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**The Right to Vote:
Impact on Polarization, Attitudes
and Perceptions of the Economy**

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Abstract

This study analyzes the causal impact that voting eligibility has on political attitudes, beliefs, and perceptions about the economy. Specifically, it examines how acquiring the right to vote impacts *affective polarization*—measured by trust attitudes and moral judgments towards political ingroups and outgroups; *ideological polarization*—measured by the variability in evaluations of the current state of the economy; and *political engagement*—measured by participation in political activities and consumption of political information. Leveraging the “as good as random” nature of the discontinuity at the age threshold for eligibility, a survey experiment was conducted with 179 Mexican individuals who were barely eligible and barely ineligible to vote in the 2018 Mexican elections. Several game theoretical scenarios and questions were used to measure the outlined outcomes. Our findings show that, relative to their ineligible counterparts, eligible individuals are much more prone to show trust and positive moral judgments towards their ingroup while reducing their trust and more intensely showing negative moral opinions towards people of their outgroup. Participants who could vote in 2018 also displayed more extreme evaluations of the economy than those who could not. Contrary to our expectations, ineligible participants consistently showed more frequent participation in political or communal activities than eligible participants, while no difference was found in terms of information consumption between both groups. This study is novel in its attempt to examine the causal relation between voting shocks and political polarization through experimental economics methods. Its implications generate a discussion of the potential virtues and downsides that voting inductions have on social and economic interactions.

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Section I. Introduction

Does acquiring the right to vote change us in any meaningful way? Does it make us better people? Worse people? Does it give us a sense that we are part of a community and act on behalf of it? Or does it make us more factious and sectarian? Does it make us more prone to listen to others' views and attempt to reach a middle ground? Or does it make us less tolerant towards people who think differently?

Certainly, the right to vote and the act of voting themselves are, more likely than not, considered intrinsically good in public discourse (Sen, 1999). The mere idea of political factions winning and losing elections by competing for votes suggests that those who aspire for power must have, as imperfect as it might be, some degree of responsiveness to constituents' needs. But whatever the actual efficacy of exercising the right to vote may be, that deserves a separate discussion. Here, we are concerned about the effects that being eligible to vote has on beliefs and behaviors towards others and oneself. Particularly, we want to know if eligibility makes individuals more polarized in their judgments about people from an opposing political position and in their views about the economy, and if the right to vote raises individuals' interest in politics.

Why do these questions even matter? For one, they help us understand how we behave in a democratic society. If being able to vote reduces our negative attitudes and perceptions about individuals who hold different political positions, then it might be valuable for the cohesion and reproduction of social life. The same goes if it makes people more informed and concerned with public issues. Thus, we can make a case to lower voting age restrictions or to increase voter turnout. On the other hand, if acquiring voting rights worsens our opinions about the outgroup or dampens our willingness to cooperate or interact with them, then we must discover what is flawed within the system and provide solutions to fix it. If voting does not really do much for society's welfare (besides the election of representatives) then we must come up with other ways to strengthen the social fabric.

From an economic perspective, trust and civic morality are closely related to cooperation, economic growth, and development (Hugh-Jones, 2016; James Jr., 2015). Trust in others facilitates cooperation in a society and is the cornerstone of what is referred to as *social capital*. Notorious scholars such as Robert Putnam and Francis Fukuyama have highlighted the value of social capital in reducing transaction costs found in formal coordination mechanisms like contracts and bureaucratic rules (Fukuyama, 2000; Putnam et al., 2000). Hence, the way trust is distributed among members of a society has important implications for the efficiency of economic exchanges. By this token, trusting not only in people from our own political camps but also people with differing opinions and beliefs may facilitate the exchange of goods and ideas for a larger part of society; otherwise, it might negatively impact variables associated to social capital such as the use and distribution of public goods, consequently affecting economic development. Whether the right to vote makes us more willing to engage in forms of communal participation or in changing how we trust or cooperate with others is thus worth inquiring from a social and economic point of view.

On the other hand, the relation of voting in beliefs and attitudes serves as an instance to show how certain actions intervene in preference formation. Instead of viewing preferences as something stable and fixed that drives action, typical of rational choice models in economics, here we study an instance in which causation runs in the other direction. Thus, in line with a vast tradition in psychology (Bandura, 1989), our research matter can contribute to our understanding of the behavioral mechanisms that intervene in the formation of what we believe in.

In a broader context, at the time of writing this, polarization is a term continuously used and generating discussions among the academia, the press and the general public in Mexico and many other countries (Moreno, 2024). There is a notion that there are growing social divides within many democratic regimes that promote an “us versus them” logic, seemingly making us more incapable of acknowledging the others’ concerns and viewpoints. Thus, this study is timely and relevant to understand the drivers of a phenomenon that have many implications for our society’s well-being.

In addition to the timeliness and relevance of the topics analyzed here, our study also contributes to the current literature gap on what has been called by Holbein et al. (2023) the *transformative voting hypothesis* (TVH), namely, the idea that exogenous shocks that induce people to vote (e.g.

reaching voting age) changes individuals' attitudes and beliefs in meaningful ways beyond mere act of casting a vote. In this regard, while there are numerous theoretical works linking voting to other forms of political engagement such as consumption of political information, working in political or communal associations, acquisition of political knowledge, political efficacy, and many others, there are only a few addressing this relationship empirically and, much less, through causally oriented research designs. As it will be discussed further in-depth in what follows, the few causal works exploring this relationship only cover a handful of countries, most of them deal with the shock of compulsory voting rules and there is not a wide variety of dependent variables studied, most of them restricted to forms of political knowledge or political interest. In this work, I expand on the variables typically studied by this literature by analyzing measures of affective and ideological polarization besides political engagement and consumption of political information.

Moreover, this is the only study, to our knowledge, that directly analyzes how a voting shock affects beliefs and behaviors towards perceived political ingroups and outgroups. The study by Mullainathan & Washington (2009), which is arguably the closest to what is done here, examines polarization in terms of opinions of partisan elite figures by eligible and ineligible individuals, but does not precisely analyze changes in affective sentiment –like moral judgements or trust— towards other similar individuals from the same and contrary political groups. Also, the work by Iyengar & Westwood (2015), similarly to our approach, applies trust games and dictator games to examine trust and discrimination along partisan markers, but does not aim to know if these attitudes are more intense for people who are eligible to vote than for those who are not. Therefore, our study provides the unique combination of applying game theoretical scenarios to measure differences in affective and ideological polarization of individuals caused by voting eligibility.

With all these considerations stated, the specific research questions we address here are:

RQ1. Affective polarization: Does being eligible to vote makes individuals more polarized in their moral judgements and trust towards their political ingroups and outgroups?

RQ2. Ideological polarization (economy): Does being eligible to vote prompts individuals to adopt more extreme views about the current state of the economy?

RQ3. Interest in politics: Does being eligible to vote makes individuals more interested in politics as reflected in greater political participation and consumption of political information?

To give answer to these questions we exploit the fact that individuals who are barely eligible to vote are virtually identical on average to those who are barely ineligible to vote. Nonetheless, due the exogenous assignment of a birthdate, some of these individuals acquired the right to vote earlier than others like them. Consequently, under a few weak assumptions, due to the as-good-as-random nature of the voting eligibility assignment, we can assert that being barely eligible to vote has a causal effect on political beliefs and behaviors. As voting eligibility is sharply determined by being 18 years or older by the time of the election, age is what completely selects who gets assigned to the treatment and who does not. Thus, we are applying a sharp regression discontinuity design (RDD).

With this identification strategy in mind, we implemented an experimental survey of 179 Mexican participants in the ages of 21-25 years old through the Prolific survey platform, thus capturing voting eligibility effects in the long term. Participants were asked a series of questions about their opinions on diverse political and economic topics and were also placed in game theoretical scenarios, where their decisions regarding other participants would determine the real payments they would receive. This way we are able to know what their perceptions towards people from opposing political sides, including the president, were; to capture how much they trust people from their perceived ingroups and outgroups in a scenario where they could win or lose money; and also to get to know how frequently they displayed habits of political interest.

Anticipating the results, while we found that, generally, individuals displayed a greater favoritism towards people from their ingroup and a greater dislike towards people from their outgroup, this was substantially more intense for those who were eligible to vote than for those who were not eligible. This was consistent in the measures of trust, perceptions of generosity and perceptions of dishonesty. At the same time, evaluations of the current president's performance were much higher

for people on the left who could vote than for people on the left who could not vote, suggesting a greater consistency between the political action of voting in a certain way and the beliefs that support that action. We also found that the variability in opinions of the current state of the economy were sharply distinct and significantly greater for those who were eligible to vote than for those who were not eligible, suggesting more extreme opinions in this issue for people who could vote. Lastly, contrary to the initial expectations, we found a significant difference in the frequency of political activities done by ineligibles and eligibles, but where ineligibles consistently were the ones more actively participating; on the other hand, we found no statistical difference in the frequency of consumption of political information between both groups. I discuss interpretations of these results with qualitative data collected by the survey.

It must be stressed that, although the relationships we study here are political by definition, many of them are also fundamentally economic. If we agree on the idea that economics is a science of decision-making under strategic settings, and if we agree that one of its scopes of inquiry is the decisions regarding exchanges between the self and the others, then the present work not only directly observes economic decision-making, but its findings have relevant implications for the ways resources are distributed among a society as well. By noting how entrusting resources to others varies according to group membership, how beliefs are shaped by group identities and also by directly examining how opinions regarding the economy are changed by conditions such as being eligible to vote, this project aims to contribute to a better understanding of economic decision-making in political environments.

The structure of this work is as follows: the next section provides a review of the bodies of literature most relevant for this study, focusing on the works surrounding the transformative voting hypothesis, political polarization and applied game theoretical approaches; then, Section III presents the research design and data, where we find the concrete hypotheses and the methods and materials used to test them; in Section IV I present the findings of each one of the hypothesis tested; finally, Section V concludes with a discussion of the results and their implications, as well as the next steps that will be undertaken to expand this research further.

Section II. Literature Review

This research project themes and methods can be mapped into three distinct, but related, bodies of literature within political science and economics. The main one concerns the relationships between factors that induce voting (e.g. voting eligibility) and political attitudes (e.g. interest in politics) or other forms of communal participation. This literature comes from a long tradition in political theory and political science but has given little attention to the causal impact of voting on attitudes. A second one deals with political polarization, broadly understood as a divide in opinions and attitudes defined by political identities, which is informed by social psychology and economic modelling. Lastly, the experimental methods used here borrow from the game theoretical approaches in the applied behavioral economics literature. This way, by using methods widely applied in experimental economics, this research project lies in the intersection between economics and political science. I thus review the works that are most relevant for this study in each one of these areas.

i. The Transformative Voting Hypothesis

There is a widely held idea in classic and modern political theory that voting is an essential part of a virtuous citizenship. A line of thought in this vein, most notably led by Robert Putnam, asserts that *civic engagement* –the participation in the life of a community that improve conditions for others or help shaping the community’s future (Adler, 2005)—is intrinsically linked to the formation of trust and prosocial attitudes between members of a community (Putnam et. al 1993; Putnam, 2000). In their seminal book, *Making Democracy Work: Civic Traditions in Modern Italy*, Putnam et. al (1993), argue that the historical differences in institutional performance between the Northern and Southern regions in Italy are the result of its different levels of active participation on associational life –including voting and other forms of communal decision-making, through the networks of reciprocity and trust generated with continued social interaction and cooperation, namely, social capital. More explicitly, it has been argued by scholars that voting makes citizens more informed and politically engaged (Lipjhart, 1997); that it develops a sense of political efficacy (Pateman, 1970; Finkel, 1985); and that it makes more likely other forms of communal participation such as greater interaction with public officials, campaigning and, generally, greater

political interest (Verba & Nie, 1972). While studies in this tradition make some compelling arguments and, to a lesser or greater extent, provide empirical evidence of the relationship between voting and other forms of communal participation or prosocial attitudes, most of these works show, at best, a correlation between these variables. Hence, we end up questioning if the engagement is somehow the result of people being introduced to it by the act of voting or simply that people who are more prosocial or engaged in communal activities also participate more in voting.

With this issue in mind, Holbein, et. al. (2023) systematically examined whether the current literature provides evidence that voting changes people's behaviors. They conducted a meta-analysis of causal studies testing what they have coined as the *transformative voting hypothesis* (TVH): the idea that the experience of voting or being somehow induced to vote will change the behavior individuals in meaningful ways (Holbein & Rangel, 2020). This induction to vote might take several forms such as changes in voting rules—like compulsory voting or lowering voting age, programs to encourage voting or, as in our case, simply being eligible to vote. Under that framework, Holbein, Rangel and their coauthors identify only nine causal studies—including their own works—testing the impact of voting on ‘behaviors that have a strong theoretical connection to voting’, which ended up being only the outcomes on political knowledge and political interest. The authors excluded a few other studies or variables treating other outcomes such as political discussions, media usage (Loewen et. al, 2018) and civic duty (Feitosa, Blais, & Dassonneville, 2019) because of the lack of enough similar studies to meta-analyze.

In the forementioned causal studies we can find two that analyze the effect of compulsory voting’s staggered implementation in Austria’s provinces. Shineman (2021) finds that recent exposure to compulsory voting increases daily news intake, attention to news about politics and self-reported interest in politics, but no statistically significant effects with current exposure. However, with longitudinal data from the European Values Study, Gaebler (2019) finds no evidence supporting greater self-reported interest in politics, engagement in political discussions or political action, and points out that mandatory voting may crowd out intrinsic motivation to be politically involved.

There are also studies that take as voting treatment get-out-the-vote interventions. Loewen et al. (2008) conducted an experiment with 121 students in Quebec where the voting treatment was to

receive a gift card if they voted, thus approximating compulsion. They found no significant effects on political discussions, political knowledge, but found more media usage at a 10% significance level. Shineman (2018) built on that same study but addressed the issues of low statistical power, high voter turnout in the control group and small increase in voter turnout for the treatment group. With the premise than an election with low baseline turnout would yield a larger turnout effect and, consequently, more precise estimates of downstream effects, Shineman's RCT applied financial incentives to vote in the San Francisco 2011 municipal election in a sample of 178 participants. The outcome was a turnout increase of 37.8 percentage points for treated individuals, as well as significant positive effects on individuals' consumption of political information and on 9 out of 12 measures of knowledge about the candidates and the electoral context. In a similar vein, Braconnier et al. (2017) conducted an RCT aimed at facilitating voter registration amidst France's 2012 general elections. It showed significant effects in the treatment individuals' frequency of political discussions during the election campaigns at a 5% level and in the ability to locate one's political preferences and prominent local and national politicians on the left-right axis at a 10% level; however, although there were positive effects for self-reported political interest, they were not significant. These studies suggest that if interventions substantially encourage voting they have other second-order effects, such as increasing political knowledge and engagement in political discussions.

The meta-analysis also includes three papers that exploit Brazil's dual-voting system, where individuals 16 up to 18 years old can vote voluntarily and those 18 or older are obliged to vote and face substantial penalties for not doing so. These studies use a regression discontinuity design, leveraging the fact that those individuals close enough to the compulsory voting cutoff age are virtually the same and that compulsion laws are a powerful instrument for voter turnout in Brazil. With survey data collected for 3,236 participants a week after the 2010 Presidential election, de Leon & Rizzi (2014) found no differences in political knowledge or frequency in information consumption between those nearly reaching the compulsory voting threshold and those nearly surpassing it. Holbein & Rangel (2020) applied a similar approach with a large dataset of more than 40,000 respondents to test impact 1.5 months before and two years after the 2006 Brazil's general election. They found no significant effects in political knowledge, political interest and social awareness. With a slightly different design, Bruce & Lima (2019) use sharp regression

discontinuity to test if compulsory voting increases consumption of Brazil's main TV newscast, *Jornal Nacional*, a month after the 2014 Federal Elections, finding that individuals compelled to vote for the first time are 57% more likely to watch the show. Hence, we infer from these studies that while political knowledge and overall political information consumption may not be increased as a result of compulsory voting, it might be the case that some forms of information consumption, such as watching specific shows, could be enhanced by this voting shock.

Finally, in addition to the meta-analysis conducted in their paper, Holbein et al. (2021) use data from two large-scale surveys conducted by the American College Test (ACT) applied to graduating high-school students in the aftermath of the United States' 2016 and 2018 elections. Similarly to what we do in this study, Holbein and coauthors leverage the exogenous variation surrounding the U.S.'s voluntary voting age cutoff to test if voting eligibility has any impact on political knowledge, political interest, social awareness or ideological position. They found null effects in each variable analyzed. It must be noted that, besides Braconnier et al. (2018), this is the only study in the meta-analysis that does not use some form of mandatory voting as a treatment, which could account for the different nature of the outcomes studied. The distinction is important as this research project deals with effect of being eligible and ineligible to vote with voluntary rules.

As we can see, these nine studies are diverse in their methods, geographical locations, electoral contexts and variables analyzed. Holbein et al. (2019) take advantage of the fact that all of them at least study some measure of political knowledge and political interest to determine if the literature gives credible evidence for the TVH. In the pooled analysis of the seven papers that deal with political knowledge, they show that only Shineman's (2018) and Bruce & Lima's (2019) display significant results and thus treat them as outliers. They find only one of three meta-analysis estimates—a fixed effects estimator—to be statistically significant, but dismiss it as not being robust to meta-analysis checks in the meta-analysis literature. On the other hand, in the six papers used to meta-analyze political interest they found no statically significant effects in any of them. As a result, they conclude that there is no evidence found in the literature up the moment of writing their study that confirms the transformative voting hypothesis.

Is this meta-analysis a definitive proof that voting is not transformative? There are many reasons why we cannot make such an assurance. Firstly, as it was noted, the main dependent variables analyzed are self-reported political interest and political knowledge. Other variables related to civic attitudes or engagement in political discussions were left out of the meta-analysis but showed mixed results in the forementioned studies. Secondly, as it was just mentioned, the bulk of the studies are related to compulsory voting treatments; however, as suggested by Gaebler (2019), these kinds of interventions could reasonably crowd out intrinsic motivations to vote or simply preclude first-time voting shocks when it is voluntary, such as when Brazilians turn 16.

A few other recent causally identified publications shed some more light into this discussion, as they deal with other relevant variables in non-compulsory settings. Horiuchi et. al (2021) show that lowering the voting age significantly increased seeking of election-related information either through discussions with friends and family or through media consumption as well as mobilization to vote by family or friends; however, their study finds that there are no changes in civic attitudes such as self-reported political interest, trust in government and a sense of political efficacy. This way, their findings point out that while being eligible to vote may increase political engagement, it does not make people any less or any more optimistic about their participation in the political process. Moreover, Jessen et. al (2021) use longitudinal data from the UK with an RDD for a period covering elections between 1992 and 2017 to examine short-run and long-run effects of earlier voting eligibility. They find a pronounced and statistically significant increase in political involvement (0.11 of a standard deviation), meaning greater political interest, civic duty of voting, and feeling close to a party. Nonetheless, they also note that these effects vanish in the long run. In contrast, Schulte-Cloos (2019) relies on a cross-national dataset from 2004 including six different European countries from the three political European regions to test whether first-time eligibility in European parliament elections enhances political interest and support for radical parties in the short and long run. Her study's results mirror Shineman's (2018) in that mobilization for complex low-salience elections—as European Parliament elections—prompts a greater political interest (a third of a standard deviation). Also, contrarily to the above studies that deal with long-term effects, it finds that political interest lasts up to five years after the election. Additionally, their results show that there is no significant support for radical parties.

Furthermore, in terms of first-time voting against experienced voting effects, a study that deserves special attention is the one by Bhatti, et al. (2016), which shows that, for Nordic countries, there is a ‘first-time hype’ in voter turnout that decreases in time as voting experience is gathered. They also argue that this might be different in other contexts, as analyses in the US show, without ambiguity, that the relation between past eligibility and turnout is positive. They attribute the differences to institutional barriers to vote, as the US system requires registration and so investment in a first election lowers the perceived costs for further elections.

From these other studies, we can find evidence of voting shocks affecting political engagement at least in the short run and, similarly, that first-time voting may have different effects than experienced voting. It might be argued that this supports the notion that voting is not actually transformative, as it is not changing attitudes in a persistent manner. While we do not discard that possibility *prima facie*, it is nonetheless telling that the impetus surrounding first-time voting could be lost or diminished with experience, making a worthwhile case of inquiry.

This study contributes to the literature on TVH by analyzing *long-term effects* of voting eligibility through *experimental methods* in a country –Mexico—where the hypothesis has not been tested in published work. This way, this work expands the evidence about the effects voting eligibility with voluntary rules on political beliefs and attitudes in a location not explored before and with methods that are novel for the literature so far.

ii. Political polarization

This study analyzes if voting eligibility changes moral judgements and trust towards perceived political ingroups and outgroups. In this regard, we are concerned with *affective polarization* –the difference between ingroup liking and outgroup disliking (Leininger & Grünewald, 2023). To our knowledge, there is no published empirical work directly measuring if voting shocks affect perceptions and attitudes towards others marked by political identities. There is, nonetheless, a strong theoretical body of literature supporting that 1) social identities (like ideology or party affiliation) affect behaviors towards perceived ingroups or outgroups and that 2) action choices (such as voting) could shape political beliefs. There are also a few, but solid, empirical studies that

test whether voting inductions affect *ideological polarization* –understood in terms of stronger or more extreme political preferences. Thus, we find a theoretical rationale to study the impact on political beliefs and identity-based attitudes of voting eligibility as well as a fertile ground to contribute to the literature on voting shocks and political polarization.

In terms of differentiated beliefs and attitudes based on political identification, social identity theory offers illuminating insights for our hypotheses. The theory is informed by a series of experiments conducted by Henri Tajfel in the 1970's and 1980's which show that the act of social categorization itself leads to discriminatory behavior against an outgroup and favorable behavior towards an ingroup (Tajfel, et al. 1971). The experiments show that even the most insignificant group markers would lead individuals to maximize differences in the distribution of rewards between the ingroup and the outgroup, giving rise to the so-called 'minimal-group paradigm'. Extrapolating those principles to political affiliations, an individual's attachment to a political party would thus lead to partisan attitudes (Greene, 2004). In an empirical setting, Gerber et. al (2010) mirrors the minimal-group approach in a political context to test if the generation of a group affiliation through party identification prompts partisan attitudes. They conduct a field experiment where mails were sent to a random sample of voters registered as independent in Connecticut, US. The mails informed the subjects that they had to register with a political party to participate in the upcoming primary election. In a follow-up survey, they found that treated individuals were more likely to identify with a political party than those in the control group by more than seven percentage points, as well as showing greater concordance with their posttreatment voting behavior and evaluations of partisan figures and institutions. As we can see, the social identity approach informs why the mere act of voting could induce people to adopt a partisan or ideological identity and thus impact how that identity guides their intergroup behavior.

Another part of the story is explained by the theory of *cognitive dissonance*, pioneered by Leon Festinger. The theory refers to the situation where an individual feels discomfort regarding an inconsistent relationship between beliefs and actions (or any two items of information), and so changes one or the other in order to reduce that inconsistency (Festinger, 1962). Under that token, preferences would be the result of action choices rather than action choices being the result of prior stable preferences, as rational choice theory would suggest. Building on that theory, Acharya et al.

(2018) propose a model where individuals may change their policy preferences to match those pursued by the political party they support. Partisanship thus emerges naturally as an effort to reduce the cognitive dissonance cost of holding beliefs that differ from those of the party one most closely aligns with. Empirically, an application of the theory of cognitive dissonance in a political setting is found in Mullainathan & Washington (2009). They use the National Election Study (NES) in a time frame covering elections from 1976 to 2000 to examine if individuals eligible to vote show more polarized opinion ratings towards the incumbent president or senator than people who could not vote. Their results show that, two years after the election, eligibles show greater party affiliation than ineligibles, being nearly twice as polarized. However, the difference dissipates over four years, in the subsequent presidential election year where ineligibles now have the right to vote. Under the context of these studies, we can explain why, after individuals are compelled to support a political faction, they may adhere to the norms, values and expected attitudes conforming to their political choices.

Under a different, but related, theoretical approach, Singh & Thornton (2013) build on Converse's (1969) social learning model where the strength and stability of partisanship is increased with experience in a party system to advance a theory predicting that partisan attachments are stronger under compulsory voting systems. The logic is that less interested or less informed citizens who are compelled to vote will form an attachment to a party as a cue directing how to cast their vote. They test their theory with cross-national survey data from the Comparative Study of Electoral Systems (CSES) and find a strong positive relationship between the likelihood of identifying with a political party and voting under compulsory rules. Also, in the context of compulsory voting, de Leon & Rizzi (2016) exploit once again Brazil's dual voting system to discover if the exogenous shock in turnout reflects on preferences for political parties, extreme political orientations or polarization. They found that individuals compelled to vote were 2-4 percentage points more likely to declare themselves as extreme left-wing and, when stating a preference for a political party, 5-8 percentage points more likely to express support for *Partido da Social Democracia Brasileira* (PSDB) but no effects in polarization, being center-oriented, or stating a preference for any political party. Although we find a potential issue in the studies that exploit the variation in Brazil's dual system given that political attachments could be formed since the moment individuals acquire

voting rights, taken together, these empirical findings give us reasons to believe that exogenous shocks increasing turnout might impact political preferences and, consequently, polarization too.

Overall, the insights from this variety of theoretical and empirical works help us contextualize and better understand why voting, in generating or intensifying political identities, could drive polarized attitudes and beliefs. This is quite relevant for economic science both in a practical and a theoretical dimension. Firstly, if the way people interact in economic transactions is differentiated by the political identities involved in them, then we would see that the predictions of rational choice theory might not be fulfilled under politically polarized contexts, thus requiring further considerations in the analysis. Secondly, polarized contexts could display lower levels of social capital, which hinders the efficiency in the exchange of goods and services as well as the provision of public goods, potentially slowing economic development.

iii. Experimental economics methods

In a part of this study, we directly place participants in a game or ask them their expected outcomes of games in studies we had already conducted. The twist in all these scenarios is that decisions and expectations are based on political identities. This way we are able to test polarization through decision settings that involve other participants.

Particularly, the games applied in this work are versions of the *trust game* and the *dictator game*. The trust game –also called investment game– has two players anonymously paired: a first mover and a second mover. The first mover may transfer all or a share of her endowment to the second mover; then, the transferred amount would be multiplied for the second mover, who has the possibility to transfer back all or a part of that multiplied amount (Brülhart, 2012). On the other hand, the dictator game is simply a situation where one player unilaterally proposes a one-time offer to another player, which ultimately determines the latter's payoff (Engel, 2011).

Arguably, the test of intergroup trust that most closely resembles what is done in this work is found in Iyengar & Westwood (2015). In their study, participants play both dictator games and trust games where they are paired with others who might be of their own or a contrary political party

affiliation or not and who also might belong to their same race or a different one. They found that trust and generosity is greater towards people from the same party and smaller towards those from a different party but no differences in racial lines. In a similar way, Fershtman and Gneezy (2001) use those two games to test discrimination against people of Eastern origin. They found that there was a greater mistrust against Eastern people in the trust game –where strategic behavior the other matters—but no differences in group transfers in the dictator game –where allocation does not depend on the other’s, concluding that the results suggest that discrimination is based on ethnic stereotypes about the other’s behavior but not in an intrinsic dislike about the group the other belongs to. Another study using games to analyze strategic decisions based on partisan identity is Balliet et al. (2018). Their paper shows that both Democrats and Republicans (US) tend to cooperate more with people from their one party in the Prisoner’s Dilemma game and, applying a method to test mediation, attribute this result to expectations of cooperation regarding each political group. In that sense, individuals would cooperate more with people they identify with because they expect them to be more cooperative with them. We can thus note how these settings allow the display of behaviors that favor the ingroup and discriminate against the outgroup and also to determine to what extent those behaviors are driven by expectations of how people in each group would act.

In the other scenarios we present participants with situations that do not directly involve their participation in the games but are rather aimed to know how they believe that people from their respective ingroup and outgroup would behave in those games. The test of perceived group generosity is based in a variation of the dictator game like the one in Cappelen et al. (2013), where two players receive payoffs in accordance to the work they do but also according to a random shock that could augment or diminish their payment. In the study, an external dictator would determine how to redistribute payments based on her own preferences for fairness; in this study, respondents only know that two people worked for money but one received a payoff while the other did not and so the subject who received something could transfer a share of her payment to the less favored one. However, instead of inquiring about the preferences of fairness of participants, we examine perceived preferences of fairness or generosity of people in their ingroup and outgroup. The motivation for this variation of the dictator game also takes inspiration from Della Valle & Ploner et al. (2017), who find evidence that people are more tolerant to unfair

behavior against them if it is enacted by people belonging to their ingroup. Concretely, in their dictator game, recipients can be given a non-proportional share of gains by the dictator they are paired with, but they can lie about the amount the dictator decided in order to receive a greater payment. The authors show that when the dictator is unfair, but belongs to their same group as the recipient, then the latter is less dishonest about the amount initially allocated.

In sum, these game settings allow us to know how people make decisions and form beliefs based on perceived identities, namely political identities. This way, we can compellingly test if the saliency in social identification generated by having to choose a political party or candidate when voting spills over affective polarization behaviors.

Section III. Research design & methods

i. Hypotheses:

Interest in politics and political polarization can take various forms. In this study, as stated earlier, we focus on expressions of interest involving active participation in political discussions, information consumption and community engagement. On the other hand, we divide political polarization in two ways: 1) *affective polarization*, namely, the gap between people's positive view of their ingroup and their negative view of the outgroup, where ingroups and outgroups are determined by self-positioning in the political spectrum, and 2) *ideological polarization*, meaning a greater variability in opinions of a particular issue, which is mostly represented by variability in evaluations of the state of the economy in this study. In general terms, we hypothesize that the involvement in the political process that voting eligibility entails raises both interest in politics and political polarization, as people who can vote have higher stakes in the political and social outcomes. Particularly, I delineate the following hypotheses and the specific questions used in the surveys to address them:

- **H1.** Voting eligibility enhances affective polarization, as indicated by more negative moral judgements and greater distrust for people from a perceived out-group, positive moral stances and greater trust for people in the perceived in-group, as well as more extreme views about the current president's performance.

As suggested earlier, the capacity of voting may push people into aligning with a political faction. This might create a greater sense of belonging to a certain group while also highlighting the differences of the group with which one does not identify with. The political tensions inherent to election processes might thus exacerbate peoples' perceptions of their ingroup and outgroup, reflected by their trust attitudes, moral judgements, views about political leaders and economic outcomes.

To test this hypothesis, we first recreate the settings of a *trust game*. As discussed in the earlier section, this is a widely applied game in experimental economics to measure trust and

trustworthiness (Johnson, 2011). In the version of this study, participants are endowed with an initial amount of money and we randomly assign them with another person that might be either right wing or left wing. Participants have the possibility to transfer a share of their initial payment to that other person, who would be receiving double the amount of the share and would also be able to transfer some portion of the doubled money back to the participant. This way, we explore if people give a greater amount of money to other individuals that most closely resemble their own political leanings than to others who do not.

Secondly, we present participants with a scenario based on a modified version of the dictator game. In a dictator game, one player unilaterally proposes a one-time offer to another player, which determines the latter's payment (Engel, 2011). In this study's version, two players are asked to perform a real effort task, but only one of them receives a certain amount of money, while the other receives nothing. We inform participants that those who received the payment had the option to share some of it with the person who did not receive anything. We then ask participants to estimate the average amount shared by both left-leaning and right-leaning individuals.

Thirdly, we present participants with another game scenario where a player could gain money by lying or gain nothing by telling the truth. We inform participants that this person chose to lie and then ask them to place this individual on a scale from 0 to 10—where 0 represents the left and 10 represents the right—according to their belief about the person's self-positioning on the political spectrum.

Additionally, we ask participants to rate Mexico's president performance so far. This question aims to measure how Andres Manuel López Obrador's performance ratings differ between individuals with different political leanings and if these differences change between eligible and ineligible individuals. We expect that left-leaning participants rate the president higher than right-leaning participants and that this differential will be more intense for people who could vote in 2018 than for those who could not.

- **H2.** People who are eligible to vote have stronger opinions on the current state of the economy, thus holding views that tilt more towards the extremes than those of people who are not eligible to vote.

The reasoning behind this hypothesis is that higher stakes, partisanship and greater interest in politics derived from voting eligibility is reflected on less lukewarm evaluations of the current state of the economy. As people who are eligible must take a stronger stance on who they support, they might form a view of the economic situation that somehow supports those of their ingroup and is less nuanced than the ones of non-eligible people, while also selecting the information and arguments confirming their beliefs. In that sense, we would expect that people supporting the incumbent administration might view the economy in a better light than those who do not support it, and that this effect is stronger for eligible individuals.

The survey question addressing this issue is simply asking people to rate the current economic situation on a scale going from “very bad” (0) to “very good” (4). Then, we create a variable of each participants’ squared deviation from the mean of evaluation of the economy to measure variability:

$$Economy_variability_i = (x_i - \mu)^2$$

Where x_i is the value of the evaluation of the current state of the economy for each participant and μ is the mean evaluation of all participants in the sample.

- **H3.** Being eligible to vote increases people’s interest in politics, as reflected in more frequent engagement in political discussions, forms of communal participation, and higher consumption of political information.

To measure political engagement, we ask participants to use a Likert scale, with 0 indicating 'never' and 4 indicating 'very frequently,' to rate how frequently they:

1. Talk about politics with friends.

2. Try to convince other people about their political views.
3. Work for a cause affecting her or her community.
4. Work for a political party or candidate.

From these variables, we built a *political activities index* that aggregates these variables. The index sums how many times participants responded “frequently” or “very frequently” to any of those questions, thus its values range from 0 to 4.

In this regard, we expect that acquiring the right to vote, with all its implications, drives people into forming or consolidating political views and to discuss them with others. In a similar vein, and aligned with the civic attitudes premise, knowing that some outcome in the social context might be influenced by one’s voting participation could make people concerned about things happening within their community and motivate to act in response or even to have a greater involvement through direct work with a party or candidate.

On the other hand, political information consumption is measured by the frequency with which participants consume political information through newspapers (print or digital), radio, TV, YouTube channels, X (Twitter), TikTok, and Facebook. As in the earlier question, a Likert scale is used, with 0 indicating 'never' and 3 indicating 'very frequently'. Similarly, I constructed a *media consumption index* that registers the frequency in which respondents consume political information through any of the seven media outlets. This way, we may get a sense of people's willingness to know more about what is happening in the political landscape as a result of their own involvement in a political process.

As covariate variables, to increase the precision of our estimates, we collect data on gender, age, education level, income, geographical location, occupational status, political orientation, and life views/religiosity. The relationships between these variables and our findings are examined further.

ii. Models

Three types of models are used in this study to test our hypotheses, all of which are based in ordinary least squares (OLS) regression equations with controls and robust standard errors. The first one is simply the mean differences between eligible and ineligible individuals on our variable of interest. This model is used to test differences in mean variance in evaluations of the economy, in the political engagement and information consumption variables, among other exploratory variables:

$$(1) Y_i = \alpha + \beta \text{Eligible}_i + \rho (c_i - c_0) + \gamma \mathbf{X}_i + \epsilon_i$$

Where Y_i is the outcome variable to analyze; α is a constant term; Eligible_i is a dichotomous variable with a value of 1 if the participant is eligible and 0 if ineligible; $(c_i - c_0)$ is the recentered assignment (running) variable, representing the distance (in months) from the eligibility cutoff c_0 ; \mathbf{X}_i is a vector of characteristics of each participant and ϵ_i is an idiosyncratic error.

Including the running variable in the model helps to control for the smooth effect of the assignment variable on the outcome. This ensures that any observed discontinuity at the cutoff is not due to the underlying relationship between the running variable and the outcome.

The second model is the same as the one before, but it measures the relation between position in the political spectrum and the outcome variable. We use this mainly for exploratory purposes, to test, for example, how the president's ratings change in relation to this self-positioning:

$$(2) Y_i = \alpha + \delta \text{Spectrum}_i + \gamma \mathbf{X}_i + \epsilon_i$$

Where Spectrum_i represents the values of each participants' self-positioning in the political spectrum.

The third model is used to test how an outcome variable varies in relation to the interactions of being eligible and identifying with a political ideology, as determined by self-positioning in the

political spectrum. For this model, the values in $Spectrum_i$ are divided by three categories: those considered ‘left’ are the ones who positioned themselves between 0 and 3, those considered ‘center’ are the ones in the 4th, 5th and 6th places, and those considered ‘right’ positioned themselves between position 7 and 10. Thus, we build a categorical value called ideology which can take the values left (0), center (1), and right (2). We use this model to test how perceived differences in money shared between left-wingers and right-wingers change between the distinct political identities when eligible to vote:

$$(3) Y_i = \alpha + \beta Eligible_i + \varphi Ideology_i + \eta (Eligible_i * Ideology_i) + \rho (c_i - c_0) + \gamma \mathbf{X}_i + \epsilon_i$$

Additionally, following the guidelines suggested by Lee & Lemieux (2010), we augment models (1) and (3) by including a quadratic term of $(c_i - c_0)$ to account for possible non-linearities in our running variable that could be responsible for an apparent discontinuity in outcomes attributed to the assignment. This allows for different functional forms on both sides of the discontinuity. We use this specification as a robustness test of our estimates.

$$(4) Y_i = \alpha + \beta Eligible_i + \rho_1 (c_i - c_0) + \rho_2 (c_i - c_0)^2 + \gamma \mathbf{X}_i + \epsilon_i$$

The covariates we use in \mathbf{X}_i for every model are:

1. Being female (dichotomic)
2. Being employed (dichotomic)
3. Having completed undergraduate studies or higher (dichotomic)
4. Subjective percentile: perception of one’s place in Mexico’s income wealth from 0 to 100)
5. Importance given to religion: a Likert scale ranging from 0 (not important at all) to 10 (totally important)
6. Free will – determinism: level of agreement with the belief that one is free to make her own decisions on a Likert scale ranging from 0 (completely disagree) to 10 (totally agree)

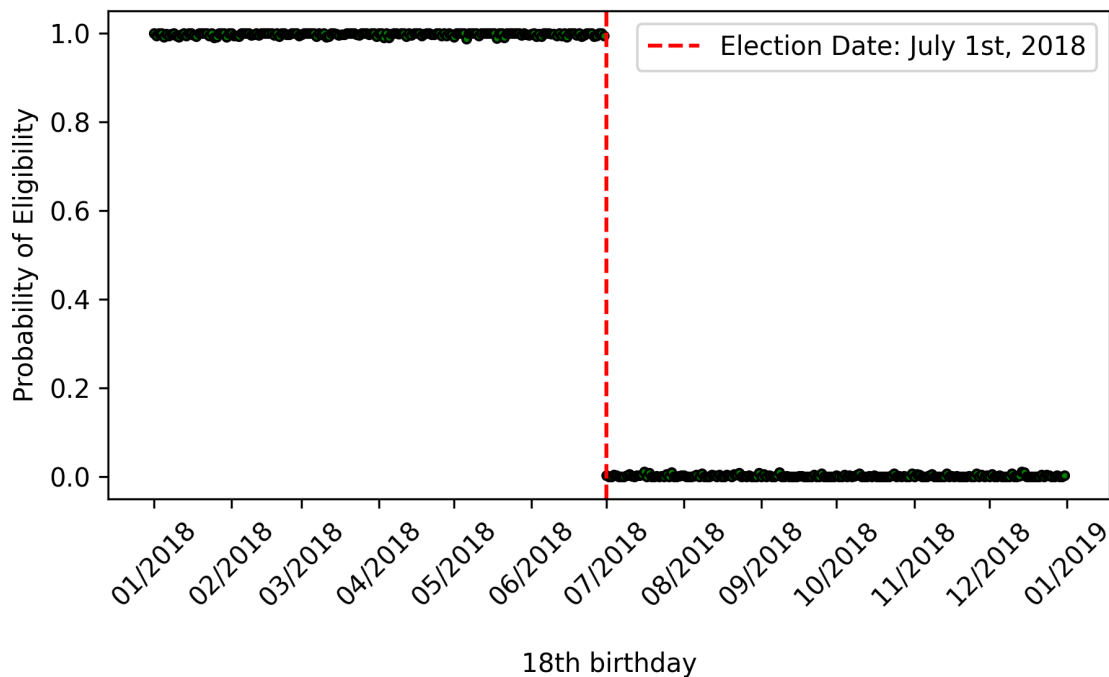
iii. Identification strategy

Econometric technique

Voting eligibility provides a very clear distinction between groups who would otherwise be quite similar. Particularly, in Mexico, individuals gain voting rights when they become 18 years old, so people who turn 18 before an election gain voting rights, while those whose birthday comes after do not. As it is determined by a sharp, arbitrary age cutoff, and age cannot be manipulated or changed at will, voting eligibility serves as an application of treatment on nearly identical people that is as good as random. This comparison between groups identical in nearly everything but the voting age condition enables us to establish a causal impact of that treatment condition on the outcomes we are studying. For this reason, the logical econometric model for this work is a sharp discontinuity regression.

Let us recall that in a sharp discontinuity regression design (RDD) there is an assignment variable—or *running* variable—that unequivocally determines assignment to a treatment. In this research, eligible participants are those who were 18 years or older by July 1st, 2018, while ineligible participants are the ones who turned 18 afterwards (see Figure A below). Thus, by comparing people around the cutoff age of eligibility, and under some basic assumptions, we can establish a causal relationship between voting eligibility and the outcomes regarding political attitudes and perceptions that we study here.

Figure A. Eligibility by Date of Birth



Note: Figure shows how the running variable (age relative to the election date) completely determines treatment in this sharp RDD. Data is simulated.

The main assumption in RDD's is that the outcomes are continuous at the cutoff (*continuity* assumption), meaning that if it weren't for the cutoff establishing the rule of assignment, we wouldn't expect any jumps in the outcomes between groups at that threshold. In our case, if age didn't determine voting rights or if the cutoff age was later in life, we shouldn't expect jumps in political attitudes at, say, the 18-year limit threshold. What this also implies is that the running variable at the cutoff point does not significantly affect our dependent variable through any other means.

In this regard, as the outcomes we study have to do with political attitudes and polarization, it is not plausible that any other changes happening exactly at the moment where majority of age is reached other than voting rights—a merely political attribute-- affect our variables of interest. Even things happening near the threshold like enrolling for military service or acquiring a driver's license can start at an earlier age and they arguably do not have much to do with the outcomes we are interested in. It could also be argued that reaching majority of age might give a greater sense

of maturity. However, it is hard to believe that this is something happens overnight rather than through a process that implies several experiences besides just turning 18 –experiences such as voting, for instance.

Furthermore, as it will be explained, our main survey is composed of people who were barely eligible or barely non-eligible at an earlier point in time –the elections that took place in 2018— so any effects that we may see capture a long-term impact. In that sense, the idea of a sudden jump in maturity is even more unfeasible. In any case, when participants gained the right to vote they had similar experiences like being in high school and enrolling for military service. To advance this argument, balance tests will be performed to address the issue of covariates at the threshold that may be suspect of affecting the outcome.

Why implement an experiment?

Besides the advantage that we can directly choose people of a certain age range, conducting a survey experiment, as we do in this study, allows us to place participants in scenarios through which we can observe how they behave under certain circumstances and not only to know the alleged beliefs and perceptions present in observational data. This way, we can find mechanisms of causality that may be driving the outcomes we are interested in. For instance, in our experiment we can see how people would trust their money to others depending on the group identity of the recipient, as well as to get to know their perceptions about dishonesty and generosity about people from their ingroup and outgroup facing specific choice settings. Hence, we can see if and how political polarization is shaped by trust and perceptions regarding people with contrary ideologies.

iv. Implementation

After pre-registering this study through As Predicted (registration number #163435) and applying a pilot survey, the survey experiment was conducted, taking place between February 24, 2024, and February 28, 2024, through the online surveys' platform Prolific. The print version of the final survey can be seen in the Appendix A. Our initial sample consisted of 214 participants distributed along most Mexican states. Participants were in the age range of 21 to 25 years old, so that we

could select people who were barely eligible and barely not eligible to vote in the Mexican general elections of 2018. Throughout the survey, several attention checks were put in place so that we could guarantee that respondents understood the instructions they were given. Those who did not pass at least one of the three attention checks were excluded from the sample (21). Likewise, people who showed inconsistencies between their voting eligibility status and reported month and age of birth were also excluded (14). As shown in Table 1, after excluding 35 participants who did not meet the criteria, we were left with a sample of 179 participants: 102 were eligible to vote in 2018 and 77 were not. Furthermore, respondents who passed at least two of the attention checks were paid an initial amount of 0.5 US dollars for their participation.

v. Participants

In Table 1 below we find a balance table with the number of participants, their characteristics and how the mean values or percentages of the characteristics are distributed between eligibles and ineligibles. Besides displaying a summary of characteristics, it also tells us that most characteristics besides age (7 out of 9) show a smooth distribution around the cut-off age. Consequently, we find no important discontinuities around the threshold of eligibility that could put in question our assumptions.

Regarding the two imbalances, we find a greater concentration of participants who already concluded their undergraduate studies in the eligible group. Nonetheless, all of them concluded high school and 65% of ineligibles are studying –so they are probably pursuing their undergraduate studies still. There is also a statistically significant difference between importance given to religion between eligibles and ineligibles. In any case, these variables are controlled for in our models and, overall, we can see that there are no generalized important jumps between assignment groups.

Table 1. Balance of covariates by eligibility status

	Ineligible	Eligible	Total	T-test
N	77 (43.0%)	102 (57.0%)	179 (100.0%)	
Female (share)	0.519 (0.503)	0.461 (0.501)	0.486 (0.501)	0.439
Higher education (share)	0.636 (0.484)	0.824 (0.383)	0.743 (0.438)	0.004
Employed (share)	0.584 (0.496)	0.686 (0.466)	0.642 (0.481)	0.161
Subjective percentile	48.649 (17.578)	49.431 (17.700)	49.095 (17.603)	0.769
Importance given to religion	3.766 (3.056)	2.814 (3.053)	3.223 (3.082)	0.040
Determinism - free will	6.506 (2.458)	6.627 (2.408)	6.575 (2.424)	0.742
Importance given to 2018 elections	5.870 (2.652)	6.069 (2.758)	5.983 (2.708)	0.629
Age	22.455 (0.551)	23.686 (0.507)	23.156 (0.806)	<0.001
Age				
21	2 (2.6%)	0 (0.0%)	2 (1.1%)	<0.001
22	38 (49.4%)	0 (0.0%)	38 (21.2%)	
23	37 (48.1%)	34 (33.3%)	71 (39.7%)	
24	0 (0.0%)	66 (64.7%)	66 (36.9%)	
25	0 (0.0%)	2 (2.0%)	2 (1.1%)	
Occupation				
Student	31 (40.3%)	29 (28.4%)	60 (33.5%)	0.185
None	1 (1.3%)	3 (2.9%)	4 (2.2%)	
Employed	26 (33.8%)	49 (48.0%)	75 (41.9%)	
Employed and student	19 (24.7%)	21 (20.6%)	40 (22.3%)	
Ideological group				
Left	21 (27.3%)	36 (35.3%)	57 (31.8%)	0.200
Center	37 (48.1%)	51 (50.0%)	88 (49.2%)	
Right	19 (24.7%)	15 (14.7%)	34 (19.0%)	

Note: Table shows balancing of covariates around the relative age cut-off at 2018 presidential election date (July 1st, 2018). Continuous variables display means; categorical variables display percentages. Female, higher education, and employed are binary indicators. Importance given to religion, determinism-free will, and importance given to 2018 elections use Likert scale from 0 (least) to 10 (most). Standard errors and percentages in parentheses.

Source: Data collected from Prolific survey; own calculations.

Section IV. Results

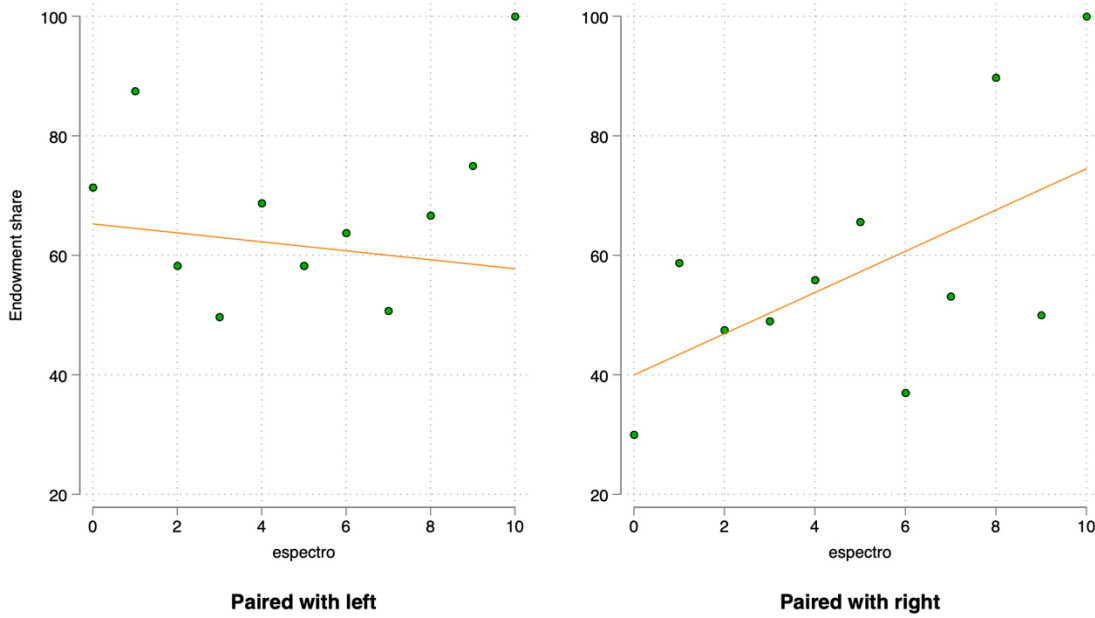
H1. Polarization

Ingroup vs. outgroup trust

One of the ways we measure polarization in this study is by examining the willingness of individuals to entrust their money to members of their ingroup relative to their outgroup. Concretely, our initial expectation was that participants whose self-positioning in the political spectrum tilted to the right (left) would, on average, send a higher share of their endowment when matched with someone who is right-wing (left-wing) than when matched with someone in the left-wing (right-wing), and that this effect would be more substantial for eligible than non-eligible participants.

Based on this reasoning, Figure 1 displays the mean share of money that participants in each level of the political spectrum sent to their matches when assigned with someone on the right and with someone on the left. Consistent with our expectation, when assigned left, the relationship between position in the political scale (0 being left and 10 being right) and amount of money sent has an inverse direction. When assigned right, the slope of that relation is positive and even steeper, showing that, on average, people leaning to the left entrusted their money much less to their match while people on the right entrusted their money much more.

Figure 1. Mean transfers to left/right pair by position in the political spectrum



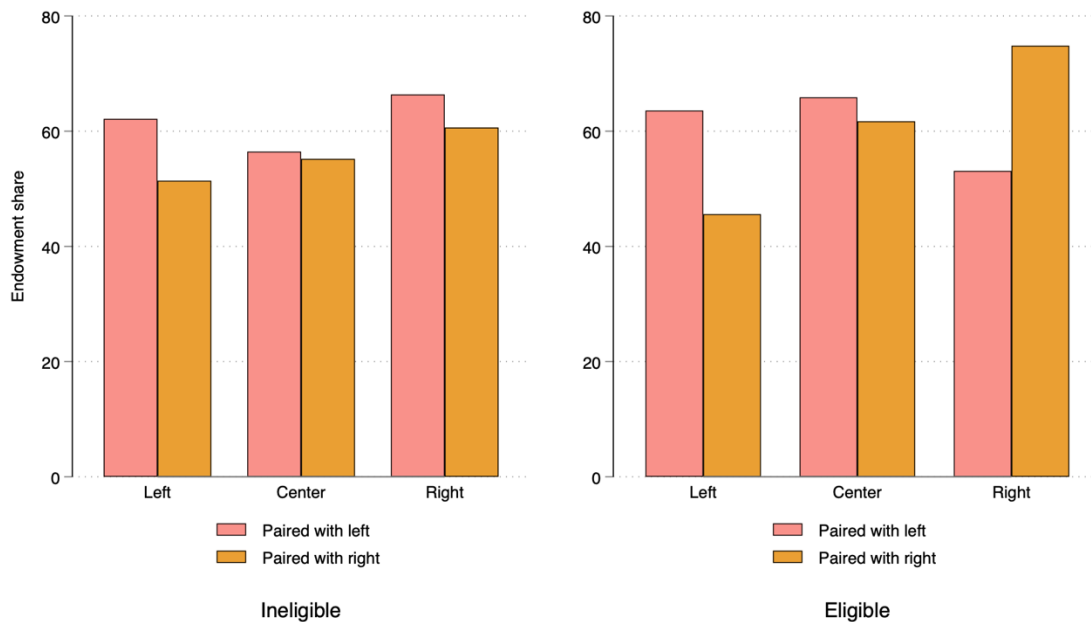
Note: Each dot represents the mean initial endowment share that participants in each self-reported position in the political spectrum sent to the player they were paired with.

How does this change between eligible and non-eligible individuals? For better readability and to address the size limitations of our sample, we grouped participants self-positioning in the political spectrum by a left, center and right categories --where individuals from 0 to 3 were categorized as left, 4 to 6 as center and 7 to 10 as right. Then, following the same method as the calculation above, we calculated the average share of money sent by participants categorized as left, center or right when assigned with someone in the right and with someone in the left, under both conditions of eligibility. The results of these aggregated means are displayed in Figure 2.

The difference between the mean share of money sent to left-wing individuals versus right-wing individuals is illustrated by the distance between the pink bar (representing matches with left-wing individuals) and the orange bar (representing matches with right-wing individuals) in the referred graph. In the plot of non-eligible participants, we see that all participants sent a higher average share to people on the left than to people on the right. Nonetheless, as expected, for left-leaning senders the differential was greater (10.73) than for right-leaning senders (5.74), while for people on the center the difference was minimal (1.27) (see Table 2). However, moving on to the plot of eligible participants we observe a substantial change: the distance between the average shares that

left-leaning individuals sent to people on the right and people on the left is even wider than in the earlier plot (17.99), while for right-leaning people the difference has now a negative sign and it is quite large (-21.72). This shows that people who could vote in 2018 entrusted much more of their initial endowments to people from their ingroups than what they entrusted to people from their outgroups. Particularly, in the case of right-leaning individuals, they passed from sending more to people on the left than to people on the right when non-eligible –but in a smaller proportion than left-leaning individuals, to send much more to people on the right relative to people on the left. In the case of participants categorized as left, the distance of average shares grew notably too. These results provide an initial piece of evidence that aligns with our predictions: voting eligibility may exacerbate polarization, as defined by differences in ingroup versus outgroup trust.

Figure 2. Mean transfers to ingroup vs. outgroup



Note: Each bar represents the mean initial endowment share that participants in each ideological group sent to the player they were paired with.

Table 2. Mean difference in transfers: paired left - paired right

Ideological group	Ineligible	Eligible	Eligible - Ineligible
Left	10.73	17.99	7.27
Center	1.27	4.15	2.88
Right	5.74	-21.72	-27.46

Note: Table cells display the difference between the mean transfer share participants of an ideological group sent when paired with a left-wing participant and the mean transfer of individuals in that same group when paired with a right-wing participant. Columns represent that difference for eligible and ineligible individuals, as well as the difference between both groups.

It must be noted that, as individuals paired with a left-wing participant are different from those paired with a right-wing participant, we cannot directly compare the individual differences in amounts transferred to the player given her ideological group. Thus, we can only compare the means sent by participants on each ideological group according to the way they were paired. This, in addition to the fact that ideological groups assigned to either left or right participants are rather small, leaving us with small power, is why we are not doing regression analysis for trust. Nonetheless, the results presented here are revealing of the change in trust behaviors between eligible and ineligible individuals.

Intergroup moral judgements: generosity

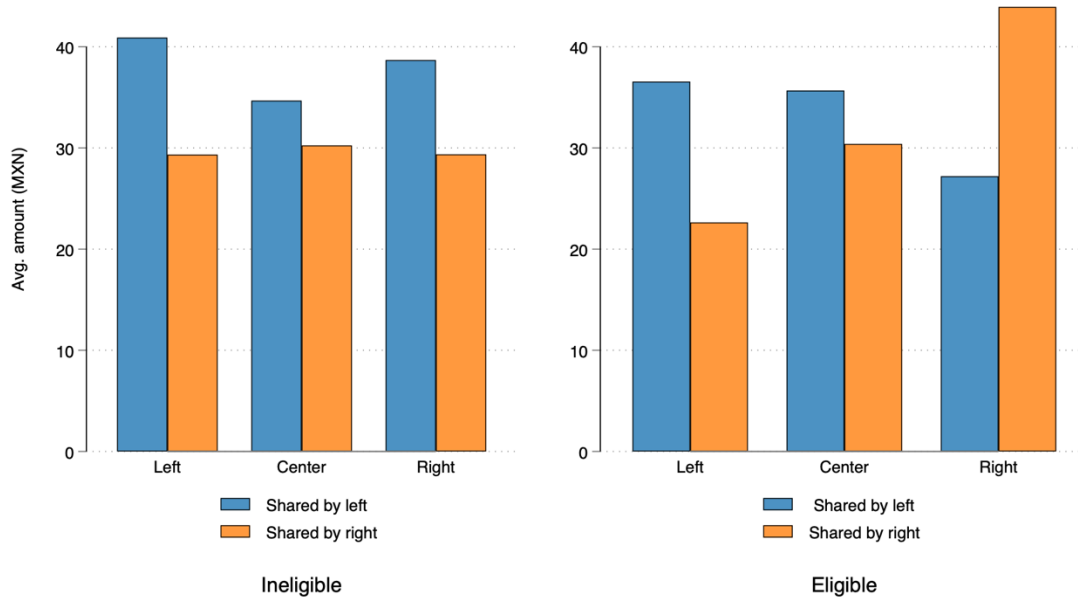
We tested how moral stances on the ingroup and outgroup differ through perceptions of generosity and dishonesty of others. In the generosity test, we presented participants with a scenario where individuals in an experiment had the chance to earn money by performing a specific task. By doing so, some ended up earning \$100 (MXN) and others received nothing; however, the person who won \$100 had the possibility to share some of that amount to the one who did not gain anything. We asked respondents of our survey experiment to tell us how much money, on average, did people who identified themselves as right-wing and those who identified as left-wing, respectively, gave to the person that did not receive any amount.

Our results in this regard display a very similar behavior as the ones of ingroup versus outgroup trust. As shown in Table 3 below, in the case of non-eligible participants, the average difference

between the amount shared by people from the left against people from the right is highest for those on the left (11.57), smaller for those on the right (9.32) and then lowest for people on the center (4.43). This shows us that although people who could not vote considered left-wing people as more generous in general, the distance separating them from those on the right was smaller for individuals leaning to the right and center. However, when we turn to the ones who could vote, we observe once again that participants who lean to the right consider those on the right considerably more generous than those on the left, thus inverting the sign of the difference found with non-eligible individuals.

Figure 3 below provides us with a clear visual representation of this: while in for non-eligible, right-leaning participants the blue bar—showing the average perceived amount shared by left-wing individuals—is higher than the orange bar—showing perceived amount shared by right-wing individuals, the opposite is true in the plot for eligible, right-leaning, participants, where the orange bar notably surpasses the blue bar. In fact, the absolute difference of the perceived amounts shared between groups is highest for right-leaning participants who could vote in 2018. At the same time, that differential also widens for left-leaning participants who were eligible to vote—passing from 11.57 to 13.92, thus telling us that they consider people from their ingroup as even more generous relative to their outgroup than left-leaning, non-eligible, participants. It is notable how the dynamic displayed in the trust game is repeated in perceptions of generosity too, where differentials favor the ingroups against the outgroups much more when people are eligible to vote.

Figure 3. Perceptions of average amounts shared by left-wingers and right-wingers



Note: Each bar represents the mean of the amounts that participants believe left-wingers and right-wingers would share with the player who received nothing in a dictator game. Amounts are in Mexican pesos (MXN)

Table 3. Differences between perceived amounts shared by left-wingers and right-wingers

Ideological group	Ineligible	Eligible	Eligible - Ineligible
Left	11.57	13.92	2.35
Center	4.43	5.27	0.84
Right	9.32	-16.73	-26.05

Note: Table cells display the difference between the perceived average amounts shared by left-wingers and right-wingers to the player who received nothing in a dictator game. Columns represent that difference for eligible and ineligible individuals, as well as the difference between both groups. Amounts are in Mexican pesos (MXN).

Table 4. Difference between perceived amounts shared by left-wingers and right-wingers

	No running variable (I)	Running variable (II)	Beliefs controls (III)	Full controls (IV)	Quadratic term (V)
Eligible in 2018	-2.345 (4.344)	-4.040 (4.934)	-4.299 (4.971)	-4.579 (5.083)	-3.875 (5.125)
Ideological group:					
Center	7.139 (4.952)	7.469 (4.970)	7.384 (5.206)	8.077 (5.404)	8.670 (5.483)
Right	2.256 (7.390)	2.767 (7.317)	2.781 (6.949)	3.703 (6.879)	4.223 (6.852)
Eligible * Center	1.503 (6.399)	1.514 (6.406)	1.702 (6.452)	1.965 (6.587)	0.941 (6.710)
Eligible * Right	28.394 *** (10.778)	28.217 ** (10.859)	28.361 ** (10.921)	26.723 ** (10.764)	25.862 ** (10.653)
Distance from cutoff		-0.132 (0.183)	-0.128 (0.186)	-0.195 (0.195)	-0.217 (0.203)
Distance from cutoff squared					-0.015 (0.012)
Intercept	-11.571 *** (3.246)	-11.132 *** (3.346)	-12.377 ** (5.108)	-14.410 ** (6.237)	-12.529 * (6.524)
Number of observations	179	179	179	179	179

Note: Table cells display the coefficients and robust standard errors (in parentheses) from regressions of the difference in perceived amounts shared by left-wingers and right-wingers. Specifications: (I) no running variable, (II) including running variable, (III) adding beliefs controls (importance of religion, determinism-free will), (IV) adding full controls (gender, education, subjective percentile, employment status), and (V) including quadratic term of the running variable. *** p<.01, ** p<.05, * p<.1

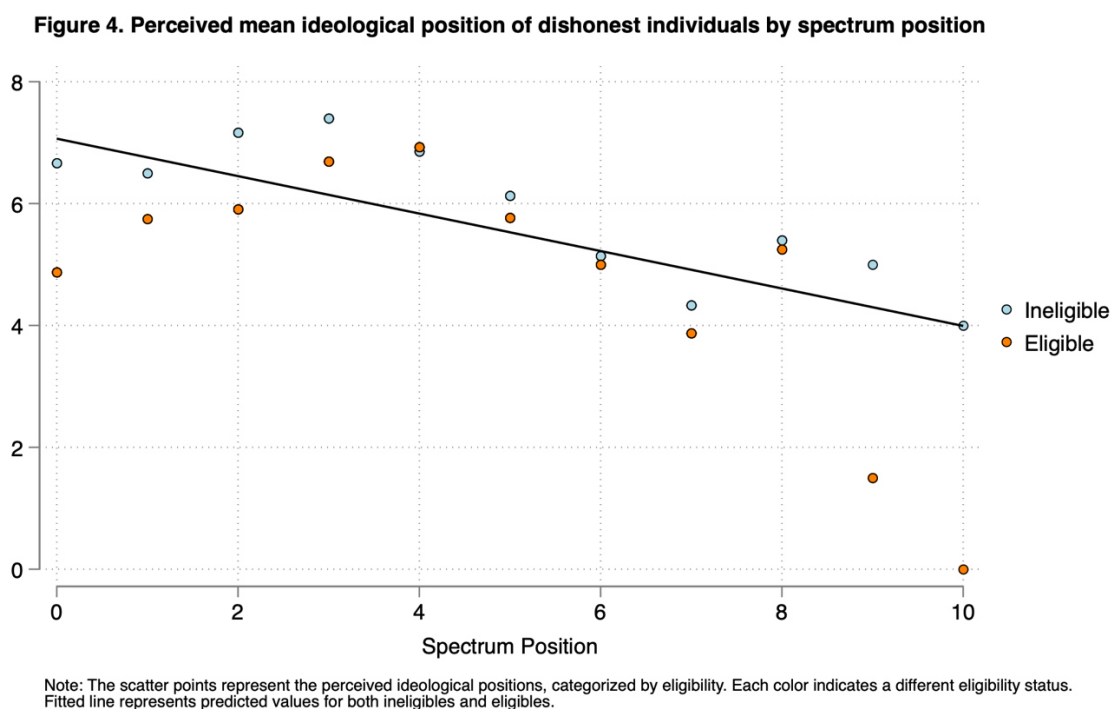
These findings thus show that, in line with our expectations, eligible individuals believe that those in their ingroup are more generous, and those in the outgroup less generous, than ineligible individuals. Namely, there is a greater affective polarization for those who acquired the right to vote than for those who did not.

Intergroup moral judgements: dishonesty

On the other hand, perceptions of dishonesty in ingroup versus outgroup was tested by asking participants where would they place someone who lied for money in the political spectrum. In this case, there was a clear significant inverse relationship between self-reported position in the spectrum and the position where respondents thought that the person who lied was (see Figure 4).

In other words, the more people leaned to the right, the more they would place dishonest people farther to the left, and viceversa.

When we compare by eligibility status, we see that eligible individuals, independently of their own political stance, tended to place dishonest people more to the left than ineligible individuals. As shown in Figure 4, eligible participants from the left and right placed those who lied for money further to the left than their non-eligible counterparts. However, it is the more extreme positions of right-leaning participants the ones that show a greater divergence between eligibles and ineligibles, so being eligible to vote intensifies this negative perception of the outgroup more for those who consider themselves more rightist.



It is worth looking at the distributions of the placement of people perceived as dishonest in the political spectrum, as they help us nuance our understanding of these changes. The central values, particularly value 5, are much less present in the plot of eligibles than in the plot of ineligible participants (see Figure 5). Consequently, what drives the mean of dishonesty beliefs down are the central values. In fact, there is a much greater concentration of placements on the right side of the

spectrum for ineligible individuals. On the other hand, we see that there is a greater dispersion of values for people who could vote, with higher concentrations of extreme values both on the left and right side of the political spectrum. Hence, we see that eligible participants saw people on the center as less prone to lie for money than ineligible participants while also placing dishonest people more on the extreme sides of the spectrum than ineligible.

This behavior is reaffirmed in the boxplot below (Figure 6). The variability in perceptions of dishonesty is much greater for eligibles than for ineligible, who show a more compact concentration of values towards the center. In the case of the latter, there are even a few outliers that might be driving down the means even further. If we exclude those outliers and conduct tests of differences in variance, we can confirm it. With a significance level of 5% both Bartlett's test and the variance-ratio test (see Table 5.1 and Table 5.2) show that there is indeed a difference in the variances between eligible and not-eligible groups. In that sense, these results favor the hypothesis that the perceptions of dishonesty are more polarized for eligible individuals than for ineligible individuals.

Figure 5. Perceived dishonest individual's spectrum position

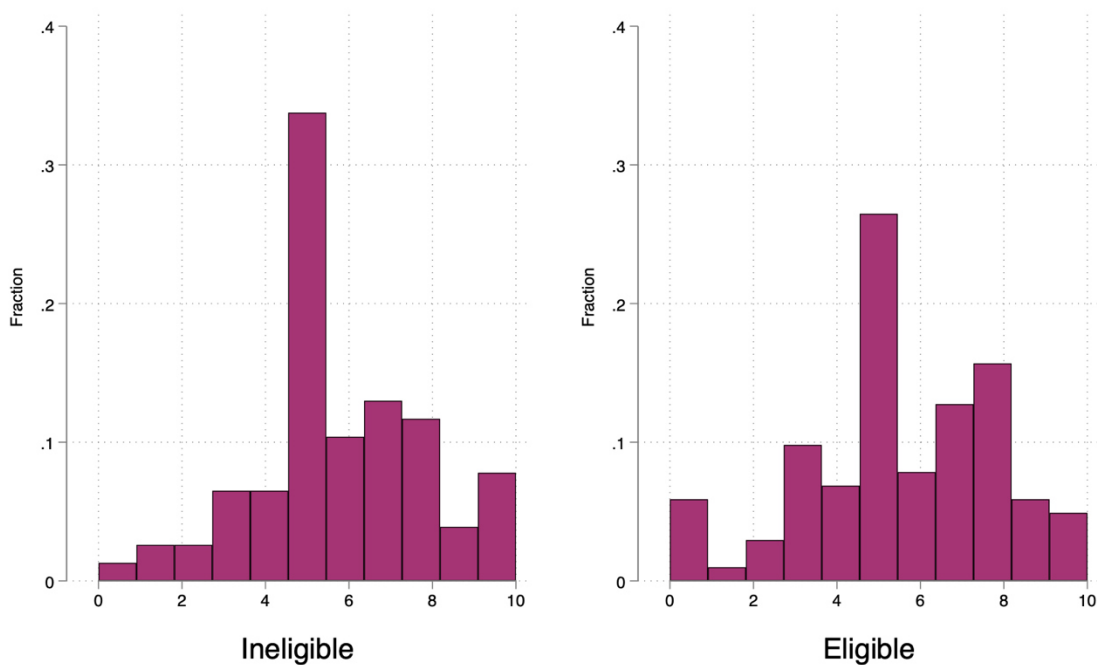


Figure 6. Perceived dishonest individual's spectrum position (2)

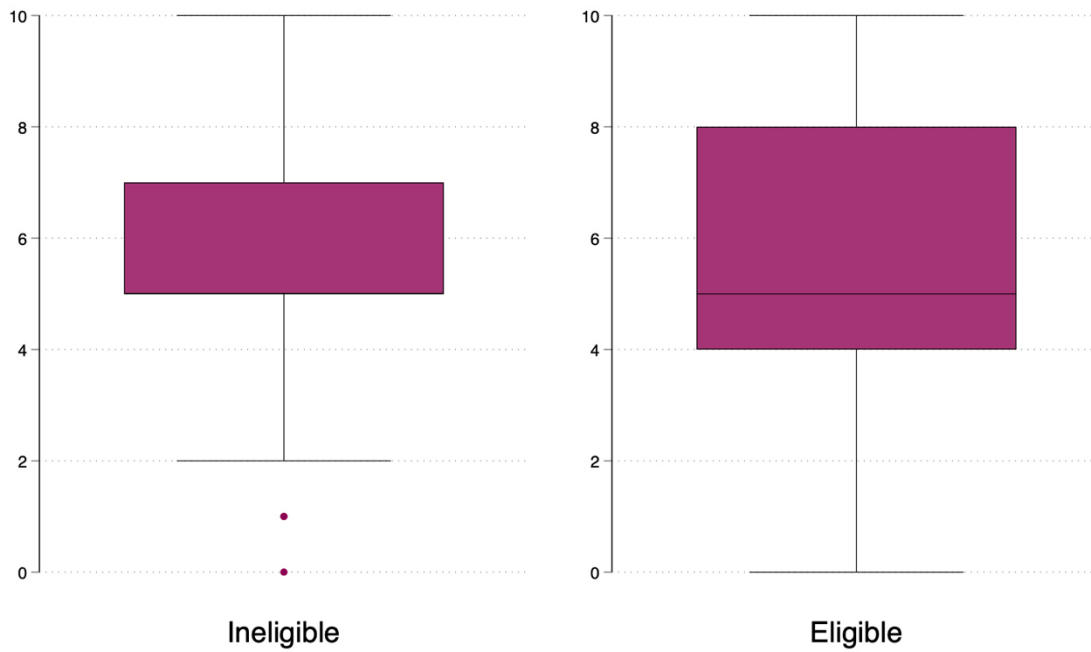


Table 5.1. Bartlett's equal-variances test for perceptions of dishonest individuals

Source	SS	df	MS	F	Prob > F
Between groups	7.89240076	1	7.89240076	1.49	0.2236
Within groups	920.465554	174	5.29003192		
Total	928.357955	175	5.3049026		

Bartlett's equal-variances test: $\chi^2 = 3.99$ Prob > $\chi^2 = 0.046$

Note: This table presents the difference of variances test for the perceptions of the dishonest individual between eligible and ineligible groups. The analysis includes the sum of squares (SS), degrees of freedom (df), mean square (MS), F statistic, and the associated p-values (Prob > F).

Table 5.2. Variance ratio test for perceptions of dishonest individuals

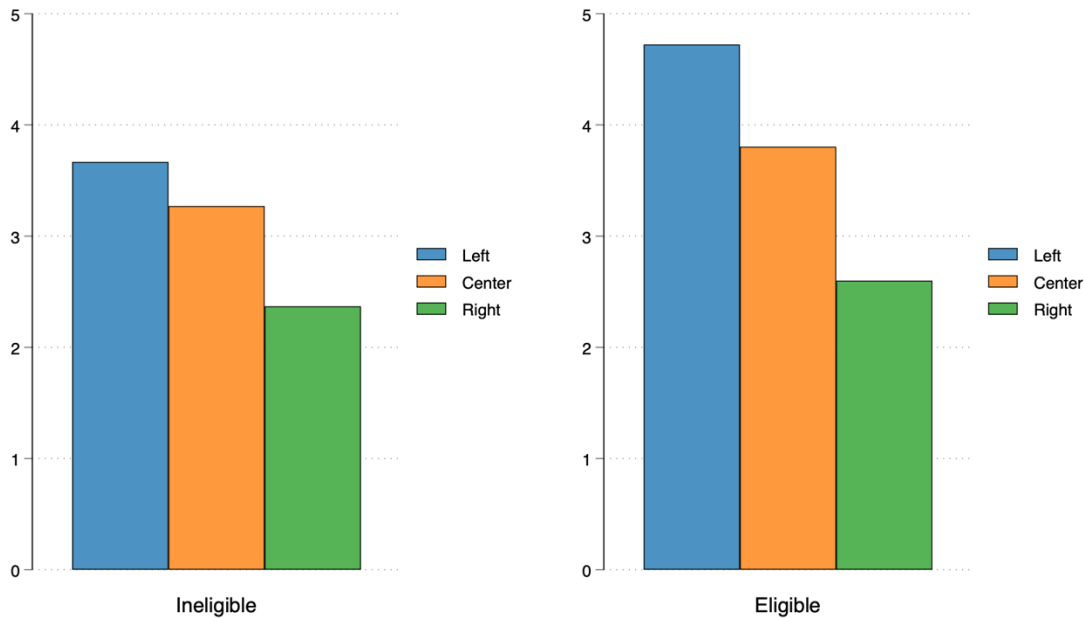
Assignment	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]
Ineligible	74	6.027027	0.2324738	1.999815	5.563707 - 6.490347
Eligible	102	5.598039	0.247001	2.494587	5.108056 - 6.088023
Combined	176	5.778409	0.1736131	2.303237	5.435764 - 6.121054
<hr/>					
ratio = sd(No) / sd(Sí)					
H0: ratio = 1		f = 0.6427		Degrees of freedom = 73, 101	
<hr/>					
Ha: ratio < 1		Ha: ratio != 1		Ha: ratio > 1	
Pr(F < f)=0.0235		2*Pr(F < f)=0.0470		Pr(F > f)=0.9765	
<hr/>					

Note: This table presents the variance ratio test for the perceptions of the dishonest individual between eligible and ineligible groups. The analysis includes the group statistics (Obs, Mean, Std. err., Std. dev., and [95% conf. interval]), the F-test value, and the degrees of freedom.

President's performance

We asked participants to rate Mexico's president performance on a scale from 0 ("very bad") to 10 ("very good"). From Figure 7, we observe that eligible participants rate the president higher, on average, than ineligible ones. However, we can also note that the distance in mean approvals between those left-leaning and right-leaning participants widens for people who could vote, mostly driven by the considerably higher mean approval of left-leaning participants. In this case, eligible left-leaning participants would be reaffirming their opinions on the figure that most closely aligns with their ideology –as the current president López Obrador and his party are typically regarded as left-wing, while right-leaning participants who could vote do not change their positions considerably to those who could not. The result is that eligible individuals differ more in their approval of the president than ineligible individuals.

Figure 7. President's performance mean ratings



Note: Ratings are on a Likert scale going from 0 (very bad) to 10 (very good)

A closer look into how these differences manifest throughout the positions in the political spectrum give us a clearer picture. The mean differences between eligibles and ineligibles by self-positioning in the political spectrum can be seen in the scatterplot of Figure 8. For a start, we observe that there is an expected inverse relation between self-positioning in the political spectrum and mean level of approval of the president's performance for all participants, as shown by the solid line. The relation is significant in a 1% level (see Table 6). But we can also observe that most eligible individuals on the left—those from position 0 to 3 in the scale with the red dot—rate the president higher than their ineligible counterparts—those with the blue dot. On the other hand, while the mean ratings of eligible participants in position 7 and 8 of the political spectrum are slightly higher than for their ineligible counterparts, the inverse is true for the most extreme right-leaning participants—those on the 9th and 10th position—with the differences between eligibles and ineligibles for the highest right-leaning position being substantially wide.

Figure 8. Mean president's ratings by position in the spectrum

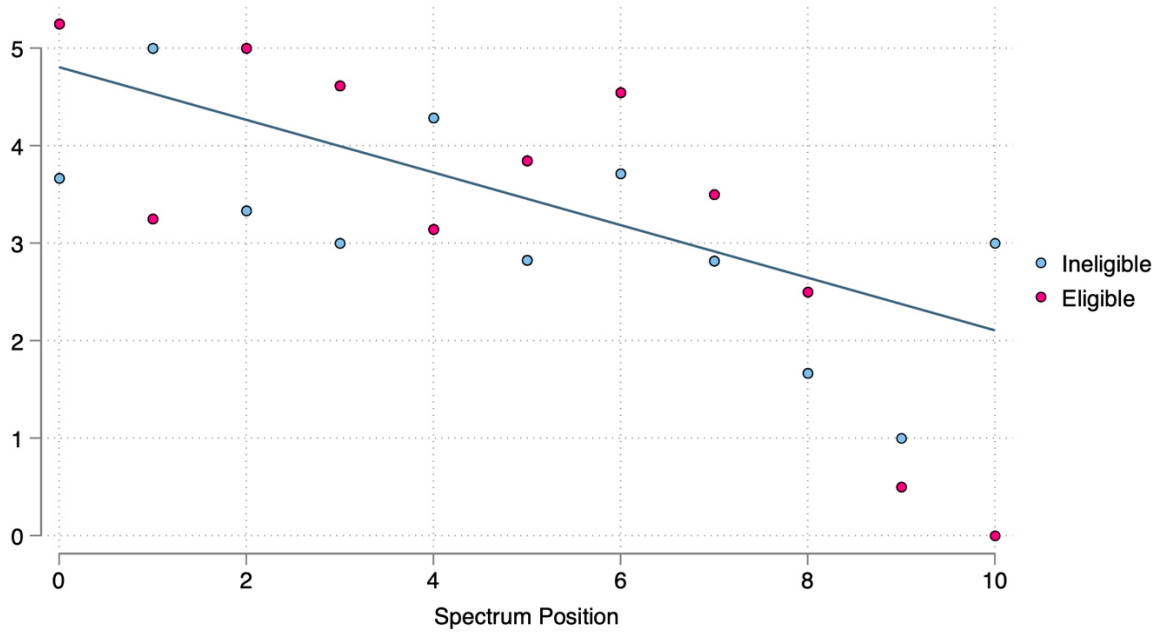


Table 6. Regression results for the president's performance rating

	Coefficient	Std. error	P-value
Position in the political spectrum	−0.266***	0.077	0.001
Female	−0.320	0.331	0.336
Complete higher studies	0.293	0.399	0.464
*Subjective percentile	−0.022**	0.009	0.022
Employed	0.293	0.339	0.389
Importance of religion	−0.003	0.063	0.958
Determinism - free will	0.195***	0.074	0.009
Intercept	4.323***	0.663	0.000

Note: Table cells display the coefficients and robust standard errors (in parentheses) from regressions of the position in the political spectrum on evaluation of the president's performance. President's performance is measured by a Likert scale ranging from 0 (very bad) to 10 (very good). *** p<.01, ** p<.05, * p<.1

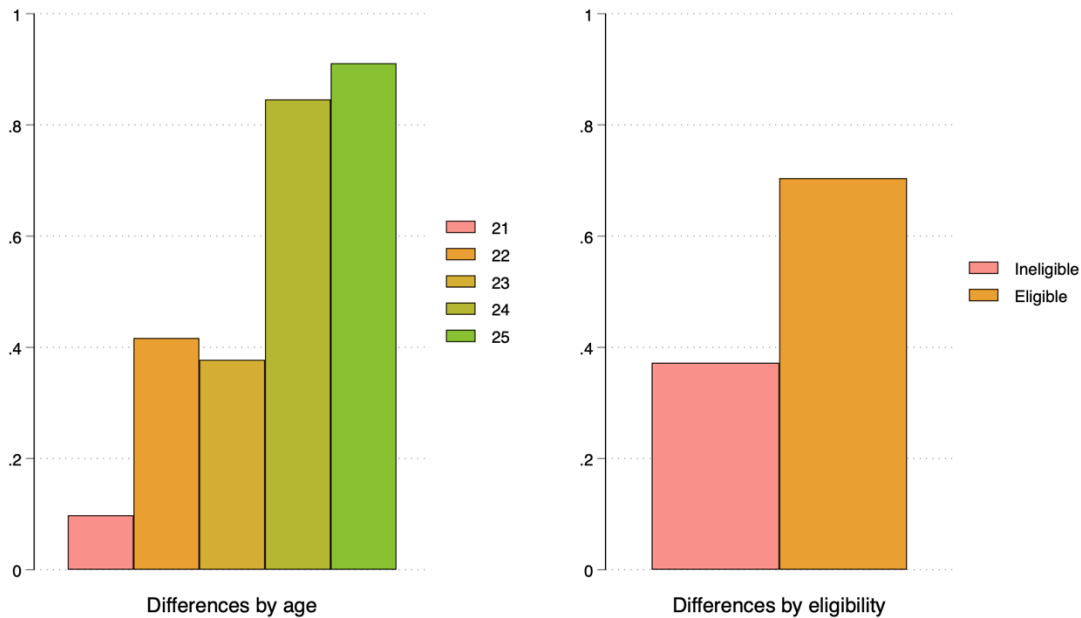
Overall, the findings back our initial hypothesis. The mean difference in the president's performance evaluation between those on the left and those on the right is greater for eligible individuals than for ineligible participants. This is the result of left-leaning participants showing better opinions on the president's performance when eligible and, conversely, most extreme right-leaning participants showing worse opinions when eligible.

If we interpret this in the light of the theoretical and empirical literature in cognitive dissonance, the beliefs and opinions of individuals may be reaffirming or self-serving because of an earlier action or event (e.g. voting, reaching voting age). By that logic, individuals who can vote feel more inclined to hold their beliefs to be consistent with earlier decisions.

H2. Evaluations of the state of the economy

Our second hypothesis suggested that people who could vote would show a greater variability in their evaluation of the economy, as they would hold stronger and more extreme opinions on it. To test this, we asked participants to rate the current state of the economy on a scale going from “very bad” (0) to “very good” (4). Then we constructed a variability measure by computing each observations' squared deviation from the mean. In Figure 9 we show the results of this measure, starting with its means by age and next with the means by condition group.

Figure 9. Mean variability in the evaluation of the economy



Note: Variability is measured by the squared deviation from the mean of the evaluation of the current state of the economy values.

The plot on the left displays a very sharp discontinuity between participants who are 23 and 24 years of age, which precisely coincides with the age threshold between those who could vote in 2018 and those who could not. Participants older than 23 (24 or 25) show a much greater variability in their evaluation of their current state of the economy than those who are 23 or younger (21, 22 or 23). In accordance with our initial prediction, people who could not vote have a much more lukewarm view about the economy than those who could vote. The plot on the right basically aggregates the ages into the condition groups but it captures the same behavior: there is a clear positive and significant effect of voting eligibility on the level of divergence of people's opinions on the current state of the economy. The results of the regression are shown in Table 7. Estimates are robust to different sets of controls and the specification controlling for non-linearities.

Table 7. Variability in evaluations of the current state of the economy

	No running variable	Running variable	Beliefs controls	Full controls	Quadratic term
	(I)	(II)	(III)	(IV)	(V)
Eligible in 2018	0.332 *** (0.125)	0.304 ** (0.136)	0.297 ** (0.138)	0.291 ** (0.144)	0.292 ** (0.145)
Distance from cutoff		-0.002 (0.006)	-0.002 (0.006)	-0.001 (0.007)	-0.002 (0.007)
Distance from cutoff squared					-0.000 (0.000)
Intercept	0.372 *** (0.066)	0.384 *** (0.072)	0.166 (0.174)	0.085 (0.237)	0.109 (0.254)
Number of observations	179	179	179	179	179

Note: Table cells display the coefficients and robust standard errors (in parentheses) from regressions of the variability in evaluations of the current state of the economy. Specifications: (I) no running variable, (II) including running variable, (III) adding beliefs controls (importance of religion, determinism-free will), (IV) adding full controls (gender, education, subjective percentile, employment status), and (V) including quadratic term of the running variable. *** $p < .01$, ** $p < .05$, * $p < .1$

This salient difference tells us that ideological polarization in terms of opinions about the economy occurs as a result of becoming eligible to vote. If being ineligible implies having opinions tilting towards the center, being eligible means taking a stronger stance on an issue like the state of the economy. In line with our earlier findings in affective polarization and the logic of political actions or events driving beliefs, our hypothesis thus finds a strong support and meaning in this case.

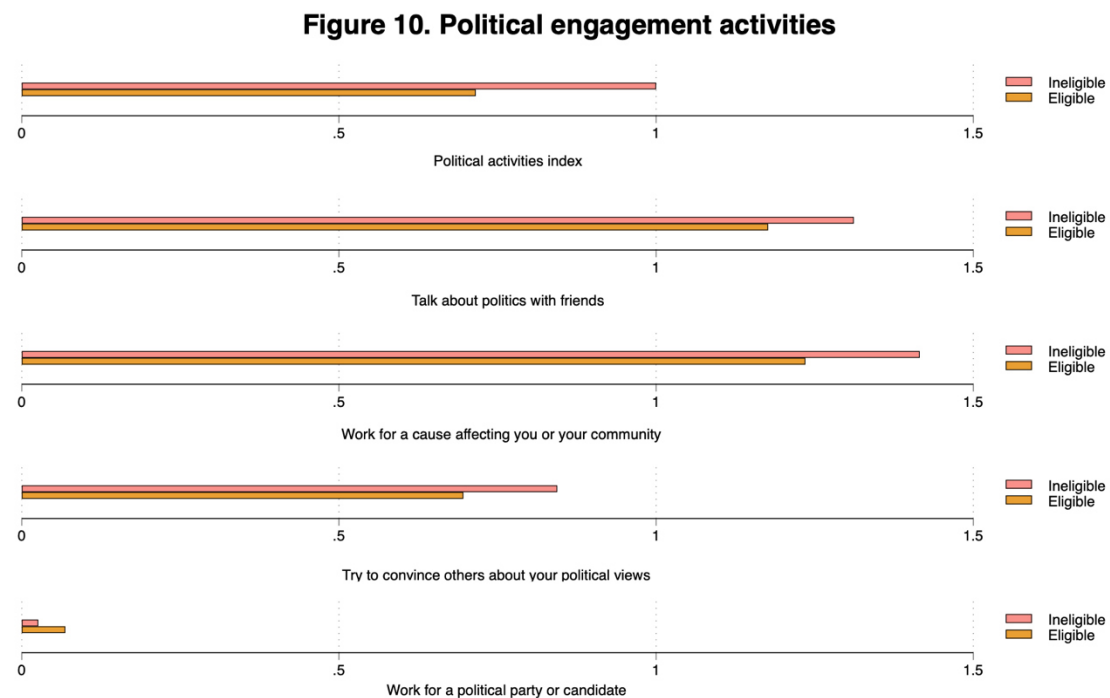
H3. Interest in politics

Political engagement

As one of the ways we determined that voting eligibility affected interest in politics was engaging in political discussions and communal or political participation, we built a *political activities index* that aggregating the frequency in which respondents talked about politics with friends, tried to convince other people about their political views, worked for a cause affecting her or her community or worked for a political party or candidate.

While our first hypothesis predicted that eligibility would raise interest in politics as reflected in higher frequency of political engagement, our analysis shows that, although there is an actual significant effect of voting eligibility on that respect, its direction is the opposite. Contrary to our expectations, people who did not have the right to vote in 2018 generally engage more in political activities.

As seen in Figure 10, in most of the variables composing the political activities index –except for working a political party or candidate—non-eligible participants were more engaged. In the aggregate, this ultimately reflects that eligible voters are about 0.4-0.45 points less inclined (in a scale from 0 to 3) to do any of the political activities that we asked about, with a level of significance of 5% and robust to different sets of controls and non-linearities (see Table 8). In addition, the fact that 3 out of the 4 variables composing the index go in the same direction and with strong levels of significance (see Table C.2 in the Appendix) tells us that there is a tendency for the people in our sample who could not vote to show more engagement in political discussions and communal participation than the ones who could vote.



Note: Bars show the mean frequency of political activities. Frequency is measured by a Likert scale ranging from 0 (never) to 3 (very frequently). The political activities index is a composite measure of all activities, which adds a value of 1 for each time a participant responded frequently or very frequently.

Table 8. Political activities index

	No running variable (I)	Running variable (II)	Beliefs controls (III)	Full controls (IV)	Quadratic term (V)
Eligible in 2018	-0.284 ** (0.139)	-0.413 ** (0.186)	-0.404 ** (0.182)	-0.454 ** (0.183)	-0.455 ** (0.182)
Distance from cutoff		-0.010 (0.009)	-0.010 (0.009)	-0.011 (0.010)	-0.009 (0.009)
Distance from cutoff squared					0.001 (0.001)
Intercept	1.000 *** (0.109)	1.053 *** (0.121)	1.433 *** (0.238)	0.931 *** (0.284)	0.794 ** (0.308)
Number of observations	179	179	179	179	179

Note: Table cells display the coefficients and robust standard errors (in parentheses) from regressions with the political activities index as dependent variable. Specifications: (I) no running variable, (II) including running variable, (III) adding beliefs controls (importance of religion, determinism-free will), (IV) adding full controls (gender, education, subjective percentile, employment status), and (V) including quadratic term of the running variable. *** p<.01, ** p<.05, * p<.1

Qualitative insights

There is a way in which we can shed light over the reasons behind these findings. The final section in our survey design asked participants if they thought our hypotheses would be fulfilled or not, which included a follow-up question where they could explain, in their own words, why would that be the case. Responses of individuals who questioned the fulfillment of our hypotheses can be found in the Appendix B. The responses from participants who shared their thoughts roughly fell in three categories: 1) being able to vote does not imply greater interest or knowledgeability, 2) political interest decreases with voting experience, and 3) people who could not vote in 2018 have a greater interest now. In the first category of responses, while many of them suggested that people simply voted as a duty or due to inertia, a sizable share also stated that young people also have interest in politics. The second category, albeit small, embraced opinions like the following¹:

¹ All translations are my own.

“I voted in 2018 elections; however, by observing the country’s situation and how Mexican society is, I don’t have much interest in politics, as I have no faith in the government and I believe that the country will not improve, quite the contrary.”

This way, we see that there is a sentiment where voting seems to have a discouragement effect in some individuals, which seems to be the consequence of not feeling that their votes resulted in the betterment of the country’s conditions. This could thus explain a part of why it is that people who voted in 2018 are less inclined to be more politically active.

The third category was the second most frequent within people who shared their opinions, and the responses put forth the idea that individuals who could not vote in 2018 are now enthusiastic, preoccupied and see voting as an opportunity to have a say in the way the country is run. Some of these responses were:

“I think that, by observing the current situation (not favorable for the majority), young people that didn’t have the opportunity to vote now have a greater willingness to exercise their right and make a change.”

“[...] personally, being part of the share of the population who didn’t have the opportunity to vote in past elections, we feel pressure and interest to pursue improvements for next elections.”

Overall, these responses suggest that voting experience affects political interest. Particularly, it seems that being eligible to vote has a different effect on those who are about to vote or voted for the first time than on those who casted their vote some time ago and possibly had participated in more elections. In that sense, we could be capturing here the effect of being eligible to vote for the first time. Naturally, this is the result of the timing of our experiment, which was done shortly before election campaigns but just four months away from the election. Thus, we can see that there may be a difference between short-term and long-term effects of voting eligibility. While for those about to vote for the first time there is motivation, willingness to discuss politics, and a sense of political efficacy, for those who voted some time ago that initial drive might vanish eventually.

While we cannot assure the exact mechanism of this significant difference between those who could not vote in 2018 but will do so for the first time in 2024 and those who will experience their second presidential elections, the fact is that a difference exists for people in our survey in how they bring politics to their social interactions.

Consumption of political information

On the other hand, we also suggested that interest in politics would manifest through consumption of political information. So just as we did a political activities index, we constructed a *media consumption index* that registers if respondents consume political information “frequently” or “very frequently” through any of seven media outlets: newspapers, television, radio, Facebook, YouTube, Twitter (X) and TikTok.

As seen in Table 10, there is no significant effect of voting eligibility on either the index itself or any of the variables that compose it. We do not see any particular pattern regarding the type of media consumed –like traditional vs. social networks, and none of the effects are sizable. In that regard, we do not find evidence in our sample that voting eligibility has any impact on political information consumption the way we defined it here.

Table 10. Media consumption index

	No running variable	Running variable	Beliefs controls	Full controls	Quadratic term
	(I)	(II)	(III)	(IV)	(V)
Eligible in 2018	-0.015 (0.242)	-0.030 (0.333)	-0.012 (0.338)	-0.003 (0.253)	-0.061 (0.340)
Distance from cutoff		-0.001 (0.015)	-0.002 (0.015)		-0.002 (0.015)
Distance from cutoff squared					0.002 * (0.001)
Intercept	2.701 *** (0.179)	2.707 *** (0.206)	2.674 *** (0.414)	2.195 *** (0.488)	1.971 *** (0.488)
Number of observations	179	179	179	179	179

Note: Table cells display the coefficients and robust standard errors (in parentheses) from regressions with media consumption index as dependent variable. Specifications: (I) no running variable, (II) including running variable, (III) adding beliefs controls (importance of religion, determinism-free will), (IV) adding full controls (gender, education, subjective percentile, employment status), and (V) including quadratic term of the running variable. *** p<.01, ** p<.05, * p<.1

Returning to our initial hypothesis, our findings do not give us enough clarity about the effects of voting eligibility on political interest. We do observe some significant differences in behavior regarding political discussions and communal participation, but we need more research to tell if this is the result of short-term versus long-term dynamics of eligibility as well as the mechanisms driving this behavior. Nonetheless, we have reasons to think that those dynamics exist and what are the drivers behind them, which must be addressed in future research. On the other hand, our findings in political information consumption do not give us evidence of voting eligibility as something making people willing to be more informed. The mixed results on this question require us to pursue the nature of this issue further.

For the sake of discussion, we can tell that the political activities we analyzed—engagement in political discussions and forms of communal participation—are forms of social engagement, while information consumption is an activity that can be done individually. So, if our intuitions are on the right track and, in the light of our earlier results on polarization, acquiring the right to vote might have an impact on social attitudes and not in personal engagement in politics.

Section VI. Discussion & further research

Reconsidering the question succinctly posed in Holbein et. al (2023): ‘is voting transformative?’, here we provide evidence, backed by a solid theoretical basis, that it can be. However, this transformative character might not be what is expected or desired from the point of view relating voting to a civic and virtuous citizenship. In fact, our findings seem to point out that, far from promoting prosocial attitudes in the citizenship, being able to vote fosters divisiveness. In any case, if we simply take the TVH as the idea that voting shocks prompt behavioral changes towards the others or oneself in meaningful ways, then we can provide strong elements supporting the hypothesis.

On one hand, this study consistently shows, at least with the variables used, that individuals who are eligible to vote have a worse opinion of people in their political outgroup and a better opinion of the ones belonging to their political ingroup than those who are ineligible. Arguably, the most compelling display of this difference in behavior are the parallel results we found on intergroup trust and intergroup perceptions of generosity. We observed that ineligible right-leaning participants viewed right-wingers as more generous and entrusted more money to them than ineligible left-leaning participants did, while still maintaining a positive difference favoring left-wingers over right-wingers among all participants. However, quite strikingly, those initial differentials were reversed significantly for eligible right-leaning participants and intensified for eligible left-leaning participants. In other words, participants who could vote not only always favored their ingroup, but they also did so by a much larger margin than those who could not vote. We also observed that eligible participants placed those who lied for money at more extreme positions on the political spectrum, while ineligible participants showed a more lukewarm judgment, usually placing dishonest people near the center. Clearly, there is a fundamental change of beliefs and attitudes towards the others when individuals have the right to vote. Recalling Section III, this right to vote is an *as good as random* assignment: individuals cannot change it at will, it was not decided by them, and people on each side of the assignment group are not very different from each other on average. The only difference is that, due to randomness, some can vote and some cannot. Consequently, we can say that voting eligibility is driving those behavior changes.

It also makes sense that it is the case. As it was discussed in Section II, the minimal-group paradigm put forth by the Social Identity Theory suggests that markers creating saliency to distinguish one group from another might generally lead to greater liking of the ingroup and greater disliking of the outgroup. In a political setting, the experiment conducted by Gerber et al. (2010) cleverly shows how simply nudging people to adopt a political identity—as weak as it might be—can make individuals more likely to develop a sense of belonging to that group and view figures within that group more favorably. By the same token, we can see the voting shock of becoming eligible as the generation of a saliency of a political identity: if you didn't have a political preference, you are likely to adopt one; if you already had a political preference, you are reminded of it. Then, you change your beliefs and attitudes towards those who share your preferences and those who do not. In this light, our findings are consistent with the predictions of this theoretical approach.

Another face of the intensification in political animosities that we found relates to the divergence of opinions regarding policies or political programs (i.e. ideological polarization). We showed how, precisely in the threshold of eligibility, participants above the threshold all greatly differed in their deviation from the mean of evaluations about the current state of the economy from those below the threshold, who consistently had a lower average deviation. Thus, not only could we observe affective polarization, but also a greater divergence in the opinions about the state of the economy. In this regard, theory of cognitive dissonance could give meaning to the result: people take a firmer stance on issues because they were somehow implicated or responsible of their making, so they aim to reduce the inconsistency between their actions and their beliefs. We observed something similar in the evaluations of the current president, at least for eligible left-leaning participants: they showed a greater mean approval than their ineligible counterparts. This logic could be understood as 'as I voted for the president, I feel even more satisfied with my decision'. Then, we would be observing actions driving beliefs and not the other way round, contrary to what the rational choice approach assumes.

Lastly, the results that most closely test the traditional topics of the TVH in our study do not have a straightforward interpretation. On one hand, we did not find a statistically significant in overall political information consumption between eligible and ineligible participants, thus we did not find

evidence that being able to vote makes individuals more knowledgeable or interested in consuming political information. On the other hand, however, we did find a statistically significant difference in the frequency of political engagement for eligibles and ineligibles, but in the inverse direction to what we expected. Surprisingly, it was the ineligibles who showed more proclivity to have political discussions, try to convince others of their political beliefs and engaged in activities in favor of their community. We found some meaning to our results with our qualitative data, which displayed a repeated sense of disenchantment for some of those who already cast their vote but, on the other side, a sense of efficacy for the youngest participants who are just about to vote and want to have a say in how the country will be run. The empirical literature referred above finds, in many cases, that when voting shocks affect behavior significantly, it does not last long. If that is applicable to our study, then we would be observing an upstream voting shock and also the vanishing interest of those who have voting experience. This is something worth researching further.

I understand the limitations of this study, particularly in terms of external validity. However, this initial piece of research provides valuable lessons that guide future work and also serves as a thermometer for what we can expect as we scale this study further with the aim of making it a publishable work for a scientific journal. With that in mind, I briefly mention some of the potential improvements and avenues for future research:

1. **Clean division between upstream and downstream effects.** It is important to understand if the preparation before voting generates different behaviors than those after the results of the election are known, as the level of uncertainty could be driving attitudes and perceptions. A way to handle this is to apply a survey before and after the election with a similar spacing in time.
2. **Clean division between short-term and long-term effects.** As we mentioned, the voting shock of voting for the first time might be exceptional in certain ways, while the passing of time and more voting experience could also give way to different outcomes. For this reason, the timing of the study is essential to determine what are we measuring.
3. **More and better game scenarios.** Our game experiments can be augmented. For instance, just as Fershtman and Gneezy (2001) did, we can apply a simple dictator game based on

partisan lines to determine if behaviors of group rejection are driven by stereotypes or plain disliking.

4. **Partisanship measures.** It may be worthy to explore more measures of partisanship, including a comprehensive thermometer of the president's approval like the one applied in Mullainathan
5. **Heterogeneity analysis.** A richer analysis can be done by studying how voting shocks have differential effects based on gender, ethnicity, class, etc.
6. **Sample improvement.** All these measures can be greatly improved with a better powered sample and also by expanding the geographical locations of the study.

A final thought: if our findings and their implications somehow resemble what actually happens more generally in the world, then there might be a fundamental flaw in the state of democracy as we know it. Of course, we cannot know *prima facie* if greater polarization translates into making democracy slower, more unresponsive, if it enhances acts of violence or even if it has a reach beyond the election time (might as well not be the case); but if it just enhances in-group bias, like in our findings, then cooperation can be damaged. In principle, divergence of opinions is beneficial for developing a more complete and truthful view of phenomena (Golub & Jackson, 2010). However, it can become a great issue if it only means that we are not paying enough attention to each other. At least from what we know of polarization through social media, a great deal of it stems from echo chamber dynamics where we only listen to what we desire to listen rather than what is worthy to listen to expand our judgment (Page, 2024). By that token, we can only expect a constant zero-sum

logic where compromise is doomed. Again, this is not to say that voting in a representative democracy is useless, right away negative or that it cannot prompt prosocial outcomes. On the contrary, if discussions and tensions between political sides reflect on a free –an ideally, respectful—exchange of ideas, then democracy could increase its instrumental value by better responding to people's needs, as well as maximizing inclusiveness and fostering critical thinking. Our challenge is to find the sweet spot where the benefit of engaging with people who behave and think differently outweighs the costs of acknowledging them.

Section VI. References

1. Acharya, A., Blackwell, M., & Sen, M. (2018). Explaining Preferences from Behavior: A Cognitive Dissonance Approach. *The Journal of Politics*, 80(2), 400-411. <https://doi.org/10.1086/694541>
2. Adler, R. P., & Goggin, J. (2005). What Do We Mean By “Civic Engagement”? *Journal of Transformative Education*, 3(3), 236-253. <https://doi.org/10.1177/1541344605276792>
3. Balliet, D., Tybur, J. M., Wu, J., Antonellis, C., & Van Lange, P. A. M. (2018). Political Ideology, Trust, and Cooperation: In-group Favoritism among Republicans and Democrats during a US National Election. *Journal of Conflict Resolution*, 62(4), 797-818. <https://doi.org/10.1177/0022002716658694>
4. Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184. <https://doi.org/10.1037/0003-066X.44.9.1175>
5. Bhatti, Y., Hansen, K. M., & Wass, H. (2016). First-time boost beats experience: the effect of past eligibility on turnout. *Electoral Studies*, 41, 151-158. <https://doi.org/10.1016/j.electstud.2015.12.005>
6. Braconnier, C., Dormagen, J. Y., & Pons, V. (2017). Voter Registration Costs and Disenfranchisement: Experimental Evidence from France. *American Political Science Review*, 111(3), 584-604. DOI: 10.1017/S0003055417000172
7. Bruce, R. and Lima, R. C. (2019). Compulsory voting and TV news consumption. *Journal of Development Economics*, 138, 165-179. <https://doi.org/10.1016/j.jdeveco.2019.01.006>
8. Cappelen, A. W., Konow, J., Sørensen, E. Ø., & Tungodden, B. (2013). Just Luck: An Experimental Study of Risk-Taking and Fairness. *American Economic Review*, 103(4), 1398-1413. <https://doi.org/10.1257/aer.103.4.1398>
9. Valle, N. D. and Ploner, M. (2017). Reacting To Unfairness: Group Identity and Dishonest Behavior. *Games*, 8(3), 28. <https://doi.org/10.3390/g8030028>
10. Engel, C. (2011). Dictator Games: A Meta Study. *Experimental Economics*, 14(4), 583-610. DOI: 10.1007/s10683-011-9283-7
11. Festinger, L. (1962). *A Theory of Cognitive Dissonance*. Stanford University Press. DOI: 10.1515/9781503620766

12. Finkel, S. E. (1985). Reciprocal Effects of Participation and Political Efficacy: A Panel Analysis. *American Journal of Political Science*, 29(4), 891-913. DOI: 10.2307/2111186
13. Fershtman, C., & Gneezy, U. (2001). Discrimination in a Segmented Society: An Experimental Approach. *Quarterly Journal of Economics*, 116(1), 351-377. DOI: 10.1162/003355301556338
14. Fukuyama, F. (2000). Social Capital and Civil Society. *IMF Working Paper No. 00/74*, Available at SSRN: <https://ssrn.com/abstract=879582>
15. Gaebler, S. (2019). Mandatory Voting and Political Participation: Evidence from Austria. *Political Science Research and Methods*, 7(2), 341-358. DOI: 10.1017/psrm.2017.35
16. Gerber, A. S., Huber, G. A., & Washington, E. (2010). Party Affiliation, Partisanship, and Political Beliefs: A Field Experiment. *The American Political Science Review*, 104(4), 720–744. <http://www.jstor.org/stable/40982894>
17. Greene, S. (2004). Social Identity Theory and Party Identification. *Social Science Quarterly*, 85(1), 136-153. DOI: 10.1111/j.0038-4941.2004.08501010.x
18. Golub, B., & Jackson, M. O. (2010). Naive Learning in Social Networks and the Wisdom of Crowds. *American Economic Journal: Microeconomics*, 2(1), 112-149. DOI: 10.1257/mic.2.1.112
19. Horiuchi, Y., Katsumata, H. & Woodard, E. (2023). Young Citizens' Civic Engagement and Civic Attitudes: A Regression Discontinuity Analysis. *Political Behavior*, 45, 265–284. <https://doi.org/10.1007/s11109-021-09698-7>
20. Holbein, J. B. and Rangel, M. A. (2020). Does Voting Have Upstream and Downstream Consequences? Regression Discontinuity Tests of The Transformative Voting Hypothesis. *The Journal of Politics*, 82(4), 1196-1216. <https://doi.org/10.1086/707859>
21. Holbein, J. B., Rangel, M. A., Moore, R., & Croft, M. (2021). Is Voting Transformative? Expanding and Meta-Analyzing the Evidence. *Political Behavior*, 45(3), 1015-1044. <https://doi.org/10.1007/s11109-021-09746-2>
22. Hugh-Jones, D. (2016). Honesty, Beliefs About Honesty, and Economic Growth In 15 Countries. *Journal of Economic Behavior & Organization*, 127, 99-114.
23. James Jr, H. S. (2015). Generalized Morality, Institutions and Economic Growth, And The Intermediating Role of Generalized Trust. *Kyklos*, 68(2), 165-196.

24. Iyengar, S., & Westwood, S. J. (2015). "Fear and Loathing across Party Lines: New Evidence on Group Polarization." *American Journal of Political Science*, 59(3), 690-707. DOI: 10.1111/ajps.12152
25. Johnson, N. D., & Mislin, A. A. (2011). Trust Games: A Meta-Analysis. *Journal of Economic Psychology*, 32(5), 865-889. DOI: 10.1016/j.joep.2011.05.007
26. Jonas J., Kuehnle D., & Wagner M. (2021). Is Voting Really Habit-Forming and Transformative? Long-Run Effects of Earlier Eligibility on Turnout and Political Involvement from the UK. *Discussion Papers of DIW Berlin 1973*, DIW Berlin, German Institute for Economic Research.
27. Lee, D. S., & Lemieux, T. (2010). Regression Discontinuity Designs in Economics. *Journal of Economic Literature*, 48(2), 281-355. DOI: 10.1257/jel.48.2.281
28. De Leon, F. L. L., & Rizzi, R. (2014). A Test for the Rational Ignorance Hypothesis: Evidence from a Natural Experiment in Brazil. *American Economic Journal: Economic Policy*, 6(4), 380–398.
29. De Leon, F. L. L., & Rizzi, R. (2016). Does forced voting result in political polarization? *Public Choice*, 166(1/2), 143–160.
30. Leininger, A., Grünewald, F., & Buntfuß, N. (2023, August 11). Ideological and affective polarization in multiparty systems. <https://doi.org/10.31235/osf.io/mz6rs>
31. Lipjhart, A. (1997). Unequal Participation: Democracy's Unresolved Dilemma. *American Political Science Review*, 91(1), 1-14. DOI: 10.2307/2952255
32. Loewen, P. J., Milner, H., & Hicks, B. M. (2008). Does Compulsory Voting Lead to More Informed and Engaged Citizens? An Experimental Test. *Canadian Journal of Political Science / Revue Canadienne de Science Politique*, 41(3), 655–672. <http://www.jstor.org/stable/25166295>
33. Moreno Álvarez, A. (2024). Facetas de la Polarización Política en México. *Foro Internacional*, 289-338. <https://doi.org/10.24201/fi.v64i2.3064>
34. Mullainathan, S., & Washington, E. (2009). Sticking with Your Vote: Cognitive Dissonance and Voting. *American Economic Journal: Applied Economics*, 1(1), 86-111. DOI: 10.1257/app.1.1.86

35. Page, L. (2024, January 31). How to improve social media. Optimally Irrational - Substack. <https://www.optimallyirrational.com/p/how-to-improve-social-media-part-ecb>
36. Pateman, C. (1970). *Participation and Democratic Theory*. Cambridge University Press.
37. Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster.
38. Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
39. Sen, A. (1999). Democracy as a Universal Value. *Journal of Democracy*, 10(3), 3-17.
40. Shineman, V. (2018). If You Mobilize Them, They Will Become Informed: Experimental Evidence that Information Acquisition Is Endogenous to Costs and Incentives to Participate. *British Journal of Political Science*, 48(1), 189–211. doi:10.1017/S0007123416000168
41. Shineman, V. (2021). Isolating The Effect of Compulsory Voting Laws on Political Sophistication: Leveraging Intra-National Variation in Mandatory Voting Laws Between the Austrian Provinces. *Electoral Studies*, 71, 102265. <https://doi.org/10.1016/j.electstud.2020.102265>
42. Singh, S. P., & Thornton, J. R. (2013). "Compulsory voting and the dynamics of partisan identification." *European Journal of Political Research*, 52(2), 188-211. DOI: 10.1111/j.1475-6765.2012.02068.x
43. Tajfel, H., et al. (1971). "Social categorization and intergroup behavior." *European Journal of Social Psychology*, 1(2), 149-178. DOI: 10.1002/ejsp.2420010202
44. Verba, S., & Nie, N. H. (1972). *Participation in America: Political Democracy and Social Equality*. Harper and Row.

Appendix A. Prolific Survey

Estudio sobre opiniones políticas y económicas

Carta de consentimiento informado

Introducción

Apreciamos mucho tu participación en este proyecto. En este estudio trata sobre tus opiniones políticas y económicas. El Colegio de México ha provisto la infraestructura para este proyecto.

Procedimiento

Este estudio consta de tres partes. En una contestarás algunas preguntas sobre tus experiencias y opiniones políticas y económicas. En otra, tomarás algunas decisiones que afectarán la cantidad de un bono que recibirás y los pagos de otras personas en el proyecto. En la última contestarás algunas preguntas sobre ti.

Participación

Tu participación en este estudio de investigación es totalmente voluntaria. Tienes derecho a retirarte en cualquier momento o a negarte a participar por completo sin poner en peligro tus posibilidades de participar en otros estudios realizados por nosotros. Sin embargo, habrá varios controles de atención a lo largo del estudio. Por lo tanto, asegúrate de siempre de leer atentamente las instrucciones. Para que tu trabajo sea aceptado no debes fallar en ninguno de estos controles de atención.

Confidencialidad

Tu ProlificID se utilizará únicamente con el fin de realizar los pagos por la participación en el estudio. Todos los datos se almacenarán en una base de datos segura. Solo los datos anónimos se analizarán y estarán disponibles en repositorios científicos abiertos una vez concluido el estudio.

Pago

Tu pago por participar en este estudio consistirá en una cantidad fija por tu participación y un bono que dependerá de tus decisiones y de las de los demás. Tu pago por participar en el estudio será enviado poco después de completar la tarea. El bono se pagará mediante el sistema de Prolific en un plazo máximo de tres semanas.

Código de finalización de Prolific

Te pediremos tu código ProlificID como aceptación a esta carta de consentimiento informado. Además, al finalizar este estudio te daremos un código de finalización. Es muy importante que captures correctamente estos códigos para que realicemos tu pago.

Preguntas sobre esta investigación

Si tienes preguntas respecto a este estudio, puedes contactar a: pisoto@colmex.mx

Ingresa tu ProlificID como confirmación de que has leído esto y estás de acuerdo en participar. *

En este estudio te haremos preguntas sobre tus experiencias y opiniones políticas y económicas. ¿Te comprometes a contestar de la forma más honesta posible? *

- ☐ Sí
- ☐ No

Es muy importante para nuestra investigación que todos lean el texto y las instrucciones antes de responder cada pregunta. Para confirmar que has leído y comprendido estas instrucciones, ignora la pregunta siguiente y haz clic en el número "2" de la escala.

¿Qué probabilidad crees que hay de que llueva mañana en el lugar donde vives? *

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10

¿Cómo calificarías en general la gestión del presidente de México? (0:Muy mala, 10: Muy buena) *

- ☐ 0 (Muy mala)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Muy buena)

¿Cómo calificarías en general la situación económica actual del país? Dirías que la situación es... *

- ☐ Muy buena
- ☐ Buena
- ☐ Regular
- ☐ Mala
- ☐ Muy mala

En los próximos 12 meses, ¿Cómo crees que la situación económica del país estará respecto a ahora? *

- ☐ Muy buena
- ☐ Buena

- ☐ Regular
- ☐ Mala
- ☐ Muy mala

Hablando en general, ¿Qué tan de acuerdo estás con la siguiente afirmación? "Se puede confiar en la mayoría de las personas" (0: Nada, 10: Totalmente) *

- ☐ 0 (Nada)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Totalmente)

En términos generales, ¿qué tan satisfecho(a) estás con el funcionamiento de la democracia en México? (0: Nada, 10: totalmente) *

- ☐ 0 (Nada)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Totalmente)

¿Cuán justa crees que es la distribución del ingreso en México? *

- ☐ Muy justa
- ☐ Justa
- ☐ Ni justa ni injusta
- ☐ Injusta
- ☐ Muy injusta

Respecto a cuando empezó el sexenio de Andres Manuel López Obrador, consideras que, en términos generales, tu vida es... *

- ☐ Mucho mejor
- ☐ Mejor
- ☐ Igual
- ☐ Peor
- ☐ Mucho peor

¿Con qué frecuencia haces cada una de las siguientes cosas? *

	Muy frecuentemente	Frecuentemente	Casi nunca	Nunca
Hablar de política con amigos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trabajar por un tema que te afecta a ti o a tu comunidad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tratar de convencer a alguien de lo que piensas en política	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trabajar para un partido o candidato(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¿Con qué frecuencia haces cada una de las siguientes actividades? *

	Muy frecuentemente	Frecuentemente	Casi nunca	Nunca
Leer noticias o información política en un diario o periódico (digital o impreso)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escuchar noticias o información política por la radio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ver noticias o información política en la televisión	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ver noticias o información política en canales de YouTube	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leer noticias o información política a través de X (Twitter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ver noticias o información política a través de TikTok	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leer noticias o información política a través de Facebook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Postura Política

En política se habla normalmente de "Izquierda" y de "derecha". En una escala donde 0 es "Izquierda" y 10 es "derecha". ¿Dónde te ubicarías a ti mismo? *

- ☐ 0 (Izquierda)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Derecha)

¿Qué tan de acuerdo estás con la afirmación? "Las personas con la postura política contraria a la mía son personas que también quieren lo mejor para el país". *

- ☐ 0 (En absoluto)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6

- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Totalmente)

¿En qué mes naciste? *

¿Cuántos años cumplidos tienes? *

¿Eres el tipo de persona que cuando contesta encuestas lee todas las instrucciones? Para nosotros es muy importante que leas y comprendas todas las preguntas para que puedas contestar de la manera más honesta posible. Para confirmar que es así, contesta en la siguiente pregunta la opción que dice "No estoy seguro" dentro de la siguiente lista. *

- ☐ Sí
- ☐ No estoy seguro
- ☐ No

¿Tienes credencial de elector? *

- ☐ Sí
- ☐ No
- ☐ La estoy tramitando
- ☐ No puedo tenerla

Todas las personas de nacionalidad mexicana tenían 18 años o más el 1 de julio del 2018 pudieron votar en las elecciones para presidente en México. Las personas que cumplieron 18 años luego del 2 de julio no pudieron votar.

De acuerdo a esta información, ¿tenías el derecho al voto en las elecciones del 2 de julio del 2018? *

☐ Sí

☐ No

¿Votaste en las elecciones del 2018? *

☐ Sí

☐ No

☐ No recuerdo

En ese momento de tu vida, ¿qué tan importante fueron para ti esas elecciones? *

☐ 0 (Nada)

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

☐ 8

☐ 9

☐ 10 (Totalmente)

En las elecciones del 2018, Andrés Manuel López Obrador ganó la presidencia. ¿Votaste por él o por otra persona? *

- ☐ Voté por él
- ☐ Voté por otra persona
- ☐ No voté / voté nulo
- ☐ No me acuerdo
- ☐ Preferiría no decirlo

¿Te habría gustado votar en esas elecciones? *

- ☐ Sí
- ☐ No
- ☐ No recuerdo

En ese momento de tu vida, ¿qué tan importante fueron para ti esas elecciones? *

- ☐ 0 (Nada)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Totalmente)

En las elecciones del 2018, Andrés Manuel López Obrador ganó la presidencia. Si hubieras podido votar, ¿habrías votado por él o por otra persona? *

- ☐ Habría votado por él
- ☐ Habría votado por otra persona
- ☐ Habría decidido no votar o votar nulo
- ☐ No me acuerdo
- ☐ Preferiría no decirlo

Por participar en este estudio, te hemos otorgado un bono inicial de 0.5 USD.

En esta actividad interactuarás con otra persona que participa en el estudio.

Esta persona nos ha indicado su orientación política es de izquierda.

Tienes la opción de enviar una parte de tu bono a esta persona. Puedes elegir enviar cualquier cantidad, desde no enviar nada (0%) hasta enviar la totalidad de tu bono (100%).

La cantidad que decidas enviar será multiplicada por 2 y se la daremos a la otra persona.

La persona que recibe tu contribución multiplicada tomará una decisión sobre cuánto de ese monto desea devolverte. Puede decidir enviarte cualquier cantidad: desde quedarse todo y no devolverte nada hasta devolverte el monto completo multiplicado por 2.

La cantidad que la otra persona decida devolverte se te otorgará como parte de tu bono final junto con la parte que hayas decidido no enviarle.

En la imagen se ilustra la situación:

Tú tienes 0.5 USD y le puedes enviar un porcentaje a una persona de orientación política de izquierda. Esa persona recibirá el doble de lo que le envíes. Luego, le preguntaremos a esa persona cuánto quiere darte a tí de lo que reciba.

Es importante que hayas leído estas instrucciones y que comprendas las reglas de esta actividad. Es por eso hemos incluido esta prueba de atención. Por favor, en la siguiente pregunta responde la segunda opción ("no estoy seguro").

¿Has leído y comprendes estas instrucciones? *

- ☐ Sí, he leído y comprendo estas instrucciones
- ☐ No estoy seguro

☐ No, no he leído o no comprendo estas instrucciones

Por participar en este estudio, te hemos otorgado un bono inicial de 0.5 USD.

En esta actividad interactuarás con otra persona que participa en el estudio.

Esta persona nos ha indicado su orientación política es de derecha.

Tienes la opción de enviar una parte de tu bono a esta persona. Puedes elegir enviar cualquier cantidad, desde no enviar nada (0%) hasta enviar la totalidad de tu bono (100%).

La cantidad que decidas enviar será multiplicada por 2 y se la daremos a la otra persona.

La persona que recibe tu contribución multiplicada tomará una decisión sobre cuánto de ese monto desea devolverte. Puede decidir enviarte cualquier cantidad: desde quedarse todo y no devolverte nada hasta devolverte el monto completo multiplicado por 2.

La cantidad que la otra persona decida devolverte se te otorgará como parte de tu bono final junto con la parte que hayas decidido no enviarle.

En la imagen se ilustra la situación:

Tú tienes 0.5 USD y le puedes enviar un porcentaje a una persona de orientación política de derecha. Esa persona recibirá el doble de lo que le envíes. Luego, le preguntaremos a esa persona cuánto quiere darte a tí de lo que reciba.

Es importante que hayas leído estas instrucciones y que comprendas las reglas de esta actividad. Es por eso hemos incluido esta prueba de atención. Por favor, en la siguiente pregunta responde la segunda opción ("no estoy seguro").

¿Has leído y comprendes estas instrucciones? *

☐ Sí, he leído y comprendo estas instrucciones

☐ No estoy seguro

☐ No, no he leído o no comprendo estas instrucciones

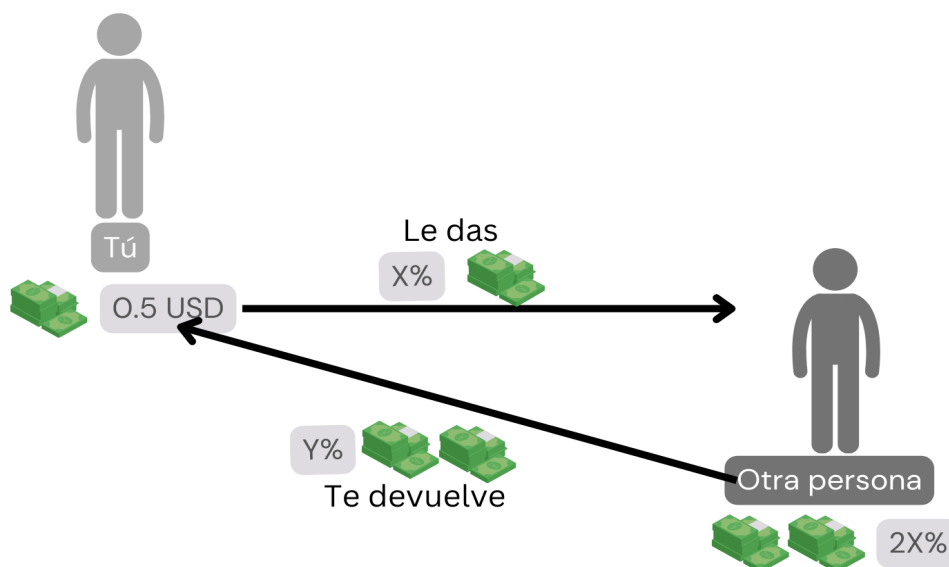
Recuerda

Tienes la opción de enviar una parte de tu bono a esta persona. Puedes elegir enviar cualquier cantidad, desde no enviar nada (0%) hasta enviar la totalidad de tu bono (100%).

La cantidad que decidas enviar será multiplicada por 2 y se la daremos a la otra persona.

La persona que recibe tu contribución multiplicada tomará una decisión sobre cuánto de ese monto desea devolverte. Puede decidir enviarte cualquier cantidad: desde quedarse todo y no devolverte nada hasta devolverte el monto completo multiplicado por 2.

La cantidad que la otra persona decida devolverte se te otorgará como parte de tu bono final junto con la parte que hayas decidido no enviarle.



Conociendo estas reglas, ¿qué porcentaje de tu bono inicial deseas enviar a la otra persona?

Decido enviar...

Conociendo estas reglas, ¿qué porcentaje del monto total que reciba (lo que le mandes, multiplicado por 2) crees que sería justo que te devuelva?

Sería justo...

Las siguientes dos preguntas refieren de estudios que de verdad realizamos. En un estudio que realizamos recientemente, una persona recibió una oportunidad en la que tuvo que decidir si mentir por dinero o no. Si decidía mentir ganaría \$50 y si decidía no mentir no ganaría nada. La persona decidió mentir. Además, le preguntamos su postura política. En una escala donde 0 es "Izquierda" y 10 es "derecha", ¿cuál crees que fue su respuesta? *

0 (Izquierda)

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (derecha)

En un estudio que realizamos recientemente, algunas personas realizaron una actividad sencilla (realizar operaciones aritméticas). A algunas personas se les pagó \$100 por esta actividad. A otras personas no se les pagó nada. Sin embargo, a las personas que se les pagó \$100 les dimos la oportunidad de darle lo que consideraran justo a alguien que no recibió nada. En promedio, ¿cuánto crees que dieron los siguientes grupos de personas? (Escribe una cantidad entre \$0 y \$100). *

Personas que dijeron que eran de derecha *

Personas que dijeron que eran de izquierda *

Si tú hubieras participado en el estudio y hubieras recibido los \$100, ¿cuánto le habrías dado al participante que no recibió nada?

Le habría dado...

¿Cuál es tu género? *

- ☐ Soy mujer
- ☐ Soy hombre
- ☐ No soy ni hombre ni mujer

¿Cuál es nivel educativo más alto que has completado? *

- ☐ Primaria
- ☐ Secundaria
- ☐ Bachillerato o preparatoria
- ☐ Licenciatura
- ☐ Maestría
- ☐ Doctorado

¿En qué estado de la República Mexicana vives? *

¿A qué dedicas la mayor parte de tu tiempo? *

- ☐ Trabajo
- ☐ Estudio
- ☐ No trabajo ni estudio
- ☐ Trabajo y estudio

Imagina una escalera con 100 escalones. Si en el escalón número 1 están las personas más pobres de México y en el escalón número 100 están las personas más ricas de México. ¿En qué escalón crees estar?

Estaría en el escalón...

¿Qué tan importante es la religión en tu vida? *

- ☐ 0 (Nada)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Totalmente)

¿Crees que las personas son libres y toman sus propias decisiones de manera independiente? *

- ☐ 0 (En absoluto)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 (Totalmente)

El 2 de junio del 2024 habrá elecciones para presidente/a en México. ¿Planeas votar? *

- ☐ Sí
- ☐ No
- ☐ Aún no lo sé

¿Ya sabes por quién vas a votar? *

- ☐ Sí
- ☐ No
- ☐ Aún no lo sé

Escribe los nombres completos de las personas candidatas en la elección para presidente/a. *

En este estudio estamos evaluando qué tanto interés en la política y qué tanta polarización hay entre las personas que tuvieron la oportunidad de votar en las elecciones presidenciales del 2018 y las personas que no tuvieron esa oportunidad. Nuestra hipótesis es que las personas que tuvieron la oportunidad de votar tienen más interés en política y están más polarizadas que las que no tuvieron esa oportunidad.

¿Crees que encontraremos resultados consistentes con esa hipótesis? *

- ☐ Sí

☐

No

☐

No lo sé

Si no crees que encontraremos resultados consistentes con nuestra hipótesis, por favor dinos brevemente por qué.

**Para recibir tu código de finalización avanza a la siguiente página.
Por favor, asegúrate de copiar correctamente tu código.**

Appendix B. Qualitative responses

Cumplimiento de hipótesis	Comentario	Creencia	Motivo
No	Por que yo tuve esa oportunidad de votar y cada vez estoy menos interesado en la política	El interés decae con experiencia en el voto	-
No	Cada eleccion que pasa, personalmente me siento menos enterado e interesado de las noticias, propuestas y curriculums de los candidatos, y menos preparado para decidir en general	El interés decae con experiencia en el voto	Desilusión de resultados
No	Yo voté en las elecciones del 2018; sin embargo, al ver como está la situación del país y ver como es la sociedad mexicana, no tengo mucho interés en la política ya que no tengo nada de fe en el gobierno y considero que el pais no mejorará, al contrario.	El interés decae con experiencia en el voto	Desilusión de resultados
No	Creo que la mayoría de las personas va a votar sin estar tan metidos o informados sobre la política	El voto no implica conciencia o interés	-
No	Cada persona es libre de votar, no porque sepa mas o menos de politica quiere decir que por eso decides, a veces se vota por las propuestas de los candidatos.	El voto no implica conciencia o interés	-
No	No todas las personas que pudieron votar en el 2018 estaban conscientes de su elección y muy probablemente no se informaron adecuadamente por lo que en estas elecciones no quiere decir que lo harán.	El voto no implica conciencia o interés	-
No	No porque se haya votado en las elecciones anteriores, quiere decir que se tenga interes en política	El voto no implica conciencia o interés	-
No lo sé	Porque la condición es que las personas que cumplen después de determinada fecha no pueden votar pero las que cumplen antes de la fecha sí, tienen prácticamente la misma edad, no hay una justificación clara ni relación al afirmar que antes de tal fecha se interesan más en la política o no.	El voto no implica conciencia o interés	-
No	LA GENTE SE HARTA DE TANTA MENTIRA SIN SENTIDO	El voto no implica conciencia o interés	Desilusión de resultados

No	En mi generación no observo ideales. La mayoría de mis conocidos contemporáneos se dejan llevar por la inercia de MORENA porque consideran obvio que es mejor al otro camino, no porque tengan razones fundamentadas o de verdad se consideren de izquierda.	El voto no implica conciencia o interés	Inercia de información saliente/predisposición
No	Creo que mucha gente estuvo influenciada a votar por amlo, no necesariamente tienen un "interés" real en política ni en el bienestar de Mexico	El voto no implica conciencia o interés	Inercia de información saliente/predisposición
No lo sé	Porque muchas veces las personas no votan porque tenga interés en la política, simplemente lo hace porque se dejan llevar por alguna información que ven, no es como que estén involucrados en ello	El voto no implica conciencia o interés	Inercia de información saliente/predisposición
No	Mucha gente votó sin tener idea realmente de por quién votaba, simplemente por que se les ofrecía algo (dinero, despensa, etc)	El voto no implica conciencia o interés	Motivación monetaria o aspiracional
No	Muchas de las personas que votan lo hacen por vender su voto de alguna manera (despensa, dinero, puestos laborales), que hayan votado no quiere decir que estuvieron informados por lo que es difícil que hayan dado seguimiento a las acciones del presidente	El voto no implica conciencia o interés	Motivación monetaria o aspiracional
No lo sé	En México en la clase más baja casi no hay interés en votar si no son acarreados	El voto no implica conciencia o interés	Motivación monetaria o aspiracional
No	creo que existen personas que aunque no tuvieran oportunidad, si estan interesados en el futuro de su país	El voto no implica conciencia o interés	No elegibles también tienen interés
No	Porque aunque en 2018 no se tuvo oportunidad para muchas personas, no quiere decir que no estén interesadas en la política.	El voto no implica conciencia o interés	No elegibles también tienen interés
No	Pensar que las personas que no pudieron votar, simplemente por su edad, no están interesadas en el futuro político de su país es invalidar el conocimiento de estas así como su derecho constitucional a votar, no por ser jóvenes significa que no hay interés.	El voto no implica conciencia o interés	No elegibles también tienen interés
No lo sé	Yo dije que "no lo se" porque para mi la decision de votar va mas alla de lo individual, hay	El voto no implica conciencia o interés	No elegibles también tienen interés

	muchos factores externos y/o consecuencias en este contexto tan violento. Yo no vote en las elecciones del 2018, sin embargo este año pienso hacerlo porque me interesa participar en el intento de democracia que aun existe en el pais, podria decirse que es por el respeto a la democracia y a mi derecho.		
No	Creo que hay una proporcion muy grande de la poblacion que vota por votar. Lo ven como algo que "tienen" que hacer aunque no tengan ningun interes real	El voto no implica conciencia o interés	Obligación/inercia
No	Porque el interés no está reflejado en la oportunidad. Muchas personas votaron pero les da igual	El voto no implica conciencia o interés	Obligación/inercia
No	Muchas de las personas que pueden votar, decidieron no hacerlo porque creían que su voto no valdría nada	El voto no implica conciencia o interés	Poco valor del voto
No	Porque en la actualidad las opiniones de las personas son muy distintas y el interés por cambiar cualquier aspecto de la vida que no está en nuestras manos es una pérdida de tiempo	El voto no implica conciencia o interés	Poco valor del voto
No	Por falta de información en general o la manipulación de masas que existe en nuestro país, dejando esto como un juego para el país. Muchas personas interesadas en política pueden saber mucho de política pero debido a experiencias anteriores donde no estén dentro de este proceso directamente generan desconfianza y falsas ideas sobre esta actividad.	El voto no implica conciencia o interés	Poco valor del voto
No	Las candidaturas de este año están generando un gran desaire de participación entre las generaciones más jóvenes, sin importar que para muchos serán sus primeras o segundas elecciones	El voto no implica conciencia o interés	Poco valor del voto
No	Conozco gente de mi edad que no pudo votar y que ahora están muy polarizados.	El voto no implica conciencia o interés	Polarización de no elegibles
No	si bien creo que el interés en la política si aumenta con la edad (y por tanto los que pudieron votar antes del 2018 están más interesados) considero que la alta polarización en las opiniones políticas generalmente es una señal de inmadures. Por tanto,	El voto no implica conciencia o interés	Relación positiva entre madurez e interés

	es de esperarse que la gente joven que apenas empieza votar tenga ideas más extremistas. Simplemente por falta de experiencia previa en la escena política del país y porque hay a esa edad gente que vota así simplemente por dar la contra a los padres		
No	Porque son personas con un gran rango de diferencia de edad, y que no es necesario haber votado antes para tener este interés. Probablemente tenga que ver con la madurez y la edad.	El voto no implica conciencia o interés	Relación positiva entre madurez e interés
No	Creo que las personas que no pudimos votar son las que mas queremos que nuestro voto tenga peso en estas elecciones.	No elegibles tienen mayor interés	-
No	Creo que la primera vez que un joven vota, le toma más importancia, debido a ser algo "especial" y que indica su "paso a la adultez"	No elegibles tienen mayor interés	Entusiasmo por novedad/paso a la adultez
No lo sé	Al ser la primera votación para algunos jóvenes les entusiasma la idea de votar por primera vez	No elegibles tienen mayor interés	Entusiasmo por novedad/paso a la adultez
No	Creo que nos compete a todos e incluso es en las personas jóvenes quienes nos interesamos por un verdadero cambio en el país, no solo la gente que ya ha votado antes	No elegibles tienen mayor interés	No elegibles también tienen interés
No	Porque, personalmente, siendo parte del porcentaje de la población que no tuvimos la oportunidad de votar en las elecciones pasadas sentimos esa presión e interés por buscar una mejoría para la próxima candidatura.	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio
No	Las generaciones que no pudieron votar (como la mía, que tenía 17 años) vieron cómo el país decayó mucho con AMLO y queremos tener la oportunidad que volver a cambiar al país con nuestro voto.	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio
No	En 2018 hubo muchos jóvenes que no pudieron votar debido a que aún no cumplían la mayoría de edad, sin embargo, hoy en día los jóvenes se preocupan por la situación del país por lo cual tienden a estar más informados de política y el hecho de que no pudieron votar en 2018 no	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio

	significa que no tienen interés en la misma.		
No	Muchos jóvenes que no tuvieron la oportunidad, quieren votar para poner su granito de arena en quitar a Morena	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio
No	Considero que al ver la situación actual (poco favorecedora para la mayoría), las personas jóvenes que no tenían oportunidad de votar, sienten unas ganas mayores de ahora sí ejercer su derecho y lograr un cambio.	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio
No lo sé	Las personas que no tuvimos la oportunidad de votar en ese momento (como yo) estamos interesados en las proximas elecciones presidenciales ya que queremos ejercer nuestro derecho al voto ya que sería la primera vez que lo haremos, por lo tanto, queremos tomar una decisión correcta que pueda beneficiarnos en el futuro, ya que en el 2018 no pudimos hacer nada para tomar la mejor elección que pensábamos en el momento.	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio
No lo sé	Creo que tiene que ver con las generaciones que emiten su voto en estas elecciones y la manera en la que han visto un cambio en el país.	No elegibles tienen mayor interés	Preocupación por cambio/situación del país durante el sexenio
No	No considero posible encontrar resultados con preguntas tan generalizadas.	No sabe	No sabe
No lo sé	No tengo la suficiente información para poder formar una opinión concreta.	No sabe	No sabe
No lo sé	No entiendo realmente la coorrealcion entre el hecho de haber votado anteriormente y la polarizacion que pueda haber ahora, mayor explicacion para entender la coorrelacion seria necesaria.	No sabe	No sabe
No lo sé	Espero que encuentren datos significativos en su estudio, sería interesante	No sabe	No sabe
No lo sé	la verdad no lo sé	No sabe	No sabe
No lo sé	Yo creo que todo depende de la sicneridad de las personas que realmene si les inerece contestar y votar en las proximas elecciones	No sabe	No sabe
No lo sé	puede que no encuentren resultados consistentes debido a que muchos jóvenes estaban en contra de Morena, por otro lado	No sabe	No sabe

	<p>puede que no haya habido estudios confiables que nos dijeran los intereses políticos de las personas que en aquel entonces no votaron, así que podría ser que sus hipótesis sean consistentes o puede que no. Por otro lado los jóvenes cada vez parecen menos interesados en política según estudios, pero hay estudios que se contraponen a este hecho, es difícil determinarlo</p>		
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Appendix C. Auxiliary tables

Table C.1. Distribution of respondents by state and eligibility status in 2018

State	Ineligible	Eligible	Total
Baja California	1	6	7
Campeche, Coahuila	3	3	6
Chihuahua	5	1	6
Colima		1	1
Distrito Federal	14	16	30
Durango	1	2	3
Guanajuato	2	5	7
Guerrero	1		1
Jalisco	4	9	13
Michoacán	1		1
Morelos	1	1	2
México	5	8	13
Nayarit		1	1
Nuevo León	10	12	22
Oaxaca		1	1
Puebla	6	7	13
Querétaro	2	3	5
Quintana Roo		1	1
San Luis Potosí	4	1	5
Sinaloa	1	4	5
Sonora	5	7	12
Tabasco		2	2
Tamaulipas	4	3	7
Tlaxcala		2	2
Veracruz	5	2	7
Yucatán	2	4	6
Total	77	102	179

Note: This table presents the distribution of respondents by Mexican state and voting eligibility in 2018. The columns indicate the number of respondents who were eligible to vote and those who were not, along with the total number of respondents from each state.

Table C.2. Engagement in political activities

	Pol. activities index (I)	Political discussions (II)	Community participation (III)	Convince others (IV)	Working for party/candidate (V)
Eligible in 2018	-0.454 ** (0.183)	-0.117 (0.130)	-0.375 *** (0.133)	-0.304 ** (0.135)	0.075 ** (0.035)
Distance from cutoff	-0.011 (0.010)	0.004 (0.006)	-0.014 ** (0.007)	-0.010 (0.007)	0.004 * (0.002)
Beliefs controls					
Importance of religion	-0.003 (0.024)	-0.000 (0.016)	0.012 (0.018)	-0.021 (0.018)	-0.007 (0.004)
Determinism - free will	-0.069 ** (0.031)	-0.037 (0.022)	-0.017 (0.024)	-0.057 ** (0.025)	0.010 (0.008)
Full controls					
Female	0.239 * (0.142)	0.147 (0.105)	0.216 ** (0.109)	0.145 (0.113)	0.011 (0.034)
University education	0.200 (0.165)	0.206 * (0.108)	0.105 (0.125)	0.118 (0.119)	0.024 (0.029)
Subjective percentile	0.006 (0.004)	0.002 (0.003)	0.001 (0.003)	0.004 (0.003)	-0.001 (0.001)
Employed	0.046 (0.149)	0.038 (0.112)	0.069 (0.115)	-0.029 (0.124)	0.054 * (0.030)
Intercept	0.931 *** (0.284)	1.212 *** (0.219)	1.266 *** (0.216)	1.027 *** (0.217)	-0.061 (0.056)
Number of observations	179	179	179	179	179

Note: Table cells display the coefficients and robust standard errors (in parentheses) from regressions with several political activities. Dependent variables: (I) political activities index, (II) discussing politics with friends, (III) working for a cause affecting the community, (IV) trying to convince others about one's own political views, and (V) working for a political party or candidate. *** p<.01, ** p<.05, * p<.1