

Upward Representation Bias: How Voters Sustain Political Inequality*

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Abstract

Inequality in representation is linked to inequality in participation, where social groups with low turnout levels in elections tend to be underrepresented in decision-making bodies. Equality in participation has thus rightfully been identified in the literature as a pivotal concern to achieve equality in representation. We show here, however, that equal participation is an insufficient condition due to what we label as the upward representation bias: citizens of lower socioeconomic status tend to want politicians of higher socioeconomic status, even if the citizens know their political views will be less represented. We demonstrate this phenomenon using a candidate choice experiment fielded in probability-based surveys in France, Germany, Iceland, The Netherlands, Norway, and Sweden (N=17,964). This type of voter bias reinforces existing inequalities, even under equal participation.

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1 Introduction

Why are different social groups unequally represented in politics? In this paper, we identify a new source of political inequality, which we label upward representation bias. Citizens do not always prefer candidates that are closest to their own political views. The upward representation bias occurs when citizens of lower socioeconomic status choose candidates with higher socioeconomic status, despite not sharing their political views. This bias can thus reinforce existing inequalities, even under equal participation, challenging the process of democratic representation.

Unequal substantive representation has been thought to emerge on the basis of gender (e.g. Bratton and Ray 2002), race or ethnicity (e.g. Gay 2002), income (e.g. Gilens 2012), age (e.g. Kissau, Lutz, and Rosset 2012), and class (e.g. Carnes 2012). One key elite explanation for this inequality is a lack of descriptive representation: when legislators do not reflect the various relevant groups in society proportionally (approximately), some groups are underrepresented substantively (e.g. Homola 2017; Mansbridge 1999). Indeed, representatives' social backgrounds cause considerable bias in their legislative and communication behavior (Butler 2014; Costa 2017). In particular, Carnes and Lupu (2015) find that the underrepresentation of the working class in legislatures matters for the substantive representation of their interests. In a separate study (Carnes and Lupu 2016), however, they show that this underrepresentation does not necessarily occur because citizens are unwilling to elect representatives from lower social classes.

Still, even though people might be willing to elect representatives from various classes, legislatures may not reflect citizens' wishes equally. The main citizen explanation of unequal representation is unequal political participation (Leighley and Oser 2018; Peters and Ensink 2015) because politically inactive citizens are likely to have different political needs and preferences than politically active ones (Gallego 2014). Consequently, when citizens vote like-minded legislators into office, their preferences are also represented in policy making, whereas the preferences of non-voters are not (Griffin and Newman 2005). Because participation is not random (Schlozman, Verba, and Brady 2012), systematic biases exist in terms of who is elected.

Thus, equalizing participation results in equal representation only when we assume that

citizens choose the candidates they feel mostly closely match their political views. However, this assumption has remained untested until now. To evaluate this assumption, we need a direct measure of voters' perception of their closeness to a given representative in terms of political views as well as voters' desire to elect that representative. We use a candidate choice conjoint experiment, which is particularly well suited to provide such measure. The experiment allows us to isolate different motivations of vote choice, holding many other sources of inequality constant.

Focusing on the representation of socioeconomic groups, we find that voters prefer highly educated, middle or working class candidates over less educated and upper class candidates. More importantly, and extending the existing literature, our experimental design allows us to identify that low socioeconomic status voters tend to elect high socioeconomic status candidates beyond what their own perception of policy closeness to these candidates of a different status would predict.

2 Research Design

We presented subjects with two different candidates, each with a set of fully randomized attributes, in a conjoint experiment (see Hainmueller, Hopkins, and Yamamoto 2014). In a between-subjects design, subjects were asked to either (1) pick the candidate they feel the closest to in terms of political views or (2) pick the candidate they would vote for. We refer to the former as the *closeness* treatment and the latter as the *voteChoice* treatment. This setup enables the estimation of differences between voters' perceived closeness to a candidate, given the candidate's attributes, and their inclination to vote for that candidate. A mock-up of the experimental design with an English translation is shown in Figure 1.

2.1 Sample

The experiment was fielded between May 1st, 2017 and January 10th, 2018 in probability-based survey panels in France (N=2,373), Germany (N=2,651), Iceland (N=1,742), the Netherlands (N=5,332), Norway (N=2,547), and Sweden (N=2,365), for a total of 17,010 subjects. The data

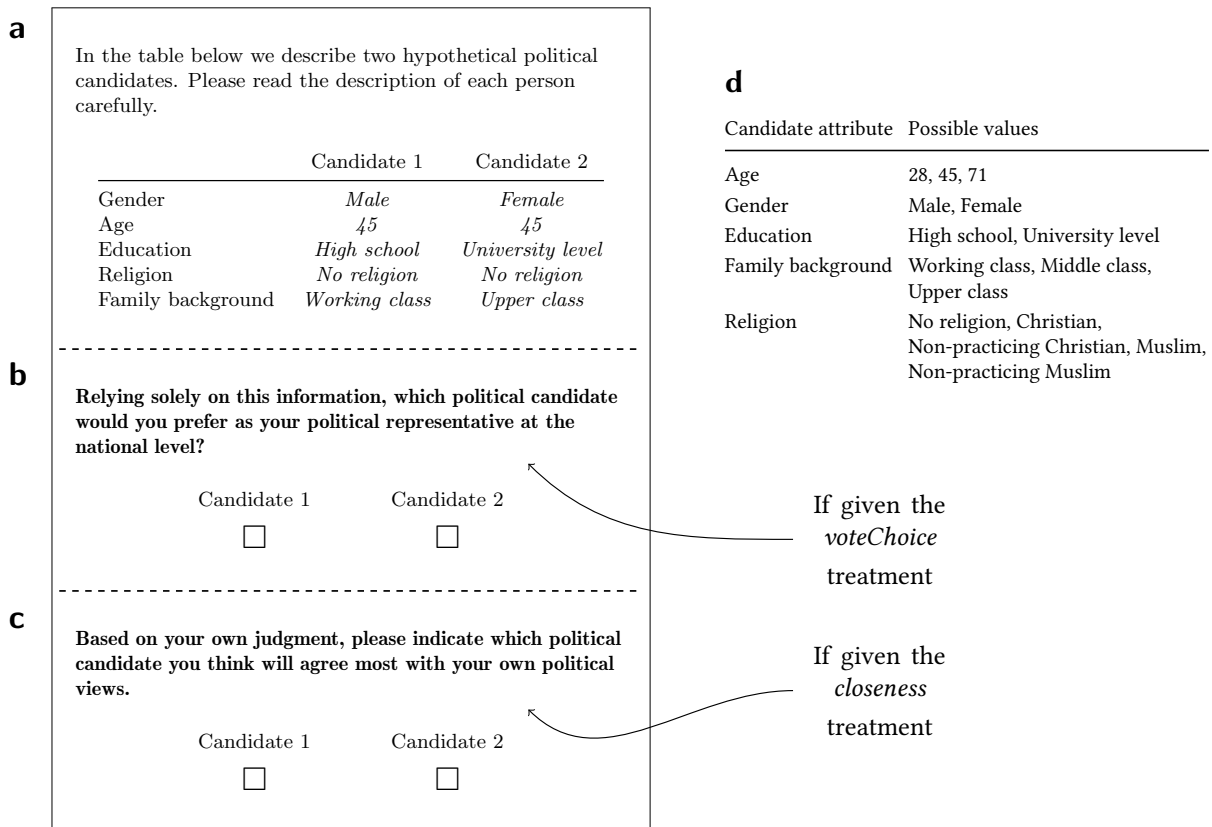


Figure 1: The experimental design.

Note: This figure illustrates the experimental design. The box on left shows an English mock-up of the experiment as seen by the subjects. (a) shows the vignette shown to all subjects, where the candidate attributes, as well as their order in the table, are randomized; (b) is the question if given the *voteChoice* treatment and (c) is the question if given the *closeness* treatment. The table on the right (d) shows the candidate attributes and attribute values (comma separated) used to generate the candidates.

collection was conducted as part of the 2017 European Internet Panel Study (EIPS, Das et al. (2017)). EIPS is a unique collaboration between gold-standard survey panels, where the entire population in each country has an equal and known probability of being invited.¹

2.2 Randomized candidate attributes

To isolate the effect of candidates' social characteristics on vote choice, we simulate a decision between two candidates with similar policy profiles but differing social characteristics. Therefore, we show only candidates' age, education, gender, religious affiliation, and family background (class). Employing experimental designs similar to ours, others also have studied candidate choice in a manner that do not directly mimic the real-world election situations of

¹See detailed information on each panel in Section A of the appendix.

the countries under investigation but successfully tease out citizens' preferences for particular candidate characteristics (Horiuchi, Smith, and Yamamoto 2017; Kirkland and Coppock 2017). Franchino and Zucchini (2015) further argue for the exclusion of party labels, as implemented in our study as well, because participants' opinions of a given party may either be correlated with existing attributes of candidates or be proxies for attributes that are omitted.

3 Theoretical Framework and Empirical Strategy

To guide our analysis and interpretation of results, we provide a simple voting model and discussion of our empirical strategy. The point of departure is the proximity model, where voter i derives utility from choosing candidate j that is a function of the difference between the voter's own preferred policy π_i and the candidate's policy platform. Voters often are not perfectly informed about the policy platform or it is unclear whether the candidate will implement the campaign platform once in office. In such cases, voters may infer which policy will finally be implemented from candidates' social characteristics (Arnesen, Duell, and Johannesson 2019). Thus, we extend the standard proximity model by voters' belief about candidate j 's platform, $\phi_j(k_j)$, that is a function of j 's social characteristic k_j . Candidate j is either of low (l) or high socioeconomic status (h), that is, $k_j = K \in \{l, h\} \forall j$. Voters' utility derived from policy closeness becomes

$$d_{ij}(k_j) = -(\pi_i - \phi_j(k_j))^2 \quad (1)$$

Voters also prefer candidates with particular social characteristics independent of their policy stances (Coppock, Hunt, and Schwarz 2018; Campbell and Cowley 2014; Sanbonmatsu 2002), those with characteristics associated with competence, quality, or effectiveness (Schaffner, Streb, and Wright 2001; Lim and Snyder Jr 2015). Adding such utility component, $v(k_j)$, representing voters' candidate evaluation informed by candidates' social characteristics not related to candidates' policy platform, results in the following expression of voters' overall utility:

$$u_{ij} = \theta^D d_{ij}(k_j) + \theta^V v_{ij}(k_j) \quad (2)$$

where θ^D and θ^V are the weights i places on perceived policy closeness and on other qualities related to candidate j 's social characteristic k_j , respectively.

An empirical population model of i 's vote preference over candidate j , y_{ij} , follows accordingly:

$$y_{ij} = b^0 + b^D d_{ij}(k_j) + b^V v_{ij}(k_j) + e_{ij} \quad (3)$$

where b^D and b^V are the empirical parameter analogues to θ^D and θ^V , respectively.² In this study, however, we aim to estimate b^D and b^V independently of observing $d_{ij}(k_j)$ and $v_{ij}(k_j)$ directly because these quantities, as argued above, may be unknown to voters or not truthfully reported by candidates. Instead, we assume voters learn candidates' social characteristics only. The estimated model of voters i 's preferences over candidate j becomes

$$\hat{y}_{ij} = \beta^0 + \beta I^K + \epsilon_{ij} \quad (4)$$

where $I^K = 1$ if $k_j = K$ and 0 otherwise and $\beta = \beta^D + \beta^V$.

In the experiment, we present respondents with candidate characteristics k_j and ask whether they think a candidate is close to them in terms of political preferences. *Additionally*, we ask whether respondents would vote for the candidate given the candidate's social characteristics. In this way, we estimate, separately, voter i 's assessment of candidate closeness

$$\hat{y}_{ij}^{closeness} = \beta^0 + \beta^D I^K + \epsilon_{ij} \quad (5)$$

and i 's vote choice as a function of the realization of k_j

$$\hat{y}_{ij}^{voteChoice} = \beta^0 + \beta I^K + \epsilon_{ij} \quad (6)$$

By subtracting equation (5) from (6), that is, $\hat{y}_{ij}^{closeness}$ from $\hat{y}_{ij}^{voteChoice}$, we obtain $\beta^V = \beta - \beta^D$.

Substantive representation of voter i is achieved by electing candidate j when $d_{ij}(k_j)$ is close to zero. If $d_{ij}(k_j)$ is substantially larger than zero, voters prefer to elect a candidate with

²We are suggesting a linear link function here; others are certainly conceivable but we do not assess them in this study. When $b^D + b^V < 1$, any estimate of b^V will be an upper bound.

characteristic $k_j = K$ not just because of the perceived policy closeness of the candidate but the utility derived from other factors inferred from $k_j = K$. We can formulate this claim within the context of our empirical model: (i) when $\beta^V > 0$, voters prefer a candidate characterized by $k_j = K$ more than voters' perceived policy distance to that candidate would predict; (ii) when $\beta^V < 0$, voters prefer such a candidate less than voters' perceived policy distance to that candidate would predict.

Linking voters' social characteristics, $k_i = K \in \{h, l\} \forall i$, to the estimate β^V provides insight into *one* important driver of inequality in representation. The group of voters characterized by $k_i = K$ may vote for the candidate with $k_j \neq K$, even though those voters do not perceive that candidate to be closest to them in terms of policy preferences. When such voters, on the aggregate, deviate from voting for the closest candidate to voting for the candidate with $k_j \neq K$, then $\beta^V > 0$. In other words, voters are more likely to vote for such a candidate beyond what would be predicted by how close they feel to the candidate in terms of political views.

When $k_j = h$ and $k_i = l$, we characterize behavior associated with $\beta^V > 0$ as *upward representation bias*: voters of low socioeconomic status prefer a candidate of high socioeconomic status beyond their support for that candidate predicted by closeness in policy preference.

Equivalently, when $k_j = l$ and $k_i = h$, the preference of high socioeconomic status voters for a low socioeconomic status candidate is larger than voters' assessment of policy closeness would predict; we refer to such a pattern as *downward representation bias*.

Our hypotheses follow accordingly:

Hypothesis 1 *Voters prefer to elect candidates who they believe are close to themselves in terms of political views ($\beta^V = 0$).*

Rejecting Hypothesis 1 implies significant deviations in vote choice from those candidates voters consider to be closest in policy preferences given the candidates' social characteristic; that is, we find *representation bias* ($\beta^V \neq 0$). The direction of bias – upwards or downwards – depends on where voters and candidates are positioned relative to each other in the societal structure defined by low and high socioeconomic status. If such a bias exists, inequality in representation may exist.

Quantifying the extent and direction of bias, we specifically test the following claim:

Hypothesis 2 *Voters of low socioeconomic status do not prefer high socioeconomic status beyond what is predicted by voters' assessment of candidates' policy closeness ($\beta^V = 0$ when $k_i = l$ and $k_j = h$).*

Should we reject hypothesis 2, and find $\beta^V > 0$ when $k_i = l$ and $k_j = h$ instead, inequality in representation may prevail to the disadvantage of low socioeconomic status voters.³

Our conjoint experimental design allows us to identify the level of the feeling of closeness and vote preference over candidates by social characteristics contained in the candidate profiles. Specifically, we estimate the marginal means of each attribute level, that is, the favorability toward a particular candidate profile characterized by a particular attribute level, marginalizing over all other attributes. The difference in favorability towards a candidate of low socioeconomic status ($k_j = l$) and one of high socioeconomic status ($k_j = h$) in the *closeness* treatment corresponds to β^D . The difference in favorability between those two profiles in the *voteChoice* treatment is our estimate of β . Finally, our estimate of β^V is $\beta - \beta^D$, that is, the difference across treatment groups (*voteChoice* vs *closeness* treatment) in the difference in favorability towards low vs high socioeconomic status candidates. We operationalize the socioeconomic status of candidates by their level of education (high school or university level) as well as their class (working, middle, or upper class). Voters' socioeconomic status is represented by their level of education and level of income.⁴

4 Results

We begin by evaluating which of the given candidate social characteristics drive respondents' choices in *closeness* and *voteChoice* treatments. Figure 2 shows the marginal means of all levels of education and class attributes on the two outcome measures pooled across countries.⁵

We find that respondents see themselves to be close in terms of political views and prefer

³We registered hypotheses 1 and 2 in a pre-analysis plan, on a hold-out sample consisting of observations collected in France and Germany, with EGAP [further pre-registration information blinded for peer-review].

⁴See Sections C.1 and C.2 in the appendix for an evaluation of the validity of the random assignment of attribute and of the treatment balance. The EIPS does not contain a class identifier of respondents for all countries.

⁵We present and discuss the results for the full set of social characteristics (age, gender, education, religion, and class) in Figure B.1 and for all countries in the sample in Figure B.2 in the appendix. Given that the number of observation varies across country, we show that the treatment effects estimates are robust to including country weights in Section C.4 of the appendix.

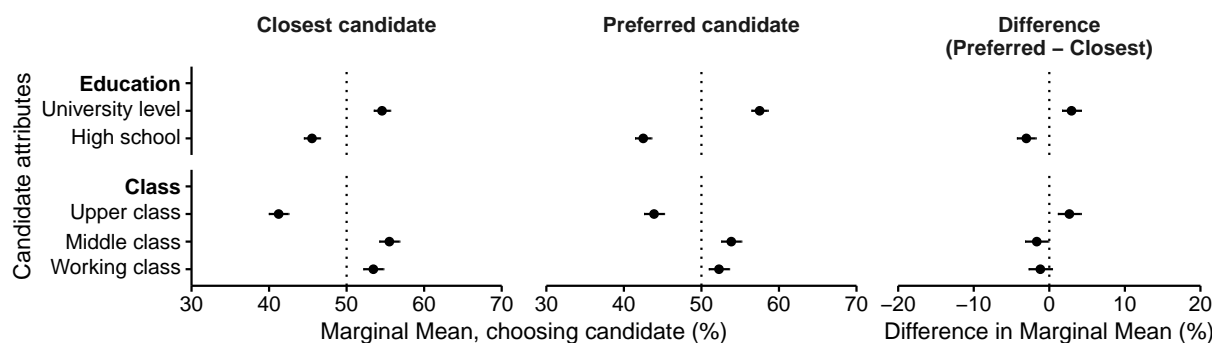


Figure 2: Marginal means of *closeness* and *voteChoice* and the difference between them for different candidate education and class attribute levels.

university-educated candidates who are not upper class. The left and middle panels of Figure 2 show that the marginal mean for highly educated candidates is significantly larger than the marginal mean for high-school educated candidates in both treatments. Furthermore, the marginal means associated with the attribute levels middle class and working class are significantly larger than the one associated with upper class. Again, this result holds for both outcome measures: feeling close to a candidate politically and vote preference.

Most noteworthy, however, is that voters want to be represented by a university-educated candidate and an upper class candidate much more than they see that candidate as being close to their own political views ($p < .01$), while that is not the case for less educated candidates or candidates who are working or middle class. This result becomes evident when looking at the difference between the marginal means associated with university-level education and upper class in the *voteChoice* and *closeness* treatments (see right-most panel of Figure 2).

We summarize this finding of our test of Hypothesis 1 in Result 1:

Result 1 *Voters elect candidates who they do not perceive as close to them in terms of political views*

In other words, we find *representation bias*. Voters, on average, prefer to vote for higher socioeconomic status candidates beyond the predicted level of electoral support given voters' assessment of candidates' policy closeness. This interpretation of the patterns of our results is robust across countries in our study (See Figure B.2 in the appendix). For clarity of exposition, the above presentation omits the marginal means associated with the attributes age, gender, and religion. We find that voters feel closer to and are more likely to prefer to vote for

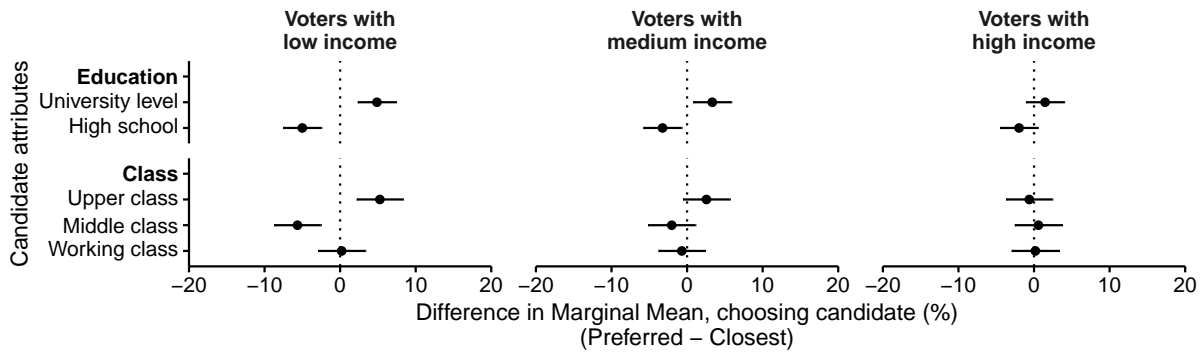


Figure 3: Difference in marginal mean between the *closeness* and *voteChoice* conditions for voters with low, medium, and high income.

Note: We use self-reported income. The categories low, medium, and high refer to income tertiles; See Table B.2 in the appendix. Also note that respondents in Germany are excluded due to the absence of income data.

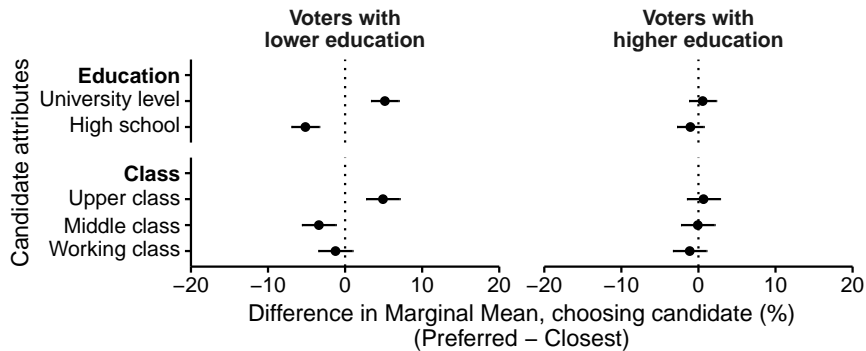


Figure 4: Difference in marginal mean between the *closeness* and *voteChoice* conditions for voters with lower and higher education.

Note: We use self-reported education. Subjects are coded as having higher education if they are on level 6 or higher on the 2011 ISCED scale, i.e., bachelor equivalent or higher. Otherwise, subjects are coded as having lower education. See Table B.3 in the appendix.

middle-aged candidates than younger or older candidates, female than male candidates, and less religious than religious candidates (See Figure B.1 in the appendix).

In testing Hypothesis 2, we find that the pattern described in Result 1 is entirely driven by low socioeconomic status voters. Figure 3 displays the difference between the *voteChoice* and *closeness* treatments in terms of marginal means, that is, our estimate of β^V of the education and class attribute levels for low, middle, and high income voters. The treatment effect is decreasing in income. The difference in vote preference for and perceived political closeness of university-educated and upper class candidates is not significant for high income voters but it is for low income voters ($p < .01$).

We find a similar upward representation bias for less-educated voters. The difference in

voteChoice vs *closeness* for voters with low education is again positive and significant for university-educated and upper class candidates ($p < .01$) while it is not for more educated voters (See Figure 4).

Result 2 *Low socioeconomic status voters prefer university-educated and upper class candidates to a larger extent than expected given voters' perception of which candidate is politically closest to them.*

In other words, we find an upward representation bias.

5 Discussion and Conclusion

Our results suggest the existence of an upward representation bias among voters. This bias can reinforce existing socioeconomic-status-based inequalities, even under equal participation.

We argued that if equal political participation is to lead to equal representation, citizens would need to choose candidates that they believe represent their political views. Using a joint experiment, we have tested this assumption by presenting a representative sample of the electorate in six countries with two separate questions: Given a set of candidate characteristics, which candidate is seen as closest to their own political preferences *and* which candidate is the preferred representative. While voters prefer the candidate they perceive as closest to their own political views in many cases, we find a discrepancy in the preference for higher educated candidates by voters without higher education. Even though citizens are willing to elect candidates with lower education and those from a lower class (Carnes and Lupu 2016), there tends to be a discrepancy between the candidate people think represents them and the candidate that they prefer. This bias is asymmetrical, as lower educated voters are not more likely to prefer higher educated candidates. Moreover, voters prefer upper class candidates despite understanding that they may not be close to them in terms of political views.

What mechanisms can explain the emergence of such patterns? While our design does not allow us to examine this question empirically, various explanations come to mind. As mentioned above, it has been argued that voters prefer candidates with social characteristics that are associated with personal traits such as competence, quality, or effectiveness. Lower edu-

cated voters face a trade-off in their candidate choice decision: choosing between a candidate that is close in terms of political views or a candidate with desirable social attributes. Another possible explanation for the upward representation bias is that voters' stated candidate preferences mirror what they believe a politician *should* be like and what social characteristics correspond with that idea. Such instantiation of an availability bias clearly disadvantages candidates of low socioeconomic status given the historic underrepresentation of candidates from such groups in positions of political power (e.g. Best 2007).

On the flip-side of this argument, one could wonder why citizens would prefer politicians without higher education and the answer is better representation. Scholars have shown that the preferences of higher and lower educated voters are different, and that this difference should be reflected in a representative body (Hakhverdian 2015). Perceived legitimacy is said to increase when the composition of decision-making bodies reflects that of the overall society (Arnesen and Peters 2018; Clayton, O'Brien, and Piscopo 2019). Political decision makers already tend to be more responsive to the policy preferences of highly educated, politically active, and affluent citizens (Bartels 2016), driving policies to better match the preferences of the higher educated. Indeed, education has been identified as a rising division in Western democracies (Kriesi et al. 2006; Stubager 2010).

The consequences of the upward representation bias are likely to reinforce existing inequalities in representation, where underrepresented voters disregard candidates who share their own background in exchange for candidates with social backgrounds that are already politically represented to a disproportionately high degree. In light of this study and the populist gains and anti-elitist sentiments we currently observe in our sample countries and elsewhere, the upward representation bias comes across as a case where underrepresented voters are feeding the mouth that bites them.

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