

**Do Polarized Issues Hold Greater Importance in Voters'  
Electoral Choices? Empirical Evidence from a Novel  
Measurement Approach**

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## **Abstract**

In this paper, we aim to assess whether polarized issues wield more influence over the electoral choices of voters. Doing so requires a reliable way to measure issue importance. To this end, we introduce a novel measurement approach using conjoint experimental designs to elicit issue importance. Unlike previous methods, ours is firmly grounded in the potential outcomes framework and designed to minimize participants' burden. In the aftermath of the 2022 Congressional midterm elections, we implemented this new approach on a nationally representative sample of 2,109 U.S. registered voters. Using the resulting estimates, we assess the correlation between issue importance and the polarization surrounding issues. We consider two notions of polarization: policy and partisan polarization. In both cases, a robust correlation exists between issue importance and polarization. However, our findings suggest that partisan polarization holds greater relevance in the relationship between these two variables.

## Introduction

ISSUE voting holds a central place in our understanding of electoral behavior, serving as the basis for many models of voting (Downs 1957; Carmines and Stimson 1980; Rabinowitz and Macdonald 1989). According to this paradigm, voters prioritize candidates' policy positions over their party affiliations, personal attributes, and other characteristics. When making electoral choices, voters focus on how much candidates' stances align with their own. Ultimately, the goal of voters is to choose a candidate whose positions closely mirror their beliefs.

All else equal, voters favor candidates whose positions closely align with their views on a particular policy issue. However, political debates involve a wide array of matters. Thus, voters must consider candidates' positions on multiple issues. A voter is unlikely to agree with a candidate on every relevant issue. Consequently, voters must often compare candidates' views on different topics, leading them to assign weights and prioritize some issues over others. For example, voters might place greater importance on environmental policies, healthcare reform, or economic policy while being more flexible on issues related to foreign policy.

Despite extensive research on issue voting, our understanding of the factors shaping the relative importance of policy issues in voters' electoral choices remains deficient (Dennison 2019). This study endeavors to fill this gap by exploring the relationship between the weight of questions in voters' decisions and the polarization surrounding them. Our central hypothesis postulates that issues over which positions are polarized carry more weight in voters' decisions than those on which a consensus prevails in the population.

This hypothesis can be justified in multiple ways. Firstly, voters tend to focus their attention on polarized issues. Even when politicians give equal attention to two distinct issues, voters may not allocate the same attention and amount of cognitive processing to both. This is due to the scarcity of mental resources, leading voters to be selective about the information they absorb and memorize. Theoretical studies have confirmed that rationally inattentive voters tend to pay more attention to contentious issues (Matějka and Tabellini 2020). Also, voters' attention may be psychologically drawn to divisive issues.

This emphasis on controversial topics is likely to be further amplified by the actions of political actors and the media, as they frequently give more coverage and attention to those. Prior studies have shown that moderates are less likely to run in Congressional elections than extremists (Thomsen 2014). Almost by definition, extremist candidates might tend to emphasize their campaign on polarized issues. More generally, to capture voters' attention and underscore differences with their opponents, parties and candidates may also place a greater emphasis on polarized issues (Simas and Ozer 2021).

In any case, it is reasonable to assume that voters' attention will ultimately be reflected in the weight they assign to policy issues. All else equal, voters will be more responsive to candidates' positions on topics they are well-informed about. On the other hand, voters are likely to overlook candidates' positions on issues they lack familiarity with and, as such, over which they lack definitive opinions.

Secondly, voters may attribute greater importance to polarized issues because their resolution heavily depends on the election's outcome. For topics on which a consensus already exists, the electoral result may have a lesser impact on the policy outcome. This is because even if a candidate with opposing views is elected, they are likely to recognize the unpopularity of their stance and be compelled by public opinion to abandon it. Consequently, the policy outcome is more likely to align with the prevailing consensus. In the case of a policy issue over which the electorate is divided and polarized, the elected candidate will not face the same pressures. Instead, they are prone to interpret their victory as confirmation and validation of their position, viewing it as evidence that the electorate has settled the debate in their favor. As a result, the resolution of that issue is more likely to reflect the elected candidate's stance.

Thirdly, as voters engage in partisan sorting, a process through which they align their party affiliation and policy positions, their perception of the importance of different policy issues will vary. In particular, they are more likely to switch parties if doing so leads to a better alignment with their chosen party over critical issues (Carsey and Layman 2006; Baldassarri and Gelman 2008; McCarty 2019). This dynamic should ultimately lead to a strong correlation between issue importance and the degree to which policy positions on them are polarized along partisan lines.

We empirically investigate the relationship between issue importance and polarization in the context of the 2022 Congressional midterm elections in the United States. Before this study, no such empirical testing had been undertaken. Our findings reveal a statistically significant correlation between the importance of policy issues in voters' electoral choices and the polarization of voters' positions over them. Therefore, our hypothesis stands confirmed by the data.

We consider two distinct notions of political polarization: policy and partisan polarization. Policy polarization occurs when positions are concentrated around two extremes, leading to a stark division among voters about which policy to pursue. On the other hand, partisan polarization occurs when voters' positions are sorted along partisan lines or, to put it differently, when policy stances are strongly correlated with partisan identity. Although policy polarization is moderately linked to issue importance, partisan polarization exhibits the strongest correlation with issue importance. Therefore, as we consider the relationship between issue importance and polarization, partisan polarization emerges as the most relevant form of political polarization.

Assessing the relationship between issue importance and another variable requires a reliable approach to measuring issue importance. By “reliable approach,” we mean one that accurately explains and predicts voters’ electoral choices. Unfortunately, past research has not supplied such a measurement approach. Historically, researchers have relied on self-reported measures, which involve asking participants in survey studies to assign the importance of different policy issues to a number from one to ten or name the issues they care about the most. The simplicity of these measures has made them attractive. However, previous research has shown that self-reported measures of issue importance poorly reflect the actual weight issues hold in voters’ electoral choices and only have limited value in predicting their behavior (Niemi and Bartels 1985; Wlezien 2005; Johns 2010; Bartle and Laycock 2012; Leeper and Robison 2020). The fundamental explanation for this phenomenon is that voters’ electoral decision-making process is largely subconscious, making it difficult to accurately identify and articulate all the factors and motives influencing their choices.

In reaction, political science has recently shifted towards choice-based measures of issue importance derived from either experimental or observational data (Alvarez and Nagler 1998; Schofield et al. 1998; Thurner 2000; Ansolabehere and Puy 2018). This paper builds and improves upon previous studies using conjoint experimental designs to assess issue importance. Specifically, we conducted a survey experiment on a nationally representative sample of 2,109 U.S. registered voters shortly after the 2022 Congressional midterm elections. During this experiment, participants were presented with 19 proposals. Their task was to indicate whether they agreed or disagreed with each proposition. Also, participants were asked to choose between six pairs of hypothetical candidates running for Congress. Through rigorous analysis of this experimental data, we make causal inferences about how much a voter’s likelihood of voting for a candidate increases when they share the same policy position. We assert that this constitutes a valid measure of issue importance.

Two recent papers closely related to ours were authored by Horiuchi, Smith, and Yamamoto (2018) and Hanretty, Lauderdale, and Vivyan (2020). We improve their approach in two fundamental ways: firstly, by refining the design of the choice tasks, and secondly, by redefining the causal quantity of interest. In existing papers, participants are typically asked to choose between two candidates, and these candidates have policy platforms randomly generated from multiple policy positions (ranging from two to five) covering various issues (between three and eight). In contrast, our approach involves simpler choices. Participants must choose between two candidates with binary positions on two policy issues. Also, we give participants the option to adopt a neutral stance, signaling their indifference over the outcome of some policy issues. Although this approach may not perfectly reflect all possible scenarios in every election, it substantially lightens the participants’ burden. As a result, the resulting measures are

likely to depict voters' genuine preferences better.

Regarding the quantity of interest, the measure of issue importance estimated by Horiuchi, Smith, and Yamamoto (2018) leads to a misleading portrayal of the relative importance of policy issues. Recent methodological studies on causal quantities of interest in conjoint experiments have corroborated this point (Abramson, Kocak, and Magazinnik 2022; Bansak et al. 2022). The analysis by Hanretty, Lauderdale, and Vivyan (2020) manages to avoid this pitfall, but their structural measure of issue importance lacks a clear and natural interpretation. To address these concerns, we propose and estimate a novel estimator of issue importance that can be naturally interpreted in percentage points. Our approach is firmly rooted in the potential outcomes framework, which sheds light on the aspects of voters' preferences it captures. Also, this formalization provides insights into why accurate elicitation of issue importance can only be accomplished through carefully designed experiments.

Recently, Cavaillé, Chen, and Van der Straeten (2022) also introduced a novel approach to measuring issue importance. Like ours, their technique acknowledges the limitations of self-reported measures in revealing voters' priorities. Often, survey participants express significant concern for many topics, making it challenging to ascertain the hierarchy of their priorities. This situation arises because respondents are placed in a “world of abundance,” where their choices over one issue do not impact subsequent options. Thus, with self-reported measures of issue importance, participants have no incentives to contemplate trade-offs between various issues. In other words, issue importance cannot be measured in absolute terms since it only emerges when voters compare issues. To address this problem, the authors propose a new design called “Quadratic Voting for Survey Research” (QVSR). In this setup, participants receive a budget to purchase votes, enabling them to express their views on various policy proposals. The cost of acquiring additional votes follows a quadratic pattern, meaning that casting more votes to express additional support or opposition to a proposal becomes increasingly expensive. Accordingly, participants are motivated to thoughtfully evaluate their degree of concern for policy issues and prioritize those that genuinely matter to them. The efficacy of conjoint experiments in eliciting issue importance is grounded in a similar logic. These experimental designs force participants to confront dilemmas where they must weigh the trade-offs between candidates who may align with their views on one issue but not another. However, conjoint designs provide a more authentic portrayal of the electoral decision-making environment that voters experience. This increased realism lends them greater credibility for measuring issue importance than QVSR.

In addition to its implications for political science, our paper holds significant methodological and substantive relevance to the vast literature on attitude strength in psychology (Howe and Krosnick 2017). Issue importance can be likened to attitude strength in the context of issue voting. In this paper, we showcase an innovative approach

to quantifying attitude strength in binary choices, a method that has the potential to be extended far beyond the realm of politics. Finally, our paper explores the causes and repercussions of attitude strength and its relationship with social identity.

The rest of this paper is organized as follows. We start by presenting a precise definition of the causal conception of issue importance. Next, we provide a comprehensive overview of the experimental design employed to measure issue importance and polarization, accompanied by a description of the underlying statistical methodology. We then present our findings on importance and polarization separately and in relation to each other. Finally, we derive insights from these results, emphasizing their significance in furthering our understanding of issue importance and its relationship with political polarization.

## The Causal Conception of Issue Importance

We consider electoral contests between two candidates, respectively labeled 0 and 1. The voters' task is straightforward: they are presented with candidates' policy profiles and must decide which one to vote for. Let  $Y_i(\theta_0, \theta_1)$  denote the probability that voter  $i$  chooses candidate 1 when candidate 0 has policy profile  $\theta_0 \in \Theta$  and candidate 1 has policy profile  $\theta_1 \in \Theta$ , where  $\Theta$  is the set of all possible policy profiles.

A policy profile  $\theta_j \in \Theta$  consists of  $k$  elements, each representing the position of candidate  $j$  on a specific issue. To make policy issues more tangible, we condense them into succinct reform proposals. For example, the complex issue of abortion is summarized in the following proposition: "The right to an abortion should be guaranteed by federal law." Provisionally, each component of a candidate's policy profile can be understood as denoting their agreement or disagreement with the corresponding proposal.

Following the pure theory of issue voting, we assume all pertinent information for voters' decision-making is contained in the candidates' policy profiles. Candidates' labels do not convey any supplementary information. Accordingly, interchanging the policy profiles between candidates 0 and 1 should merely result in a reversal of the candidates' probability of being chosen by a particular voter:

$$Y_i(\theta, \theta') = 1 - Y_i(\theta', \theta) \text{ for all } \theta, \theta' \in \Theta.$$

Our conception of issue importance revolves around the relative intensity of voters' preferences on policy issues as measured by the extent to which their electoral choices are sensitive to candidates' policy positions over those issues. In other words, issue importance reflects the magnitude of the effect of candidates' policy positions on

voters' support. The underlying logic is simple: the more important a policy issue is in voters' electoral choices, the greater the influence candidates' stances on that issue will have on their choices.

While there is considerable confusion in the existing literature on this matter, it is crucial to distinguish issue importance from issue salience as they represent separate albeit correlated concepts. Issue salience pertains to the level of attention political actors, including candidates, allocate to policy issues. It is typically measured by the extent to which individuals actively seek information or engage in discussions and debates related to specific policy matters. In general, we expect that voters will pay greater attention to issues carrying greater importance in their choices. Additionally, voters may ascribe a greater weight to policy issues politicians frequently discuss. However, issue importance, as we define it, centers on the effect of candidates' policy positions on voters' electoral choices. Consequently, it has a narrower definition and is directly connected to electoral decisions and outcomes.

A simplistic approach to measuring issue importance would be to estimate the effect of candidates' raw policy positions on voters' choices. For example, we can quantify the extent to which voters are more or less likely to vote for a candidate who supports enacting a federal law guaranteeing the right to seek an abortion compared to one who holds the opposite view. More generally, we can estimate for each issue the extent to which voters are more inclined to vote for a candidate who agrees with the corresponding proposal compared to one who opposes it. The magnitude of this effect is then interpreted as a measure of issue importance. Specifically, the candidates' stances on the issues with the largest absolute treatment effect exert the most influence on voters' choices and, consequently, are deemed the most important. This approach has been employed by eminent scholars, including Horiuchi, Smith, and Yamamoto (2018).

The problem with this approach lies in its failure to recognize that the effect of candidates' positions on individual voters' choices critically depends on their preferred position. Indeed, all else equal, voters are more likely to support a candidate whose policy positions align with their views on a particular issue and are less inclined to vote for a candidate with opposing views. Accordingly, espousing a policy proposal will increase the chances of a candidate being selected by proponents of the proposal while diminishing the probability of being chosen by opponents.

This heterogeneity in voters' responses tends to dilute the effect of candidates' policy positions on voters' choices, pulling it closer to zero. This occurs because this effect is obtained by averaging effects of different signs conditional on voters' views. To illustrate this, let us consider the example of an electorate evenly divided on a given policy issue, with half of the voters supporting the underlying proposal and the other half opposing it. Assuming that the magnitude of the effect of candidates' policy positions on voters' support conditional on their preferred



position is constant across all voters, the estimated impact of candidates' policy positions on voters' support will be null, as the positive effect on supporters cancels out the negative impact on opponents. Nonetheless, the behavior of individual voters may still be strongly influenced by candidates' positions on that issue. This result hides that reality.

This finding is consistent with the broader observations made by Abramson, Kocak, and Magazinnik (2022) and Bansak et al. (2022) regarding the causal effect of candidates' attributes on voters' support and, more specifically, how it aggregates voters' heterogeneous preferences. Their analysis reveals that the average effect can paint a deceptive portrait of voters' preferences because it simultaneously captures the intensity and direction of voters' preferences. For instance, a negative average effect might conceal a situation where most voters support a policy proposal while the opposing minority holds a greater level of concern for the policy issue compared to the majority. Within our framework, the effect of candidates' policy positions on voters' decisions, even if we consider its magnitude, fails to reflect issue importance accurately. This inconsistency arises because the former solely focuses on the intensity of voters' preferences, whereas the latter encompasses both the strength and direction of those preferences.

To address the heterogeneity in the direction of voters' responses and derive a measure that exclusively captures the intensity of their preferences, one potential approach would be to estimate the effect of candidates' positions on voters' responses conditional on their preferred position. However, employing this method would yield different measures of issue importance for voters who support a policy proposal and those who oppose it.

To obtain a measure of issue importance not contingent on voters' preferred positions, we propose a different approach. This approach involves recasting policy profiles to indicate whether the candidate agrees or disagrees with the voter's stance on each policy issue. Specifically, we assign a value of 1 to  $\theta_{jk}$  if candidate  $j$  agrees with the voter on issue  $k$ , and  $-1$  otherwise. Accordingly,  $\theta_{jk}$  now captures the interaction between candidates' and voters' policy positions. With this reformulation, we formally define issue importance as the causal effect of agreeing with a candidate's stance on a policy issue on a voter's probability of voting for that candidate. Our conception of issue importance is based on a straightforward principle: when voters are deeply concerned about a specific issue, they tend to be uncompromising and only vote for candidates who share their views. Conversely, if voters do not attach significant importance to a topic, they are more likely to compromise and vote for a candidate even if they disagree. As a result, issue importance is measured by the extent to which voters are uncompromising regarding candidates' policies on that issue.

Undoubtedly, the portrayal of policy issues through reform proposals and the binary nature of political actors' positions play a crucial role in this approach. If some matters had more than two possible positions, depicting

policy profiles solely in terms of agreements and disagreements could obscure the nuances and proximity between the various stances. Also, although this concern applies to all experimental designs, it is imperative to acknowledge that our findings may be affected by the reform proposals chosen to represent policy issues. We further explore this issue in the Results section.

In concluding our definition of the causal conception of issue importance, we formally define the causal quantities of interest. Firstly, for any pair of profile sets  $\boldsymbol{\theta} = \langle \theta_0, \theta_1 \rangle \in \Theta^2$  and  $\boldsymbol{\theta}' = \langle \theta'_0, \theta'_1 \rangle \in \Theta^2$ , we define the individual-level treatment effect as the difference between the probabilities that a given subject, say, voter  $i$ , chooses candidate 1 under these two profile sets:

$$\pi_i(\boldsymbol{\theta}, \boldsymbol{\theta}') = Y_i(\theta_0, \theta_1) - Y_i(\theta'_0, \theta'_1).$$

Identifying individual-level treatment effects is challenging as it necessitates observing choices under all possible profile sets, leading to what is known as the “fundamental problem of causal inference.” However, we can generally identify average treatment effects (ATE), which represent the expectation of individual-level treatment effects over the entire population:

$$\bar{\pi}(\boldsymbol{\theta}, \boldsymbol{\theta}') = \mathbb{E}[\pi_i(\boldsymbol{\theta}, \boldsymbol{\theta}')] = \mathbb{E}[Y_i(\theta_0, \theta_1) - Y_i(\theta'_0, \theta'_1)].$$

The ATE is the most fundamental causal quantity since it quantifies the expected difference in voters’ responses between two sets of profiles. Nevertheless, it is not well-suited for the analysis of conjoint designs because of the multi-dimensional nature of treatments in them. Specifically, each candidate adopts stances on multiple policy issues, and each contest involves comparing two policy profiles that can vary across various dimensions. This complexity makes directly interpreting the ATE exceedingly challenging, if not impossible.

In practice, we are interested in how the value of individual dimensions in policy profiles affects subjects’ responses, specifically, how agreeing with a candidate’s position on a specific policy issue impacts the probability of a voter choosing them. In general, the effect of some attributes varies based on the values of the other characteristics. In particular, the impact of agreeing with a candidate on a policy issue is contingent upon two factors: (i) the candidate’s positions on other policy issues and (ii) the policy stances taken by the alternative candidate. To generate a statistic that captures the average effect of an individual component, we can effectively “average out” these factors. Accordingly, the measure we use to assess the relative importance of a policy issue is the average marginal

component effect (AMCE) of agreeing with a candidate's stance on that issue on the probability of a voter selecting them:

$$\bar{\pi}_\ell = \mathbb{E} [Y_i(\boldsymbol{\theta}_0, \boldsymbol{\theta}_{1,-\ell}, \theta_{1\ell} = 1) - Y_i(\boldsymbol{\theta}_0, \boldsymbol{\theta}_{1,-\ell}, \theta_{1\ell} = -1)] , \quad (1)$$

where the expectation is computed over all individuals in the population as well as over the joint distribution of candidate o's policy positions and candidate r's positions on policy issues excluding issue  $\ell$ . Note that  $\theta_{j\ell}$  refers to the  $\ell^{\text{th}}$  component of candidate  $j$ 's policy profile, while  $\boldsymbol{\theta}_{j,-\ell}$  denotes the remaining components.

It is important to note that the joint distribution remains constant regardless of the position of candidate r on issue  $\ell$ . In other words, it is independent of the candidate's stance on the topic of interest. This is crucial for the marginal nature of the effect described in Equation (1). Indeed, the equation quantifies the change in voters' choices resulting from altering the  $\ell^{\text{th}}$  component of candidate r's policy profile while keeping all other factors fixed, including the distribution of other relevant factors.

Without loss of generality, we focus solely on the effect of candidate r's policy positions on voters' responses. Indeed, if we assume that candidates o and r are a priori identical and that all factors relevant to voters' decision-making are captured in their policy profiles, any modification in candidate o's policy profile should have a symmetric effect on the likelihood of this candidate being chosen by voters.

With either experimental or observational choice data, a simple estimate of the AMCE can be derived by computing the difference between the probability of a voter choosing a candidate they agree with on issue  $\ell$  and the probability of voting for a candidate they disagree with on that specific issue:

$$\begin{aligned} \Delta_\ell = & \mathbb{P}(\text{Voting for a candidate} \mid \text{Agreeing with the candidate on issue } \ell) \\ & - \mathbb{P}(\text{Voting for a candidate} \mid \text{Disagreeing with the candidate on issue } \ell) . \end{aligned} \quad (2)$$

If treatment assignment is independent of potential outcomes, then  $\Delta_\ell$  captures the AMCE of a voter agreeing with a candidate's stance on issue  $\ell$  on their likelihood of choosing that candidate. To ensure the validity of this assumption, one method is to randomize the assignment of attributes to policy profiles. In that case, the randomization scheme allocates a positive probability to all feasible combinations of characteristics for which potential outcomes are well-defined.

**Table 1: Policy Proposals**

| #  | Issue              | Proposal                                                                                                                                      |
|----|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Abortion           | The right to an abortion should be guaranteed by federal law                                                                                  |
| 2  | Climate Change I   | Corporations should be taxed based on the carbon emissions they produce                                                                       |
| 3  | Climate Change II  | The government should provide more incentives to increase the use of hybrid and electric vehicles                                             |
| 4  | Climate Change III | Power companies should be required to use more energy from renewable sources                                                                  |
| 5  | Climate Change IV  | We should plant a trillion more trees worldwide to absorb carbon emissions in the atmosphere                                                  |
| 6  | Climate Change V   | The federal government should give a tax credit to encourage businesses to develop technology that captures and stores carbon emissions       |
| 7  | Defense            | The federal government should reduce its defense spending                                                                                     |
| 8  | Deficit            | The federal government should eliminate its deficit                                                                                           |
| 9  | Democracy          | The Electoral College should be eliminated, and the candidate who wins the most votes nationwide should be elected President                  |
| 10 | Education          | The government should provide universal, high-quality preschool to all three- and four-year-olds                                              |
| 11 | Gun Control        | The federal government should create a central database to track all firearm sales                                                            |
| 12 | Health Care        | The federal government should create a national single-payer health care insurance program to replace existing private health insurance plans |
| 13 | Higher Education   | Public colleges and universities should be free for students from low- and moderate-income families                                           |
| 14 | Immigration        | The government should establish a way for immigrants who are here illegally to stay legally                                                   |
| 15 | Marijuana          | The recreational use of marijuana should be legal nationwide                                                                                  |
| 16 | Minimum Wage       | The federal minimum wage should be raised to \$15 per hour                                                                                    |
| 17 | Racial Equality    | Descendants of people enslaved in the United States should be paid reparations                                                                |
| 18 | Social Security    | The federal government should reduce Social Security benefits to ensure the program's perennity                                               |
| 19 | Taxes              | The highest marginal federal personal income tax rate should be reduced to 35%                                                                |



Imagine you had to choose in the past midterm elections between two candidates for Congress, A and B.

The two candidates were asked about their positions on two issues. Their answers are reproduced below.

| Candidate A                                                                        | Candidate B                                                                            |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| The highest marginal federal personal income tax rate should be reduced to 35%     | The highest marginal federal personal income tax rate should NOT be reduced to 35%     |
| The federal government should create a central database to track all firearm sales | The federal government should NOT create a central database to track all firearm sales |

**Given only the above information, who would you have voted for in the past midterm elections? If the positions are the same, please pick either one.**

- ☐ I would have voted for Candidate A
- ☐ I would have voted for Candidate B

Question 1 of 6



**Figure 1:** Example of a Conjoint Question

## Experimental Design

The prospect of estimating issue importance using observational data may appear enticing. By conducting a survey, we can gather valuable information regarding voters' electoral preferences and stances on policy issues.<sup>1</sup> Simultaneously, we can collect data on candidates' positions concerning these issues from diverse sources, including the media. Equipped with this information, estimating issue importance using the estimator outlined in Equation (2) is straightforward.

It is reasonable to expect that the resulting measures of issue importance would accurately reflect the relative weight of policy issues in voters' electoral choices. This is because they would be derived from data collected close to voters' decisions. However, there are significant drawbacks to the observational approach. In elections, voters are presented with a limited set of alternatives. Also, these options have fixed policy profiles. Thus, treatment assignment is determined solely by subjects' views, causing potential outcomes to vary systematically between treatment and control groups. Voters' decisions are also influenced by non-policy factors, such as candidates' characteristics, which are difficult to account for in the analysis. Also, the observational approach has limitations when assessing the relative importance of some issues. For instance, it can only consider issues on which candidates have taken a stance while leaving latent and universally supported issues unexamined. Lastly, candidates strategically select which issues to address, presumably based on their perception of the issues' relative importance. This strategic behavior introduces biases that can be likened to those observed in spatial estimates of legislators' ideal points (Clinton and Meirowitz 2001).

Given the difficulties inherent in estimating issue importance using observational data, we opt for an experimental approach. This methodology effectively addresses many of the limitations associated with the observational method. Firstly, it enables us to construct hypothetical policy profiles where candidates' positions are independently distributed from voters' characteristics and issues' relative importance. Also, this design allows us to evaluate the significance of matters candidates have not taken a stance on or on which all candidates share the same position. Lastly, the experimental approach allows us to collect richer data on voters' preferences by presenting them with multiple pairs of hypothetical candidates and requesting repeated choices.

We implement a fully randomized conjoint design. In conjoint experiments, participants are presented with choices between alternatives that differ across multiple attributes. By employing this design, we aim to simulate

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1. In this discussion, we do not address certain factors that impact the credibility of self-reported electoral choices. One such factor is the presence of biases, such as the "winner effect," which can influence subjects' willingness to report their choices accurately. These biases undermine the reliability of survey data.

real-life decision-making scenarios and obtain comprehensive data on the many factors influencing their choices. By analyzing the resulting data, we can estimate the marginal effect of individual attributes in multidimensional treatments.

Our survey instrument consists of two sets of questions. The first set aims to gather subjects' perspectives on various policy issues. Specifically, we inquire about their support or opposition to 19 proposals spanning 15 policy areas. The proposals are listed in Table 1. For each prompt, subjects are provided with five response options: (i) Strongly support, (ii) Somewhat support, (iii) Neutral, (iv) Somewhat oppose, and (v) Strongly oppose. To streamline the analysis and account for individual-level variations in response scales, we consolidate the five options into three categories, retaining their orientation but disregarding their strength: (i) Support, (ii) Neutral, and (iii) Oppose.<sup>2</sup> The distribution of subjects' responses to the initial set of questions can be seen in Figure S1 in the Online Appendix. Additionally, Figure S2 presents the distribution of subjects' responses to these questions, categorized by their self-reported party identification.

In the second stage of our survey experiment, we introduce subjects to six conjoint questions. Each question presents them with two hypothetical candidates for Congress, candidates A and B. These candidates are solely characterized by their policy platforms, representing their positions on two specific policy issues. It is important to note that all other aspects of the candidates are assumed to be identical.

For each conjoint question, policy proposals are randomly selected without replacement from the 19 prompts listed in Table 1. The selection of prompts is independent across conjoint questions and equally probable, ensuring a diverse combination of policy issues being paired together. The candidates' positions on each policy issue are independently determined, with an equal chance of either agreement or disagreement with a given policy proposal. The candidates can have the same position on a particular policy issue.

Figure 1 visually represents a typical conjoint question in our survey. In this example, the positions of candidates A and B on two policy issues, taxes, and gun control, are presented in a table format. Candidate A supports reducing the highest marginal federal personal income tax rate and creating a database to track all firearm sales. In contrast, Candidate B opposes these two proposals. Based on this information, subjects are asked to choose which candidate they would have voted for in the past midterm elections. In the first stage of our survey experiment, respondents have already indicated their opinions on these policy prompts. Therefore, it is straightforward to determine whether

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2. Including a neutral option in our survey instrument is essential as it enables us to collect a broader range of responses and capture the full spectrum of subjects' opinions. By offering subjects the choice to select a neutral option, we acknowledge and respect their uncertainty or lack of a strong inclination towards agreement or disagreement. This approach ensures that we gather a comprehensive set of answers, reducing the likelihood of undecided subjects leaving these fields blank and enhancing the overall quality and depth of our data collection.

the respondent agrees or disagrees with their selected candidate on the issues of taxes and gun control.

We previously emphasized the difference between issue importance and salience. In our experimental design, we treat both issues equally, ensuring that candidates attribute equal salience to each. In actual elections, candidates may prioritize one issue over another based on their strategies and messaging. This difference in emphasis can have a significant impact on voters' choices. Admittedly, our experimental design fails to capture this effect.

Typically, the primary concern with the experimental approach to assessing issue importance revolves around external validity. There may be worries that the subjects do not make choices in our experimental design in the same way and with the same criteria as voters in elections. If this were the case, we could not accurately infer the relative importance of issues from data collected via our experiment. Although this concern is legitimate, we believe that experimental designs in which subjects are asked to make choices between candidates offer the best feasible option to elicit and causally infer the relative importance of issues in voters' decision-making process, given our incapacity to manipulate candidates' policy positions and observe voters' choices in actual elections. The results of this approach better reflect the relative importance of policy issues than alternative approaches.

Our survey experiment was conducted by YouGov, with a sample of 2,109 U.S. registered voters who were interviewed online from November 9 to 18, 2022. The subjects were selected from YouGov's opt-in panel to ensure national representativeness. To account for demographic characteristics, the survey sample was weighted based on gender, age, race, education, and the respondents' vote in the 2020 Presidential election. The weights assigned to the survey sample ranged from 0.1 to 4.2, with an average weight of 1.0 and a standard deviation of 0.4. All results presented in this paper have been calculated using these weights.<sup>3</sup> The margin of error for a sample percentage calculated from the entire survey sample is approximately 2.3%. Ethical considerations are discussed in the Online Appendix.

## Statistical Methodology

### Issue Importance

With the experimental data collected as explained in the previous section, we estimate the measure of issue importance  $\Delta_i$ , as defined in Equation (2), using a non-parametric approach analogous to the method proposed by

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3. The use of weighting in experiments has been a topic of controversy in the survey methodology literature (Franco et al. 2017; Miratrix et al. 2018). In our study, we have chosen to present weighted results in the body of the paper. The Online Appendix contains unweighted estimates of issue importance and polarization. Our objective in presenting those unweighted estimates is to demonstrate that our substantive findings are unaffected by weighting. It is worth noting that there is little difference between the weighted and unweighted estimates, primarily because our sample is already highly representative of the population of interest.



Hainmueller, Hopkins, and Yamamoto (2014). For clarity, we provide a comprehensive outline of this procedure. We begin by recasting the dataset, structuring each row to represent a unique combination of subject, candidate, conjoint question, and policy issue. This transformation results in 24 observations for each subject. For every one of these observations, we define three essential variables:

- (i)  $Y_{jkl} = 1$  if subject  $j$  chooses candidate  $k$  in conjoint question  $\ell$ , 0 otherwise;
- (ii)  $X_{ijk\ell} = 1$  if subject  $j$  agrees with candidate  $k$  in conjoint question  $\ell$  on issue  $i$ , 0 otherwise; and
- (iii)  $Z_{ij} = 1$  if subject  $j$  is neutral on issue  $i$ , and 0 otherwise.

Having defined the necessary variables, we then proceed to estimate a straightforward linear regression model:

$$Y_{jkl} = \alpha_i + \beta_i \times X_{ijk\ell} + \gamma_i \times Z_{ij} + \varepsilon_{ijk\ell}.$$

To address the correlation between residuals for observations associated with the same subject, we adjust the standard errors to accommodate within-subject clustering. Thanks to the independent randomization of policy profiles in our experimental design, the parameter  $\beta_i$  provides a consistent and unbiased estimate of  $\Delta_i$ .

The measure  $\Delta_i$  has a significant limitation related to how the notions of agreement and disagreement are defined. We assume that a candidate and a voter agree on a policy issue only when they share their view on the related policy proposal. Conversely, they are considered to disagree when they hold opposing views on the proposition. As a result, this approach does not consider cases in which subjects have declared themselves neutral over issue  $i$ , as they are neither considered to agree nor disagree with candidates on that issue.

In that regard, it would be beneficial to incorporate cases where subjects express their neutrality on specific issues in our assessment of issue importance. If voters are neutral over a policy issue, they remain indifferent to its outcome and typically do not factor it into their electoral choices. As a result, topics with a higher proportion of voters declaring neutrality are less likely to influence electoral decisions, ultimately leading to a diminished overall importance attached to those issues.

To address this limitation, a possible solution is to assume that a respondent who declares neutrality always agrees or disagrees with candidates on that issue. Also, we can adopt another measure of issue importance, which considers the percentage of voters who identify as neutral on that issue. With this idea in mind, we put forward the

following measure of adjusted issue importance:

$$\begin{aligned}\tilde{\Delta}_i &= \mathbb{P}(\text{Voting for a candidate with whom we agree on issue } i) \\ &\quad - \mathbb{P}(\text{Voting for a candidate with whom we disagree on issue } i) .\end{aligned}$$

In a way, the comparison embedded in  $\tilde{\Delta}_i$  is the opposite of the one implied by  $\Delta_i$ . While  $\Delta_i$  compares the probability that a candidate is selected by voters who agree and those who disagree with them on issue  $i$ ,  $\tilde{\Delta}_i$  compares the likelihood that voters agreeing and disagreeing with the candidate they chose. Yet,  $\tilde{\Delta}_i$  bears a close relationship to  $\Delta_i$ . Using the fact that the experimental design implements fully independent randomization of policy profiles, it can be easily shown that the following holds:

$$\tilde{\Delta}_i \approx (1 - \mathbb{P}(\text{Voter is neutral on issue } i)) \times \Delta_i .$$

In other words,  $\tilde{\Delta}_i$  applies a penalty to estimates of  $\Delta_i$  based on the proportion of voters who identify as neutral. This approach is equivalent to calculating the AMCE of agreeing with a candidate’s stance on a policy issue on the likelihood of voting for them considering all subjects, including neutral ones. It assumes that the conditional effect on nonaligned voters equals zero.

## Issue Polarization

So far, we have focused our discussion on issue importance and our approach to measuring it. Before turning to our results, which put into relation issue importance and polarization, we describe how we measure the latter.

We define political polarization as the diffusion of opinions and beliefs resulting in profound differences in policy views across a polity (McCarty 2019, ch. 2). This concept takes on different forms. One is called “policy polarization,” characterized by a division of policy views in the public, with two opposing groups holding conflicting positions. This manifests in a distribution of policy positions in the population with two distinct peaks. Another form of polarization is known as “partisan polarization,” according to which citizens’ policy positions closely align with their ideological or partisan affiliations. In this scenario, individuals’ political identity strongly predicts their stance on policy matters.

Although these two notions of polarization are distinct, they are often correlated. When policy attitudes strongly align with and are deeply divided along party lines, it can lead to substantial disagreements among the entire electorate regarding policy matters. However, the reverse is not always guaranteed: even if the electorate is

divided on policy issues, partisans from different parties may be equally divided. In other words, partisan sorting may contribute to overall policy polarization, but the same level of policy polarization does not always reflect the same degree of partisan sorting.

For each issue, we aim to derive a polarization measure using the weighted distribution of policy positions observed among participants in our survey. Various measures can quantify polarization, each capturing a unique aspect of this phenomenon. Therefore, we propose two polarization measures, each associated with one of the two conceptions introduced earlier.

Firstly, we introduce a measure quantifying the degree of division in policy attitudes within the electorate, thus reflecting policy polarization. We argue that the Herfindahl–Hirschman Index (HHI) is highly suitable for this end. The HHI represents the probability that two randomly chosen voters hold the same position on a given issue. To compute this measure, we sum the squares of the proportions of voters adhering to each policy position:

$$\text{HHI}_i = \sum_m p_{im}^2,$$

where  $p_{im}$  represents the proportion of voters who hold position  $m$  on issue  $i$ . A lower value of the HHI for a policy issue indicates a more divided distribution of policy positions, less agreement, and more controversy among voters. The index can be calculated by considering the distribution of subjects' positions, including or excluding neutral ones.

The HHI finds its roots in economics, where it measures the relative size of firms within an industry and the level of competition among them. Analogous applications of the HHI can also be found in fields such as biology and physics. In political science, the HHI is the basis for determining the effective number of political parties (Laakso and Taagepera 1979). Notably, this measure demonstrates a robust correlation with information-theoretic measures, including the Shannon entropy, which quantifies the “information content” of random variables. An advantage of the HHI over alternative measures lies in its natural interpretation in probabilistic terms.

To measure the intensity of the relationship between policy attitudes and partisan affiliations, reflecting partisan polarization, we use the Mutual Information (MI) of Voters' Self-Reported Party Identification and their Policy Positions. This statistical measure, rooted in information theory, quantifies the mutual dependence between two random variables. It generalizes the standard correlation coefficient to discrete random variables and instances of non-linear dependence.

The MI measures the dissimilarity between the joint distribution of the variables and the product of their

marginal distributions. It quantifies the improvement in log-likelihood resulting from considering the mutual dependence between the variables relative to a model that assumes their independence. Formally, the MI of Party Identification and Policy Positions is calculated using the following formula:

$$MI_i = \sum_m \sum_n p_{imn} \times \log \left( \frac{p_{imn}}{p_{im} \times p_{in}} \right),$$

where  $p_{imn}$  represents the proportion of voters who hold position  $m$  on issue  $i$  and have partisan identification  $n$ , and  $p_{in} = \sum_m p_{imn}$  represents the proportion of voters with partisan identity  $n$ .

## Results

### Issue Importance

Figures 2 and 3 depict estimates of our measures for issue importance, denoted by  $\Delta$ , and adjusted issue importance, denoted as  $\tilde{\Delta}$ , respectively.<sup>4</sup> These figures illustrate point estimates along with their 95% confidence intervals. Policy issues are arranged in descending order of the magnitude of their point estimate.

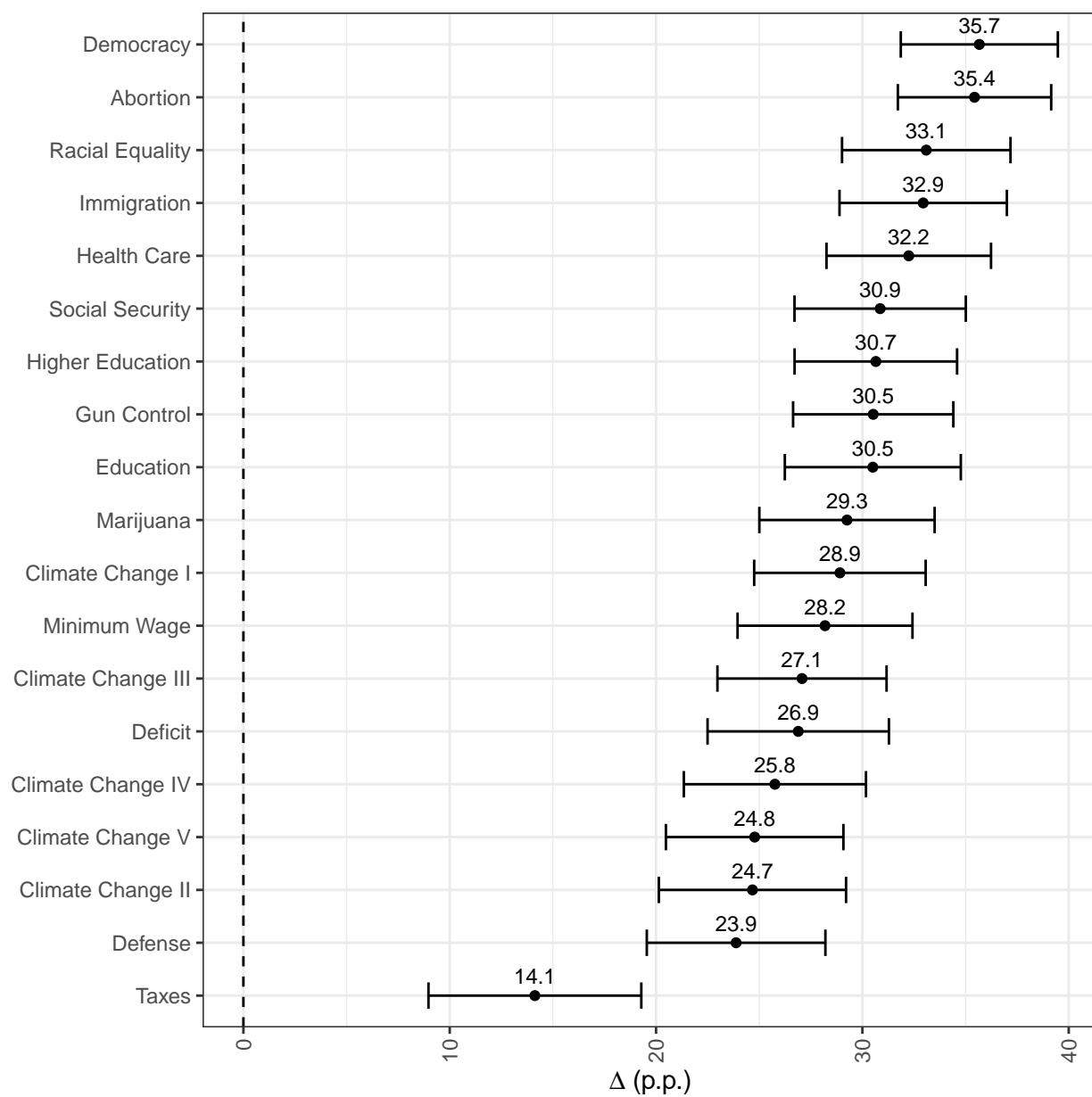
To begin our discussion, we consider the estimates of issue importance displayed in Figure 2. As a reminder, this measure reflects the extent to which a voter is more likely to support a candidate whose stance aligns with their own on a policy issue relative to a candidate with opposing views. All estimates demonstrate statistical significance at the 95% confidence level. This implies that, across the topics examined, voters are more inclined to vote for candidates who share their viewpoints rather than those who hold conflicting positions.

Significant variation is observed in the estimates of issue importance across different issues. Estimates span a range of 14.1 to 35.7 percentage points. The difference between the estimates of the most and least important issues exhibits statistical significance at the 95% confidence level. This implies that our measure effectively differentiates between issues with different weights in voters' electoral choices. The three issues with the highest estimated levels of importance are Democracy, Abortion, and Racial Equality. Conversely, the three issues with the lowest weight are Climate Change, Defense, and Taxes.

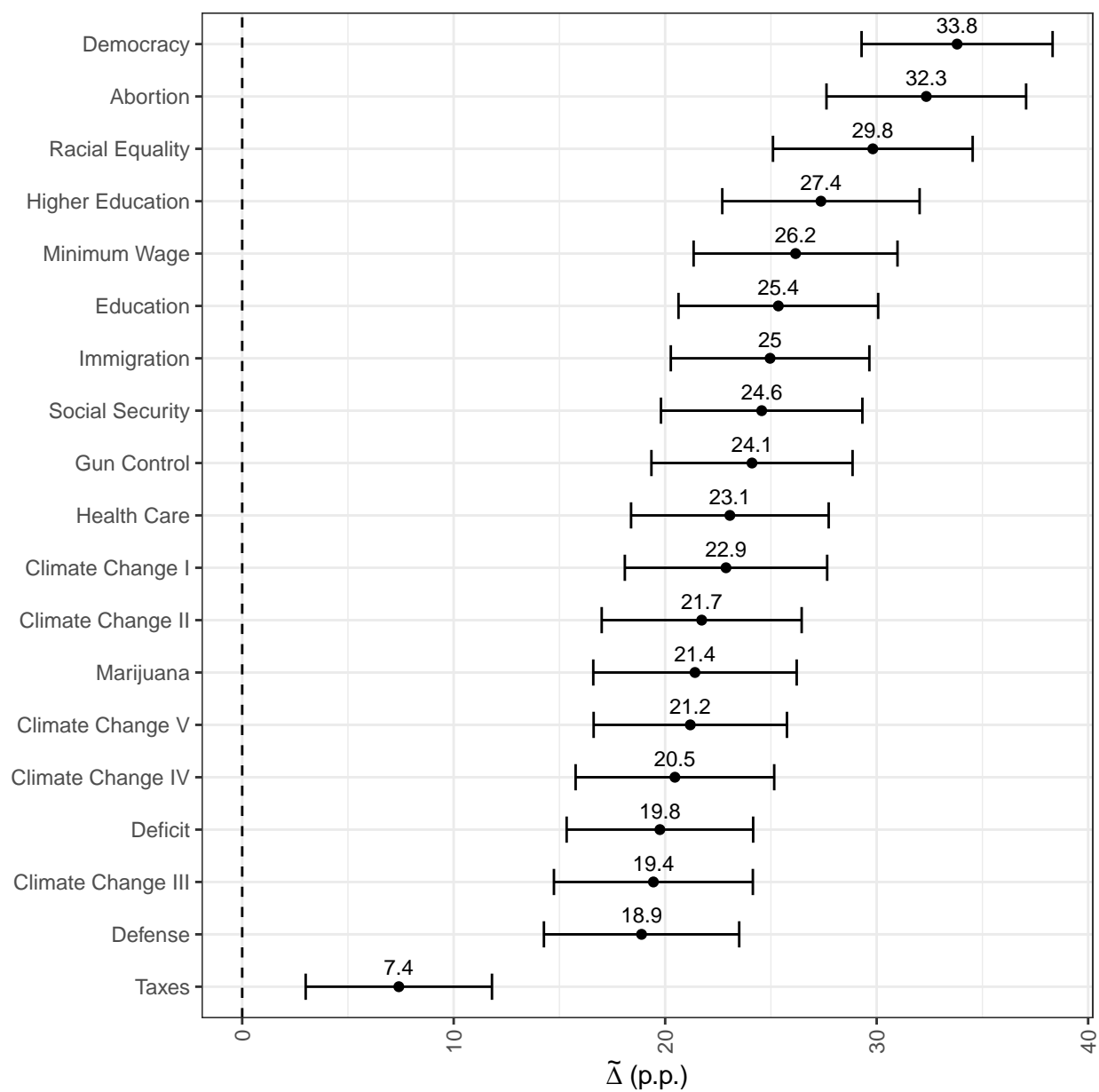
Our measure of issue importance does not account for the choices made by participants neutral on a specific issue. Yet, we believe it is crucial to consider the proportion of neutral respondents when ascertaining issue importance. The reason is that topics with a higher share of neutral respondents must have a lower overall impact on

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4. Details about these estimates can be found in Tables S1 and S2 in the Online Appendix.



**Figure 2:** Issue Importance by Policy Issue



**Figure 3:** Adjusted Issue Importance by Policy Issue

electoral choices since nonaligned voters' decisions are, by definition, uninfluenced by candidates' positions over those topics. To address this limitation, we have put forth a measure of adjusted issue importance that reflects the proportion of neutral participants.

Before delving into estimates of adjusted issue importance, note that we observe a correlation between our original measure of issue importance and the proportion of participants who identify as neutral. Specifically, there is a significant negative correlation between issue importance and the fraction of nonaligned voters, with a coefficient of  $-0.86$  (see Figure S3 in Online Appendix). This finding suggests that voters are more likely to be neutral over issues that have a lower impact on the electoral choices of those holding definite positions.

We now focus our attention on the estimates of adjusted issue importance depicted in Figure 3. This measure assesses the difference between the proportion of chosen candidates who align with voters' views on a policy issue and the percentage of preferred candidates who hold opposing views. Estimates demonstrate statistical significance at the 95% confidence level. This implies that, for each issue, voters systematically choose a significantly higher proportion of candidates who share their views rather than those with opposing opinions.

Like those of issue importance, the estimates of adjusted issue importance exhibit considerable variation, ranging from 7.4 to 33.8 percentage points. Adjusted issue importance demonstrates slightly more variability within this range than plain issue importance. Estimates of the least and most critical issues exhibit a statistically significant difference. Consequently, our measure of adjusted issue importance effectively discriminates between the least and most important issues. Among the policy issues considered, Democracy, Abortion, and Racial Equality emerge as those with the highest levels of importance. In contrast, Climate Change, Defense, and Taxes have the lowest weights.

We observe a strong positive correlation between issue importance and adjusted issue importance, with a coefficient of  $0.93$  (see Figure S4 in Online Appendix). Altering our measure of issue importance to account for neutral voters has little impact on the relative ordering of issues. This is particularly true for the three most and least important issues, as they remain identical with both measures. As a reminder, adjusted issue importance is derived by proportionally reducing issue importance based on the proportion of neutral voters. As a result, it consistently yields lower values compared to issue importance.

Substantively, our estimates of issue importance reveal a compelling pattern about the nature of the 2022 congressional midterm elections. In particular, they validate the perception that the Republican Party has successfully engaged in a "culture war," as issues directly associated with this notion, such as Abortion, Democracy, and Racial Equality, take precedence in voters' electoral decisions. It seems that the Republicans have effectively brought these

topics to the front of voters' minds, regardless of whether the electorate shares this party's views on them. Conversely, traditional themes that have long been central to American political debates, such as Defense, the Deficit, and Taxes, seem to wield little influence on voters' electoral choices.

In concluding this section, we wish to explore how the formulation of policy proposals impacts the estimates of issue importance and adjusted issue importance. Given the policy issues' complexity, we condensed them into short reform proposals. We acknowledge that different propositions stemming from the same topic may a priori vary in importance to voters. To assess the sensitivity of our results to this design choice, we narrow our focus to the policy area of Climate Change and consider five distinct proposals associated with it. We compare the resulting estimates of issue importance and adjusted issue importance across propositions.

Despite some variability in estimates, the differences between the estimates of issue importance and adjusted issue importance across policy proposals do not reach statistical significance, nor are they substantively meaningful. Estimates of issue importance range from 24.7 to 28.9 percentage points, while those of adjusted issue importance range from 19.4 to 22.9 percentage points. Interestingly, estimates tend to cluster into two groups, showing minimal to no significant variation. The first group includes policy proposals centered around economic and financial aspects, such as carbon taxation and incentives for hybrid and electric vehicles. In contrast, the second group consists of propositions focused on renewable energy, tree planting, and carbon capture and storage. These findings indicate that although there might be slight variations in estimates, the importance attributed to different policy proposals in a specific policy domain remains consistent within coherent clusters. Also, they suggest measures of issue importance are not overly influenced by our choice of policy proposals.

## **Comparison with Alternative Measurement Approaches**

This paper introduces a significant methodological advancement by laying out a novel approach to measuring issue importance. To assess its efficacy, we compare its outcomes with those from two established techniques. The first approach is one that, like ours, relies on data collected through a choice-based conjoint experiment and was previously employed by Horiuchi, Smith, and Yamamoto (2018) and other researchers. The second method is widely used and involves directly asking participants to describe the intensity of their concern for various issues.

To begin our comparative analysis, we examine the estimates from the conjoint approach used by Horiuchi, Smith, and Yamamoto (2018) and others. In the Online Appendix, the reader will find two figures: Figure S5, depicting the average effect of agreeing with a policy proposal on candidates' likelihood of being chosen by a voter, and Figure S6, illustrating the absolute value of this average effect for each policy issue. According to this measurement



approach, the greater the magnitude of the effect of candidates' positions, the more weight the corresponding issue carries in voters' choices.

As revealed in Figure S7 (see the Online Appendix), there is little to no correlation between the absolute value of the effect of candidates' raw policy positions on their probability of being chosen and our measures of issue importance and adjusted issue importance. This suggests that these measures provide a different and potentially more relevant perspective of policy issues' relative importance. Indeed, it appears that the results of the naive approach are especially susceptible to the criticisms we previously outlined.

A notable concern with the naive approach is the limited variation observed between issues over the absolute value of the effect of candidates' positions on their probability of being chosen, ranging from 2 to 12.7 percentage points. In contrast, our measures exhibit significantly more variation. This stems from the fact that the effect measured by the naive approach represents the average of conditional effects with different signs depending on voters' preferred positions. Figure S8 shows that the impact of a candidate's stance on the probability that a voter chooses them varies widely with the voter's preferred position. Therefore, relying on the average effect of candidates' raw stances conceals substantial heterogeneity in voters' responses, as a policy's supporters respond positively to candidates who support it, whereas opponents react negatively.

The average effect of candidates' positions across all voters poorly reflects the intensity of individual voters' preferences, regardless of their preferred policy position. Yet, the latter is precisely what the causal conception of issue importance is all about. Mathematically, when the electorate is divided, the effects for supporters and opponents of policy proposals tend to cancel each other out. In contrast, candidates' policy positions on less polarized issues tend to have a higher average effect. As a result, the impact estimated by the naive approach demonstrates a strong positive correlation with the HHI, with a coefficient of 0.81 (see Figure S9 in the Online Appendix). Put differently, it seems that the average effect of candidates' policy positions on voters' support better reflects the degree of polarization surrounding issues than their importance in voters' decision-making process.

Finally, we compare the outcomes of our approach with the conventional method consisting of directly asking survey participants about their level of concern for various policy issues. Participants in our survey were presented with the following question: "How important, if at all, were each of the following issues for you as you thought about whom you would vote for in the congressional election in your area in November 2022?" The distribution of self-reported levels of importance for the 13 policy issues covered by this question can be found in Figure S10 (see Online Appendix). Although the issues considered in our survey experiment do not perfectly align with those covered in this question, we are confident there is sufficient overlap to allow a meaningful comparison between

both measurement approaches.

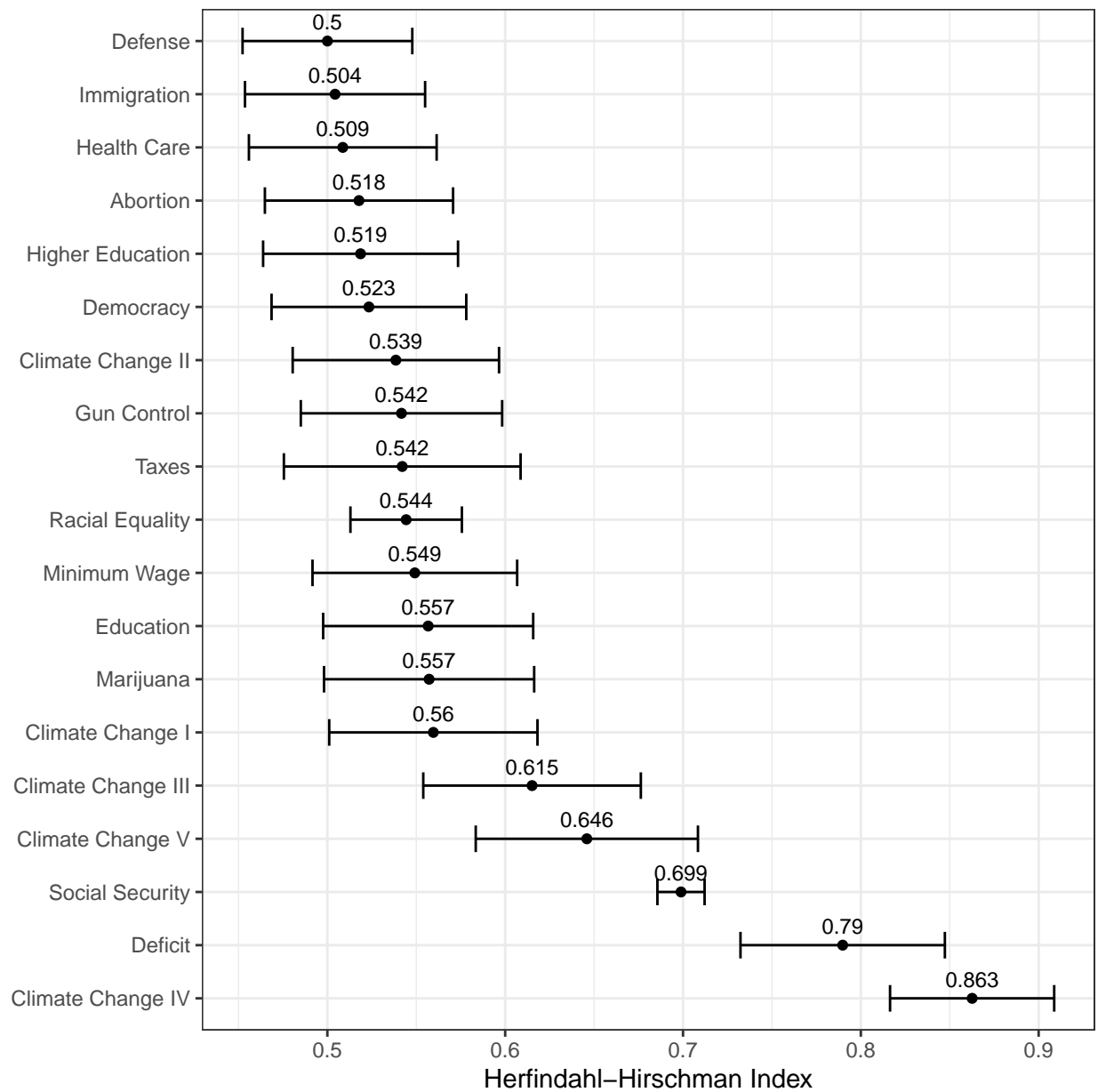
Clear patterns appear in the self-reported importance of various issues. Notably, Abortion, Gun Control, Health Care, and Immigration exhibit virtually no variation in their self-reported importance. In general, voters perceive these issues as highly important, ranking them as their highest priorities after the Economy and Inflation. In contrast, our measures of issue importance and adjusted issue importance yield different estimates for these three issues. Furthermore, Climate Change and Racial Equality display systematically lower self-reported levels of importance. Voters seem to assign less significance to these specific matters. Although the self-reported importance of Climate Change aligns reasonably well with our estimates, the same cannot be said for Racial Equality. Our findings indicate that the effect of Racial Equality on voters' electoral choices was statistically indistinguishable from the effects of Abortion, Health Care, and Gun Control and higher than the effects of the latter two policy issues. Overall, self-reported issue importance appears to inadequately reflect the magnitude of the impact of agreeing with a candidate's policy stance on voters' electoral choices, hence, our causal conception of issue importance.

## **Issue Polarization**

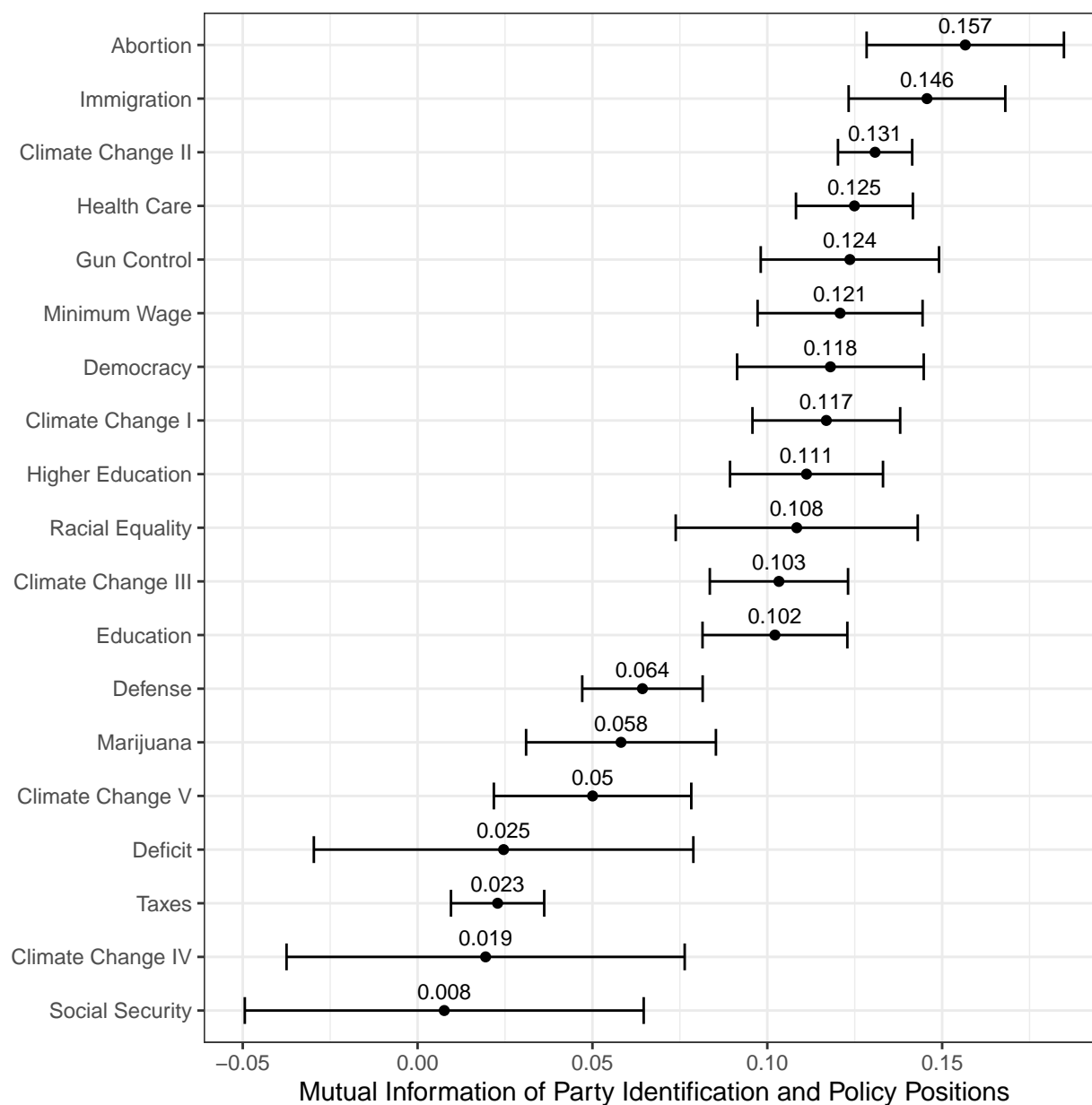
Figures 4 and 5 depict estimates of the HHI and the MI of Party Identification and Policy Positions for the 19 policy proposals considered in our survey experiment. In both figures, issues are arranged in descending order of the prevailing level of polarization.

Both measures aim to capture different aspects and manifestations of political polarization. The HHI quantifies how much policy attitudes are divided in the electorate. Specifically, it represents the probability that two randomly selected voters hold the same position on a particular issue. Thus, an increase in the HHI indicates a higher level of consensus among voters and, consequently, a lower polarization in their positions. To calculate the HHI, we consider the distribution of voters' policy positions, excluding those who identify as neutral. For comparison, you can find the value of the HHI calculated using the distribution of voters' policy positions, including neutral responses, in Figure S11 (see Online Appendix).

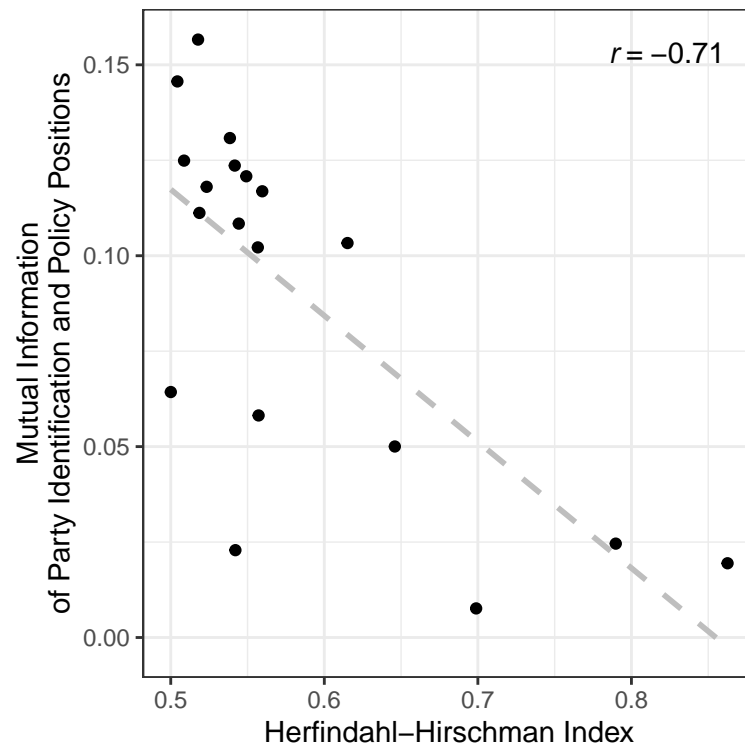
The electorate is considerably divided on the issues under consideration. The values of the HHI show modest variation across policy issues, indicating a consistent and substantial level of disagreement in the public. For most matters, the probability of two randomly selected voters sharing the same position falls within a relatively narrow range of 0.5 to 0.56. This suggests that voters' attitudes are evenly split on these issues, as seen in the case of Defense and Immigration, for which there is an equal likelihood of agreement or disagreement between two randomly chosen voters. This finding raises concerns about the effectiveness of the HHI in effectively discriminating between



**Figure 4:** Herfindahl-Hirschman Index by Policy Issue



**Figure 5:** Mutual Information of Party Identification and Policy Positions by Policy Issue



**Figure 6:** Relationship between the Herfindahl-Hirschman Index and the Mutual Information of Party Identification and Policy Positions

policy issues. On the other hand, there are five specific issues from three broad policy areas — namely, Climate Change, the Deficit, and Social Security — for which the probability of agreement between two randomly selected voters is higher than or equal to 0.62. This indicates a higher level of consensus among voters over these policy issues.

To complement the perspective on polarization offered by the HHI, we also consider the MI of Party Identification and Policy Positions. This measure quantifies the level of mutual dependence between these two variables, reflecting the extent to which policy attitudes are divided along partisan lines. A higher value of the MI reflects a greater partisan polarization of policy positions.

In contrast to the HHI, which showed limited variation between issues, the MI of Party Identification and Policy Positions exhibits considerably more fluctuation across policy matters. This suggests that the MI is more effective in differentiating the degree of polarization across policy issues. Notably, policy attitudes about Social Security, and to a lesser extent, the Deficit and Taxes, are virtually independent of voters' self-reported party affiliation. In contrast, positions on the issues of Abortion and Immigration show significant divisions along partisan lines.

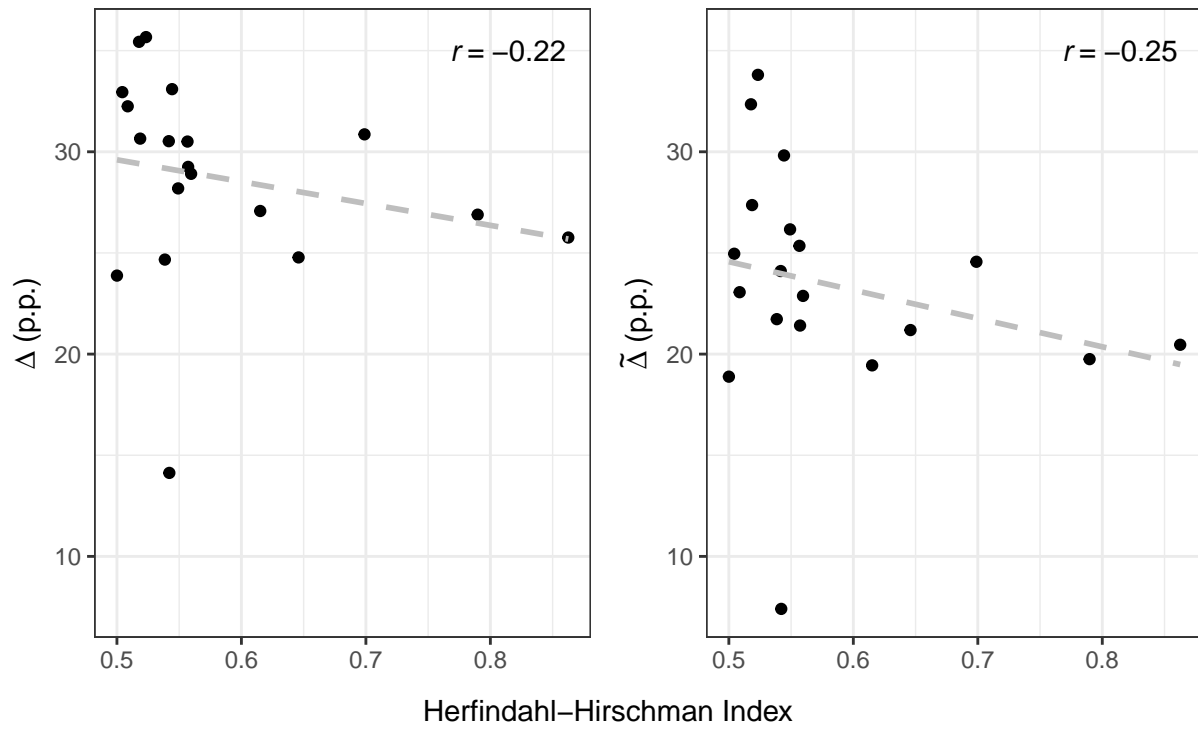
As anticipated, the HHI and the MI of Party Identification and Policy Positions show a strong negative correlation, as depicted in Figure 6. Specifically, both measures have an absolute correlation coefficient of 0.71. While these two measures are correlated, they capture distinct aspects and manifestations of political polarization, maintaining their relevance. However, due to its higher variation, the MI displays better potential than the HHI in effectively differentiating the degree of polarization prevailing over various policy issues.

## **Relationship between Issue Importance and Polarization**

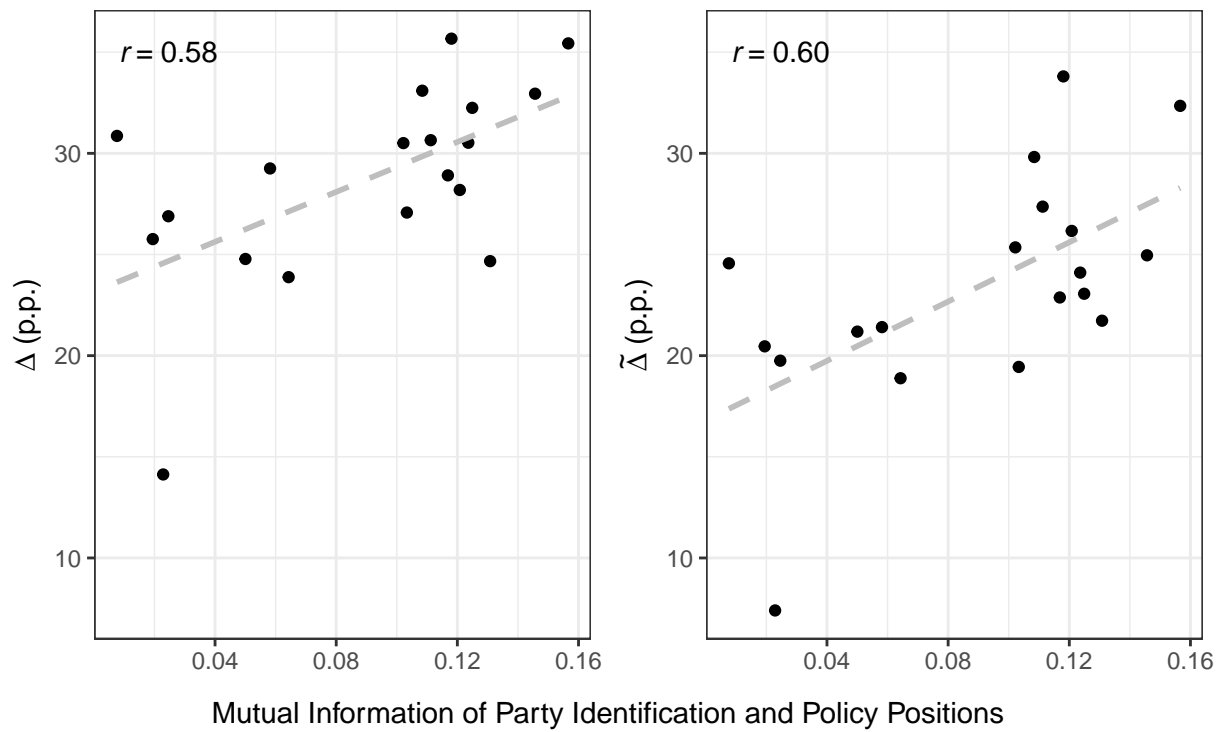
Now that we have described our findings about issue importance and polarization separately, we turn to the primary objective of this paper, which is to assess the correlation between issue importance and polarization. In particular, we aim to test the hypothesis that topics with higher levels of polarization carry a greater weight in voters' electoral choices than issues over which a consensus prevails.

Figures 7 and 8 illustrate the relationship between our measures of issue importance and adjusted issue importance on the  $y$ -axis, and the HHI and the MI of Party Identification and Policy Positions on the  $x$ -axis, respectively. There is a statistically significant correlation between issue importance and polarization, indicating that, on average, more polarized issues hold greater importance in voters' electoral choices. As a result, our hypothesis is supported by the data.

Our measures of issue importance exhibit a moderate negative correlation with the HHI. This implies that, on



**Figure 7:** Relationship between Issue Importance and the Herfindahl-Hirschman Index



**Figure 8:** Relationship between Issue Importance and the Mutual Information of Party Identification and Policy Positions

average, issues characterized by higher levels of consensus in the electorate tend to have lower importance, whereas those generating more disagreement tend to hold greater significance. Variations in the HHI predict less than 13% of the variations in issue importance. The correlation's moderate intensity was expected, given that there is much more variation in issue importance relative to the HHI.

A strong positive correlation exists between our measures of issue importance and the MI of Party Identification and Policy Positions. This implies that, on average, issues over which voters' positions are more polarized along partisan lines hold greater importance in their electoral choices compared to issues where attitudes are similarly distributed across parties. Variations in the MI of Party Identification and Policy Positions predict approximately 34% of the variations in issue importance, which is more than twice the HHI's predictive power.

The MI of Party Identification and Policy Positions demonstrates a better ability to predict issue importance than the HHI. Therefore, the MI emerges as the most relevant measure of polarization when assessing the relationship between issue importance and polarization. This finding is noteworthy. The reason is that even in an experimental setup where participants are primed to disregard candidates' partisan affiliations and focus solely on candidates' policy positions, the weight they attribute to policy issues still appears to be influenced by the extent to which policy attitudes are divided along partisan lines.

One could argue that, in that context, it is improbable for voters to adjust the weight they assign to different policy issues based on the level of disagreement between political parties. Accordingly, it is more plausible to interpret this finding as evidence that the correlation between issue importance and polarization stems from partisan sorting — a phenomenon in which voters align their party allegiance with their positions on important issues — rather than voters internalizing the level of partisan polarization around policy matters and assigning more weight to highly polarized issues when making choices. To phrase it differently, it seems that issue importance precedes political polarization. However, it is also possible that our findings merely mirror the fact that partisan distinctions are deeply ingrained in voters' minds. In all cases, conclusively establishing a causal relationship between issue importance and polarization proves impossible, given our inability to exogenously manipulate the weight of issues in voters' electoral choices and their levels of polarization.

We want to emphasize the crucial role that our innovative measurement approach plays in assessing the relationship between issue importance and polarization. The Online Appendix contains Figure S9, which illustrates the correlation between the absolute value of the effect of candidates' raw policy positions on their likelihood of being chosen and our measures of polarization. The observed relationship diametrically contradicts our theoretical expectations and the results we derived. Contrary to our projections, highly polarized issues seem to carry a reduced



weight on voters' electoral choices. We contend that this outcome does not accurately reflect the correlation between issue importance and polarization. Instead, it reflects the limitations of the naive measurement approach we extensively discussed above. In particular, the result appears to be a byproduct of how the effect of candidates' policy positions aggregates voters' preferences. Recall that the average impact of candidates' policy positions is calculated by summing up various effects conditional on voters' preferred positions, which have different signs depending on whether voters support or oppose the corresponding proposal. This averaging process leads to the dilution of the effect of candidates' positions. When the distribution of voters' policy positions is more polarized, the average impact tends to converge toward zero, resulting in a diminished absolute value.

## Conclusion

This paper offers a dual contribution. Firstly, we formulate a novel approach for measuring issue importance. Most of our effort was devoted to defining the causal conception of issue importance within the potential outcomes framework, a task that had not been undertaken before. This allows us to underscore the shortcomings of previous measurement approaches in capturing this concept and emphasize the need for meticulously designed experiments to measure it accurately.

We implemented our approach on a nationally representative panel of 2,109 registered voters, who were interviewed immediately after the 2022 Congressional midterm elections. Participants were presented with two sets of questions. The first set sought their opinion on 19 proposals covering 15 policy areas. The second set consisted of six conjoint questions in which participants had to choose between two hypothetical candidates whose policy platforms were randomly generated. This task closely emulates the choices voters encounter in actual elections. This lends substantial credibility to the resulting estimates. Through rigorous analysis of this experimental data, we estimate the causal effect of agreeing with a candidate's policy positions on voters' probability of selecting them.

Secondly, leveraging the estimates of issue importance we derived, we explore the relationship between issue importance and the degree of political polarization surrounding policy issues. Although there are several reasons to believe that polarized issues play a substantial role in voters' electoral choices, no empirical effort has been made to explore this relationship before this study. One likely explanation for the lack of research in this domain is the limited availability of reliable methods to measure issue importance until now.

We consider two distinct notions of political polarization: policy and partisan polarization. A robust statistical correlation exists between issue importance and both conceptions of political polarization. Yet, an important find-

ing from our analysis is that partisan polarization emerges as the most relevant form of polarization in the context of the relationship between issue importance and political polarization. This observation is noteworthy and somewhat surprising, as our experimental design deliberately encouraged participants to disregard candidates' partisan affiliations.

We do not assert a causal relationship between issue importance and political polarization. In particular, the direction of causality remains uncertain. It is plausible that political polarization might lead to an escalation in issue importance, or heightened issue importance could contribute to polarization. Both phenomena likely coexist. Given the impossibility of exogenously manipulating issue importance or polarization, we cannot assess the causal relationship between these two variables.

In conclusion, we advocate for further research to assess heterogeneity in issue importance among voters. Variations can arise between groups over which policies to enact and the prominence they attribute to issues (Lauderdale and Blumenau 2023). As a result, voters may place varying degrees of importance on issues in their electoral choices. However, assessing this heterogeneity using our current measurement approach poses a notable challenge because we lack the statistical power to measure them accurately, as illustrated in Figure S13 (see Online Appendix). Although there are variations between partisan groups that could be considered substantial in magnitude, only a few of these differences reach statistical significance. The only statistically significant difference in issue importance is observed between Democrats and Republicans on Education and the Minimum Wage. The multi-dimensional nature of the treatments means that each conjoint question only considers two out of the 19 policy proposals presented. Consequently, a specific issue is examined only a few thousand times (approximately 2,600). This limited number of observations is insufficient to accurately assess the variations in issue importance in subsets of the electorate.

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