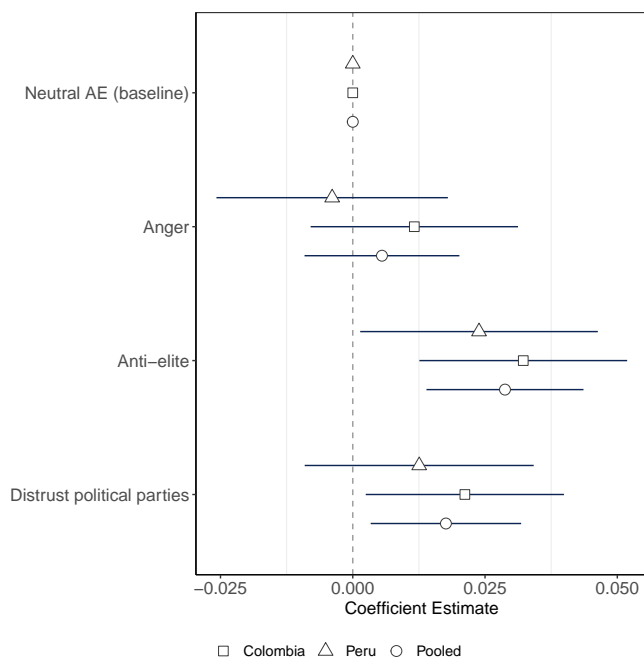
Note: Results from the conjoint experiment separating slogans by components of the anti-establishment sentiment. Confidence intervals are shown at the 95%.

Figure 14: Conjoints' estimated AMCEs - heterogeneous effects by terciles of respondents' AE sentiments
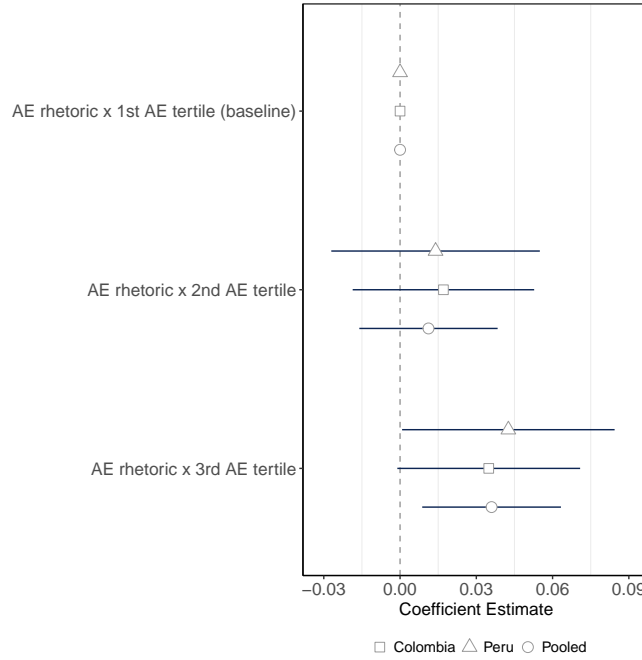
Note: Results from the conjoint experiment after estimating heterogeneous effects by terciles of respondents' anti-establishment sentiments. Confidence intervals are shown at the 95%.

Are these results driven by mere anti-incumbent sentiments? In both countries, all anti-establishment slogans have a positive effect and those with larger marginal effects refer to the political system as a whole (e.g., "the political machine," "the corrupt elite"), as shown in Appendix Figure D.5. This suggests that dissatisfaction and negative ratings of government performance extend beyond supporters of incumbent parties (as shown in Singer 2021).

In Figure 14 we show that the enticing effect of anti-establishment slogans is majorly driven by respondents with high baseline levels of anti-establishment sentiments: the AMCE of an anti-establishment slogan is around 3-4 points higher for respondents in the third tercile of anti-establishment sentiments, respect to those in the first tercile, significant at the 95% level in Peru and the pooled sample, and at the 90% level in Colombia.

Next, we ask how the favorability of candidates making anti-establishment appeals changes
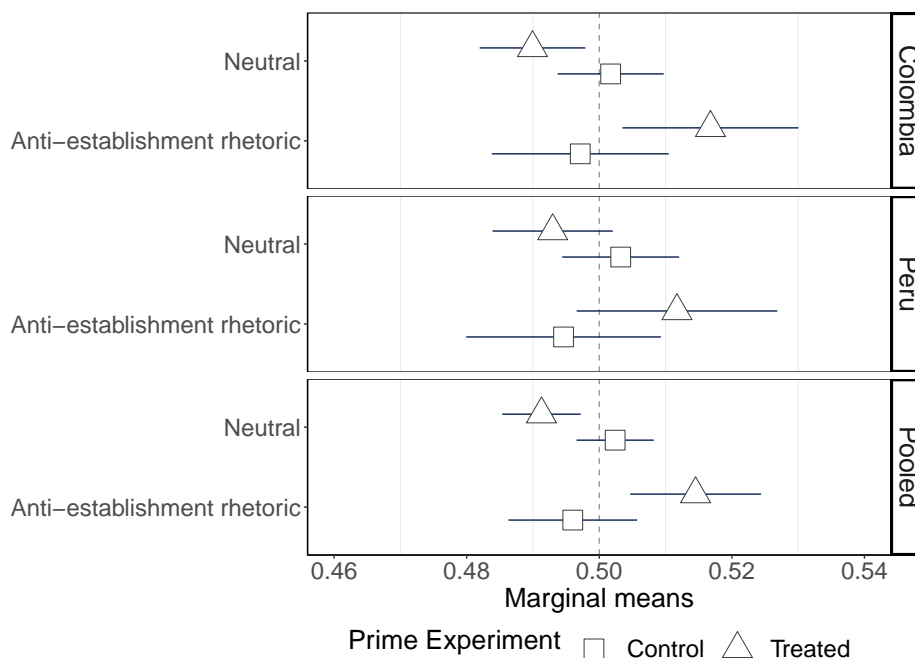
when anti-establishment sentiments are elicited with the prime experiment. To answer this question, we turn to MMs. First, we estimate the average favorability toward profiles with anti-establishment appeals by treatment status. Figure 15 shows the results of the estimated MMs for each subgroup (the formal test for the difference and its graphical representation can be found in Table D.4 and Figure D.3 in the Appendix).[20] While we find a larger effect for treated subjects ($\hat{\beta}_{\text{diff}} = 0.027$, p-value< 0.05, for our pooled sample), we are cautious in interpreting this result given the differences in favorability toward the baseline condition between experimental groups (Figure D.2).

Overall, profiles containing an anti-establishment appeal are rated positively by respondents, especially for individuals who either had a high baseline level of anti-establishment sentiments or whose anti-establishment sentiments were enhanced by the prime (this difference is not statistically significant in Peru). Responding positively to candidates' anti-establishment appeals may seem like a natural consequence of anti-establishment sentiments that were originally high or aroused by the treatment. But, *a priori*, a skeptical response to this rhetoric, or even disinterest in the conjoint task were also possible. We argue that the case of heightened anti-establishment sentiments is a good reflection of the real-world information environment in which citizens make electoral decisions. Indeed, candidates often mobilize voters around their dissatisfaction and anger with the political establishment. This is particularly true for presidential candidates in our Colombian case (see Section 4), where anti-establishment slogans are more effective. Thus, in contexts of widespread citizen

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[20]MMs for the remaining attributes are depicted in Figure D.6. We also compute differences-in-AMCEs, which capture differences in the effect of a candidate's anti-establishment appeals across treatment conditions of the main experiment (see Appendix Figure D.4).

discontent, election campaigns themselves may push in the same direction as the priming involved in our experimental manipulation, but more strongly. The attractiveness of anti-establishment appeals in a hypothetical candidate's slogan thus suggests greater vote gains for real candidates who use this kind of rhetoric on a sustained and pervasive basis.

Figure 15: Conjoints' estimated MMs by sample and treatment condition in prime experiment

Note: MMs results for the attribute levels of candidate slogans (i.e., anti-establishment appeal or neutral). Confidence intervals are shown at the 95%.

7 What are the Implications for Democracy?

Our study shows that anti-establishment sentiments affect citizens' political attitudes and voting behavior. Even if, as we have shown, anti-establishment sentiments do not affect citizens' attitudes toward democracy, their negative effect on institutional trust and, particularly, the indications of a negative effect on trust in elections raise concerns for democracy. But what are the broader implications of anti-establishment sentiments for the health of

democracy? While this question is a major undertaking, we offer some additional evidence and possible interpretations that might illuminate this debate.

Using our conjoint experiment, we assess whether citizens' attachment to anti-establishment candidates may make them less willing to punish anti-democratic stances. We find evidence in this direction: subjects treated with the prime experiment and, thus, whose anti-establishment sentiments have been heightened, are statistically less likely to punish anti-democratic rhetoric when the candidate also uses anti-establishment slogans, as shown in Figure 16. This suggests that the premium of the anti-establishment rhetoric may render citizens more tolerant of anti-democratic behavior, or perhaps adjust their understanding of democracy, consistent with Krishnarajan (2023).

Figure 16: Interaction between anti-democratic phrases and anti-establishment profiles (MMs by sample and treatment condition in the prime experiment)
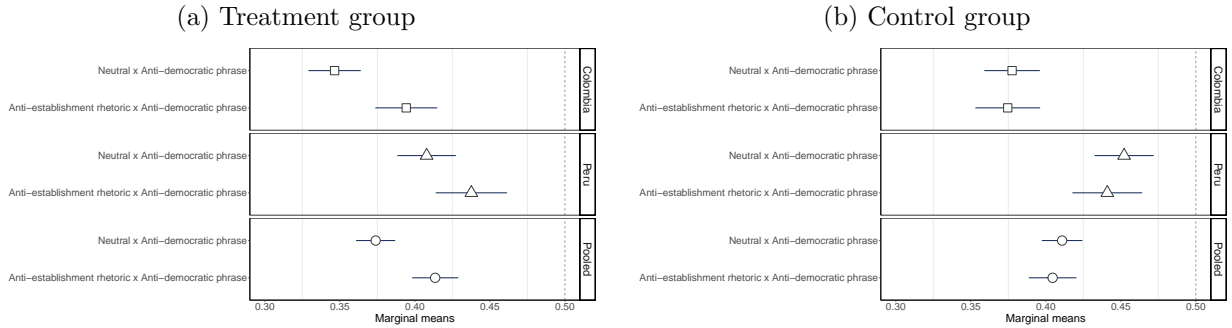
Note: Results of estimating the MMs for the combination of anti-establishment rhetoric and anti-democratic phrases by treatment condition and sample. "Anti-establishment rhetoric" corresponds to those with anti-establishment slogans and "Neutral" to those without. "Anti-democratic phrase" corresponds to candidates with an anti-democratic stance. We separate the analysis by treatment assignment in the main experiment: treatment (Figure a) and control (Figure b). We test whether the difference between the estimated MM in each country is statistically significant. For the treatment group: Colombia ($\hat{\beta}_{\text{diff}} = 0.05$, p-value< 0.01), Peru ($\hat{\beta}_{\text{diff}} = 0.03$, p-value< 0.1), Pooled ($\hat{\beta}_{\text{diff}} = 0.04$, p-value< 0.01); for the control group, the differences are not statistically significant. Confidence intervals are shown at the 95%.

These results suggest that anti-establishment sentiments may undermine citizens' ability to act as a democratic check. Moreover, we believe our finding that heightened anti-establishment sentiments increase support for anti-establishment candidates and can even

mobilize voters could have implications for democracy. To the extent that political parties establish filters for candidate selection, the electoral advantage of anti-establishment appeals may favor opportunistic outsiders who run without a party and are never screened for their democratic convictions. The past has often shown that such candidates may endanger democracy (Linz 1994; Carreras 2014).

Finally, our finding that anti-establishment appeals bring electoral gains suggests that, in the context of a rise in anti-establishment rhetoric in contemporary campaigns, candidates have strategic incentives to present themselves as anti-establishment. However, once in power, the anti-establishment stance is prone to lose credibility: it is hard to avoid all traces of corruption, and holding power may be inherently at odds with the anti-elite discourse (Engler 2023). Thus, campaign promises to renew politics may be broken, breeding more anti-establishment sentiments among citizens. This can create a cycle in which politicians struggle to appear as more anti-establishment (Garbiras-Díaz 2022), only to disillusion citizens and make them more eager for *true*, but perhaps unfeasible, anti-establishment candidates.

8   Conclusion

Our study opens the black box of citizens' anti-establishment sentiments, providing fine-grained descriptive and causal evidence of the nature, sources, and consequences of anti-establishment sentiments. We advance a definition of citizens' anti-establishment sentiments as entailing anti-elitism, distrust in political parties, and anger. Our panel study in Colombia and Peru revealed the three components of anti-establishment sentiments are widespread and positively correlated. Importantly, our concept of anti-establishment sentiments is correlated

with, yet distinct, from populism, and much more widespread, calling for theoretical and empirical distinctions between these two intertwined concepts.

Using text analysis, we show that anti-establishment sentiments are mainly driven by perceptions of corruption and unfulfilled promises, with other sources such as inequality playing a lesser role. While corruption is often identified as the force behind the rise of anti-establishment parties (e.g., Hanley and Sikk (2016)), we believe that politicians' broken promises as a source is a more novel finding that deserves further study. Overall, the similarity between Colombia and Peru in the extent and sources of anti-establishment sentiments is striking.

We also design a survey experiment that successfully activates anti-establishment sentiments and find that making such sentiments more salient does not undermine democratic attitudes or change the way citizens understand democracy, although it does reduce trust in institutions. We also find that anti-establishment sentiments have a mobilizing effect in Colombia, where voting is voluntary. Our conjoint experiment reveals that candidates who use anti-establishment appeals gain votes, specifically among individuals whose anti-establishment sentiments have been enhanced by the prime treatment, as often happens during electoral campaigns. These individuals are also less likely to punish candidates who adopt anti-democratic stances. Although our effects generally appear small, they are the response to a "light-touch" intervention within a survey experiment; we believe that these effects are indicative of larger effects in real life. Our results hold for both Colombia and Peru, although they are less robust in Peru, where the sample is smaller.[21]

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[21]Another plausible reason behind this is the recent election of former President Pedro Castillo in 2021, who gained prominence as an "anti-establishment" politician and was later

Certainly, our conclusions are inevitably bounded to the specific contexts that we study and it is unclear how they travel elsewhere. Future research should study citizen anti-establishment sentiments in other regions, including where they are less prominent. Meanwhile, our research agenda aims to expand this research to more developed democracies where anti-establishment sentiments are also widespread like the U.S. or Italy (Ipsos 2021), but where we know little about their sources and implications. Finally, our research focuses on the demand side of anti-establishment politics and further research is needed to get to the general equilibrium effects. But our study highlights that citizens are not merely recipients of anti-establishment politicians that come out of the blue; they are agents who, with reasons, hold anti-establishment preferences that drive their political behavior.

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impeached by Congress in 2022. In this sense, the election of an anti-establishment president may tame anti-establishment sentiments–if citizens are satisfied with the government's performance.

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