UNEQUAL DEMOCRACIES

Working paper n°1

May, 2018

Descriptive Misrepresentation by Social Class: Do Voter Preferences Matter?

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European Research Council
Established by the European Commission

UNIVERSITÉ DE GENÈVE

ABSTRACT:

This paper presents the results of a conjoint survey experiment in which Swiss citizens were asked to choose among parliamentary candidates distinguished by occupation, education, and income. Existing survey-experimental literature on this topic suggests that voters are indifferent to the class profiles of candidates or biased against candidates with high-status occupations and incomes. We find that the bias against upper middle-class candidates holds only for citizens in the lower half of the education/income distribution and that all voters are biased against routine working-class candidates. We also find that ideological proximity matters greatly to voter preferences for different candidates. Partisan polarization renders the class profile of candidates less salient to voters and might be a source of cross-national variation in descriptive misrepresentation by social class.

ACKNOWLEDGEMENTS:

The survey experiment presented in this paper was financed by the Swiss National Science Foundation (grant no. 100017_166238). Additional write-up support has been provided by the European Research Council (grant agreement no. 741538). Earlier versions of the paper were presented at the Conference of the ECPR Standing Group on Parliaments (2017), the Annual General Conference of the European Political Science Association (2017), the Annual Meeting of the American Political Science Association (2017), the Annual Conference of the Swiss Political Science Association (2018), and the Unequal Democracies Seminar at the University of Geneva (2018). A pre-analysis plan for the survey experiment was presented to a workshop held at the University of Zurich in 2017. For detailed comments on the pre-analysis plan and previous drafts, we are most grateful to Nathalie Giger, Dominik Hangartner, Enrique Hernández, Simon Hug, Marcello Jenny, Josh Kalla, Simon Lanz, Lucas Leemann, Noam Lupu, Tamaki Ohmura, and Jan Rosset. In addition, we thank Giacomo Benini, Fabio Cappelletti, Fabien Cottier, Federico Ferrara, Julien Jaquet, and Jasmine Lorenzini for help with translating the survey instrument into French and Italian.

The topic of descriptive misrepresentation by social class has recently attracted the interest of many students of American as well as comparative politics. Scholars of the United States Congress have documented that, by virtually any measure of socio-economic status, congressmen are vastly better off than most American citizens (Matthews 1954; Domhoff 2006; Carnes 2012, 2013). According to data compiled by the Center for Responsive Politics, the median net worth of members of Congress was more than one million dollars in 2015.[1] This is roughly 16 times the median net worth of American households (Balance 2017). Comparative studies suggest that descriptive misrepresentation by income and class is a pervasive feature of contemporary democracies (Blondel 1973; Matthews 1984; Best and Cotta 2000; Best 2007; Carnes and Lupu 2015). Two questions immediately arise. First, does it matter that elected representatives are better off than the citizenry at large? And, second, why is it that democratic elections commonly generate such discrepancies between representatives and citizens?

A growing literature documents that government policy in the US and elsewhere is particularly responsive to the preferences and interests of affluent citizens (Bartels 2008; Hacker and Pierson 2010; Gilens 2012; Elsässer, Hense and Schäfer 2018). Several studies provide evidence that this bias in substantive representation is due, at least in part, to the socio-economic backgrounds of elected politicians. For the US Congress, Carnes (2012) shows that legislators from white-collar backgrounds vote more conservatively on economic issues than legislators from working-class backgrounds. Focusing on the congressional battle over the federal estate tax in 2005-2006, Griffin and Anewalt-Remsburg (2013) find that wealthy legislators were more likely to co-sponsor and vote for bills seeking to repeal or reduce the estate tax. A similar pattern emerges in comparative research on class differences in legislators' attitudes and behavior. Carnes and Lupu (2015) show, based on data for 18 Latin American democracies, that white-collar legislators have more conservative attitudes on economic issues than working-class legislators and, based on data for Argentina, that the former are also more likely than the latter to co-sponsor bills that are economically conservative. Besides legislators' personal preferences, differences in information might be a source of bias in substantive representation. As argued by Butler (2014), legislators have an incentive to focus on issues about which they have prior knowledge and per-

[1] https://www.opensecrets.org/personal-finances/top-net-worth (last accessed March 18, 2018).

sonal backgrounds are an important source of such knowledge. This implies that if less affluent citizens are descriptively underrepresented in parliament, the issues that they care about are unlikely to receive the same time and attention as the issues that are important to affluent citizens.

We proceed on the assumption that descriptive misrepresentation by income and class matters to legislative processes and outputs. Our goal in this article is to advance the literature that seeks to answer the second of the above questions, viz., why it is that elections consistently produce parliaments that are dominated by representatives who are better off than most citizens. A simple answer to this question would be that citizens prefer to be represented by the well-to-do. As prejudice against the less well-off is common (Baron, Albright and Malloy 1995; Cozzarelli, Wilkinson and Tagler 2001), it is reasonable to suppose that many people interpret income and wealth as signs of competence. Moreover, the belief that wealth renders politicians independent of special interests is widespread (McCormack 2005; Steen 2006). However, recent survey-experimental studies call this line of reasoning into question.

Carnes and Lupu (2016) report the results of survey experiments in Argentina, Britain, and the US. In their experiments, respondents were presented with a choice between a "business owner" and a "factory worker" as candidates for local political office. The results suggest that respondents in all three countries are indifferent between the two candidates. Campbell and Cowley (2014*a*) in turn report that, for parliamentary candidates described as either a self-made businessman or an employee of an international finance company, British survey respondents tend to prefer candidates with an average rather than a high income. For the US, Sadin (2015) also reports a bias against high-income candidates relative to candidates with twice the median household income. As argued most forcefully by Carnes and Lupu (2016), these results suggest that the descriptive misrepresentation has to do with the supply of candidates for elected office—the kinds of individuals that aspire to elected office and are selected by parties—rather than voter preferences in favor of candidates with high-status occupations and high incomes.

In this paper, we present and discuss the results of a conjoint survey experiment in which Swiss citizens were asked to choose among parliamentary candidates distinguished by occupation, education, and income (as well as other

characteristics). We seek to go beyond the aforementioned studies by taking into account the effects of all three candidate characteristics.[2] In addition, and more importantly, we explore the effects of "social class" understood as a combination of occupation, education, and income. The setup of our experiment allows us to estimate voter preferences between candidates with the following class profiles: (1) a routine working-class candidate with low income, (2) a skilled working-class candidate with average income, (3) a core middle-class candidate with average income, and (4) an upper middle-class candidate earning three times the average income. To anticipate, we find that Swiss voters are biased against upper middle-class candidates, but also against routine working-class candidates. While the bias against upper middle-class candidates is primarily a bias among respondents with incomes and education levels below the median, the bias against routine working-class candidates is shared by all respondents.

Akin to Carnes and Lupu (2016), our experiment explored the mechanisms behind voter preferences for different candidates by asking survey respondents to rate candidates on competence and ability to understand the concerns of "people like me." Our results indicate that skilled working-class candidates as well as core middle-class candidates enjoy a large "understanding bonus" and suffer only a small "competence penalty" relative to upper middle-class candidates, especially among voters with incomes and education levels below the median. We also find that ideological proximity matters greatly to voter preferences for different candidates and that effects of class profile disappear when voters are presented with candidates at opposite ends of the political spectrum.

The remainder of the article is organized as follows. In Section 1, we present our theoretical framework and motivate the core hypotheses that we set out to test. Section 2 provides background information about the Swiss case and briefly compares descriptive misrepresentation by social class in Switzerland and the US. Section 3 describes the design of the conjoint survey experiment and

[2]Campbell and Cowley's (2014*a*) experiment varies candidate occupation and education in addition to income, but all hypothetical candidates have a university education and a high-skill occupation. Sadin (2015) reports on three other experiments, in addition to the one mentioned above. Two of these experiments presented respondents with information about candidate occupation and education but not income. The third experiment presented respondents with information about candidate wealth, in addition to occupation and education, but the wealth attribute could only take on the value "$19-25 million" (the baseline was no information) and all candidates with a net worth of $19-25 million had the same occupation (CEO of a Wall Street investment firm).

Section 4 presents the results. Finally, our concluding discussion in Section 5 tentatively explores the relevance of our findings for understanding why it is that descriptive misrepresentation by social class is far more pronounced in the US than in Switzerland.

1 Theoretical Framework and Hypotheses

Let us begin by clarifying, as briefly as possible, what we mean by "social class." While the literature on inequality of political representation frequently refers to social classes, it is fair to say, we think, that contributors to this literature use the concept of class somewhat casually and provide only faint indications of their conceptualization of the class structure of contemporary capitalist societies. Class and relative income are often conflated as citizens are sorted into three income groups: the poor, the middle, and the rich (e.g., Giger, Rosset and Bernauer 2012; Gilens 2012). Carnes (2013) and Carnes and Lupu (2015, 2016) emphasize the occupational basis of social classes, but their empirical analyses rely on a simple—arguably too broad—dichotomy between "blue-collar" and "white-collar" occupations.

Our "class schema" represents a simplified version of the class schema proposed by Erikson and Goldthorpe (1992) and modified by Oesch (2006*a*,*b*). It also conforms, loosely, to the class schema proposed by Savage (2015). Drawing on these authors, we propose to distinguish two large classes, the working class and the middle class, which can be subdivided into class segments. In addition, there are two small(er) classes: the upper class (in Savage's terminology, "the elite") and the "petite bourgeoisie" (small businessmen and farmers). While wealth is the main source of income of the upper class, work is the main source of income of the middle class as well as the working class. The middle class, as we conceive it, encompasses self-employed professionals, but the vast majority of the middle class in contemporary societies works for corporations or public employers. Note also that our class schema does not rely on the distinction between production and services. The class composition of employment in these sectors may differ, but there are workers as well as middle-class employees in both sectors. Fundamentally, the middle class is distinguished from the working class by the following cluster of characteristics: educational credentials, opportunities for upward advancement through internal promotion as well as switching employ-

ers, autonomy at work and, finally, house ownership and savings.[3] As each of these characteristics represents a continuum, the case for class analysis hinges on the proposition that these characteristics are combined in ways that generate (cumulative) discontinuities in the distribution of skills and opportunities.

With wealth as the boundary between the middle class and the upper class, the middle class extends well into the 10th decile of the income distribution. On the other hand, the working class and the middle class overlap in the middle of the income distribution (the 5th and 6th deciles). Contrary to popular discourse in the US and elsewhere, the middle class is called the "middle class" not because it (alone) occupies the middle of the income distribution, but because it stands (or sits) between the working class and the upper class. Following Oesch (2006*a*,*b*), we believe that it makes sense to distinguish between routine and skilled workers, with the latter being the segment of the working class that overlaps with the middle class in the middle of the income distribution. Similarly, we propose to distinguish between a lower and an upper segment of the middle class, based on educational credentials, occupational status, and income.[4] We will refer to the former as the "core middle class" and to the latter as the "upper middle class."

Turning now to the question of how the class profile of candidates affects the behavior of voters, this question can (and should) be broken down into two subquestions. First, to what extent and under what circumstances do voters rely on class attributes to evaluate and ultimately choose among the candidates on offer? Second, if voters do take class into account, how does it affect their evaluation and choice of candidates? Democratic elections typically present voters with a simultaneous choice among parties, candidates, and policies associated with parties and candidates (Blais 2013). Canonical models of voting behavior emphasize different elements of voters' choice set. The "Michigan model" emphasizes the importance of voters' identification with political parties. Voters form their political attitudes and cast their votes primarily on the basis of long-standing partisan loyalties, with candidate characteristics and policy positions playing, at best, a secondary role (Campbell et al. 1960). Rational choice approaches, on the other

[3]Savage's (2015) class schema also takes into account cultural and social capital. Related to this, Savage suggests that the "precariat" should be seen as a separate class rather than a segment of the working class.

[4]By contrast, Oesch (2006*a*) relies on "work logics" to distinguish different segments of the working class and the middle class. We chose not to incorporate this dimension into our study for pragmatic reasons.

hand, emphasize the importance of policies and policy outcomes. In spatial voting models, reelection-seeking parties (or candidates) choose policy positions so as to maximize their expected vote share and voters choose parties (candidates) on the basis of ideological proximity (Downs 1957; Davis, Hinich and Ordeshook 1970). In retrospective voting models, voters make decisions based on events and outcomes that are, at least loosely, related to government policy (such as economic performance) as these inform their evaluations of incumbent parties' and candidates' competence in office (Key 1966; Fiorina 1981).

Though candidate characteristics such as social class do not feature prominently in these canonical models of voting behavior, a number of empirical studies have sought to determine whether and under what conditions the personal characteristics of candidates or party leaders affect voters' decision-making (Butler and Stokes 1974; Miller and Shanks 1996; Cutler 2002; King 2002; Hayes 2009; Aarts, Blais and Schmitt 2013). According to these studies, the effects of candidate characteristics tend to be small relative to party identification, policy preferences, and evaluations of how competing parties and candidates have performed in office, but contextual factors condition the effects of candidate characteristics. Aarts, Blais and Schmitt (2013) show that candidates' personal characteristics are more important in plurality/majoritarian electoral systems than in closed-list proportional representation (PR) systems and in elections that are characterized by low party polarization. The most obvious explanation for these findings is that plurality/majoritarian systems are more candidate-centered than closed-list PR systems (Bawn and Thies 2003) and that voters evaluate and choose candidates based on personal characteristics when they cannot differentiate them based on information about policy positions (Popkin 1991; Green and Hobolt 2008).

When voters do base their candidate evaluations and choices on personal characteristics, how do these characteristics affect their decision-making? Work in social psychology has shown that people evaluate individuals and groups along two primary dimensions: warmth and competence (Fiske et al. 2002; Fiske, Cuddy and Glick 2007; Russell and Fiske 2008). In the words of Fiske et al. (2002, 879),

> [w]hen people meet others as individuals or group members, they want to know what the other's goals will be vis à vis the self or ingroup and how effectively the other will pursue those goals. That is, perceivers want to know the other's intent (positive or negative) and

capability; these characteristics correspond to perceptions of warmth and competence, respectively.

Perceptions of warmth and competence are determined by structural features of interpersonal and intergroup relationships. Individuals and groups are perceived as relatively warm to the extent that their goals are compatible with those of the perceiver and as relatively cold to the extent that their goals are incompatible or competing with those of the perceiver. On the other hand, individuals and groups are perceived as more competent to the extent that they are powerful and have high socio-economic status and as less competent to the extent that they are powerless and have low socio-economic status (Fiske et al. 2002, 881). The reason for the latter relationship may be what Gilbert and Malone (1995) refer to as a "correspondence bias" and Ross (1977) calls a "fundamental attribution error," i.e., the tendency to draw inferences about a person's dispositions from outcomes that can be explained by structural and situational factors. A correspondence bias leads people to assume that high-status individuals are personally responsible for their success and low-status individuals are to blame for their circumstances (Forgas, Morris and Furnham 1982; Kluegel and Smith 1986; Smith and Stone 1989).

Studies reported by Fiske et al. (2002) show that the rich are perceived as highly competent but not warm, possibly because they are assumed to use their control over resources to further their own interests. Commonly considered "parasites" who are unable to succeed on their own, the poor—welfare recipients in particular—are perceived as neither warm nor competent. In contrast, the "middle class" is consistently viewed as both warm and competent.

Research in political science suggests that people rely on warmth and competence not only when evaluating ordinary people in everyday life, but also when assessing political candidates (Miller and Miller 1976; Markus 1982; Kinder 1986; Rahn et al. 1990; Stewart and Clarke 1992; McCurley and Mondak 1995; Funk 1996*a*,*b*, 1999). Further evidence for the saliency of warmth and competence in people's candidate evaluations comes from the way (re)election-seeking politicians behave. Fenno (1978, 56-60) finds that in order to build and maintain constituent trust, candidates for the US House of Representatives make an effort to present themselves as competent for the job and caring about the problems of their constituents. Politicians seem to think that voters respond favorably to

competence and warmth-related qualities. Our expectation is that voters favor candidates with a socio-economic status high enough so that they perceive them as competent but not so high that they deem them cold or, in other words, out of touch. In terms of class position, these "favored" candidates include skilled workers as well as core middle-class employees. Compared to these candidates, we expect candidates from the routine working class to be perceived as similarly warm but less competent and candidates from the upper middle class as similarly competent but less warm. Hence our first hypothesis:

Hypothesis 1. *On average, citizens prefer skilled working-class and core middle-class candidates over routine working-class and upper middle-class candidates.*

Note that we do not have a prior expectation on whether citizens, on average, prefer routine working-class candidates over upper middle-class candidates (or vice versa). Fiske et al. (2002) show that blue-collar workers are perceived as warmer than the rich, while the rich are seen as more competent. Based on this reasoning, voters' choice between routine working-class and upper middle-class candidates depends on the relative weights that they attach to warmth and competence.

If Hypothesis 1 is true and all citizens are equally likely to vote, then we would expect parliaments to be populated by a mix of skilled working-class and core middle-class members. However, numerous studies have shown that less affluent and less educated citizens are less likely to participate in elections (Wolfinger and Rosenstone 1980; Powell 1986; Blais 2000; Rosenstone and Hansen 2003). One plausible explanation for why upper middle-class candidates often win elections (for the Swiss case, see Table 1 below) is that more affluent and educated citizens—i.e., the citizens most likely to vote—are not biased against such candidates relative to candidates from the skilled working class or the core middle class. As Fiske et al. (2002) emphasize, the extent to which an individual perceives another individual or the members of a group as warm depends on how compatible their goals are. Affluent and educated citizens might have goals that are congruent with the goals of upper middle-class candidates. If this is the case, then these citizens will not perceive upper middle-class candidates as much colder than working-class and core middle-class candidates. Hence our second hypothesis:

Hypothesis 2. *Affluent and educated citizens are not biased against upper middle-class candidates relative to skilled working-class and core middle-class candidates.*

Another explanation for why upper middle-class candidates do well in elections is that parties (or, more generally, "selectors") favor them in the candidate nomination process (Carnes and Lupu 2016). This explanation is plausible so long as voters' bias against upper middle-class candidates is not strong enough to make them vote for a competing party. As suggested above, the effects of candidates' personal characteristics on voters' decisions tend to be small relative to those of party identification and policy preferences, but they may be important in contexts characterized by low party polarization, i.e., when party labels are less informative and competing candidates share similar policy positions. Following this line of reasoning, we would expect the effect of the class attributes of candidates to vary with polarization, across countries and elections. In the context of our survey experiment, we expect class attributes to matter (most) when subjects are presented with candidates who are close to each other on the left-right spectrum. Hence our third hypothesis:

Hypothesis 3. *The importance of class profiles for voters' decision-making declines with the ideological distance between candidates.*

2 The Swiss Case

Some background information about the Swiss case is in order before we present the conjoint experiment that we conducted to test the hypotheses set out above. To begin with, Table 1 presents estimates of the distribution of the economically active population by social class, based on Oesch's (2006*a*) analysis of the Swiss Household Panel Survey of 1999. For this purpose, we have assigned "higher grade managers" and "self-employed professionals" to the upper middle class and "large employers," alone, to the upper class. Wealthy individuals may well be hiding in some other occupational categories. Note also that the population to which these figures refer includes foreign residents and that the class composition of the Swiss electorate is probably somewhat different.

Comparing available data on the occupational background of members of parliament with Oesch's data suggests that descriptive misrepresentation by social class is quite pronounced in the Swiss case. Most strikingly, Pilotti (2015) reports

Table 1: The Class Composition of the Economically Active Population in Switzerland, 1999

	Share (in %)
Upper class	1.1
Petite bourgeoisie	11.3
Upper middle class	12.2
Core middle class	32.8
Skilled working class	19.9
Routine working class	22.7

Note: Adapted from Oesch (2006*a*, 273). Note that the upper middle class includes higher grade managers and self-employed professionals.

that nearly one third of the members of the Swiss parliament were lawyers or entrepreneurs in 2000 and 2010 while large employers and the upper middle class together account for only 13.3% of the economically active population. Pilotti (2015) also reports that the majority of Swiss MPs have a university degree, while university graduates represent only 27% of the Swiss population as a whole.[5]

Based on candidate surveys for the 2007 and 2011 elections to the Swiss parliament (FORS 2009*a*, 2012*a*), Figure 1 shows the total number of candidates and the number of successful candidates by income group. Median gross monthly household income for the Swiss population as a whole was somewhat below CHF 8,000 in 2006-08 and somewhat above CHF 8,000 in 2009-11 (CHF = Swiss francs).[6] The figure shows that most successful candidates had a substantially higher income than the median household, but this is not true for the population of all candidates. Of the 2,883 candidates who reported their income in the 2007 and 2011 candidate surveys, 1,712 reported incomes higher than CHF 8,000 (59.4%). Of 221 successful candidates, 190 had incomes higher than CHF

[5]Source: Labor Force Survey of the Swiss Federal Statistical Office (`https://www.bfs.admin.ch/bfs/de/home/statistiken/bildung-wissenschaft/bildungsstand-kompetenzen/bevoelkerung.assetdetail.2662056.html`, last accessed on January 6, 2018).

[6]Own calculations based on the Household Budget Survey of the Swiss Federal Statistical Office (`https://www.bfs.admin.ch/bfs/de/home/statistiken/kataloge-datenbanken/tabellen.assetdetail.308364.html`, last accessed on January 4, 2018).

8,000 (86.0%). In the Swiss case, then, descriptive misrepresentation appears to emerge primarily in the election phase, not in the candidate selection phase. For our purposes, it is particularly noteworthy that low-income candidates very rarely succeed.[7]

While there is significant descriptive misrepresentation by income in Switzerland, it deserves to be noted that this phenomenon is not nearly as pronounced as it is in the US. Applying Hout's (2004) formula for dealing with open-ended top income categories to the candidate survey data, and assigning candidates to the midpoint of their income category, we estimate that the average household income of successful candidates to the Swiss parliament was 1.6 times as large as the average Swiss household income in both 2007 and 2011.[8] We have not been able to come up with a similar estimate for US congressmen, but the salary received by US congressmen in 2015 ($174,000) alone was 2.2 times as large as the gross income of the average US household and most congressmen receive "outside income" far in excess of their congressional salary (Carnes 2013, 2016).[9] And, as noted at the outset, the median net worth of US congressmen was about 16 times greater than the net worth of the median US household in 2015. We shall return to the question of why descriptive misrepresentation is less pronounced in Switzerland than in the US in the concluding discussion.

Candidates to the lower chamber of the Swiss parliament (National Council) are elected in a system of proportional representation (PR) with open party lists.[10] Parties can favor some candidates over others by putting them higher on

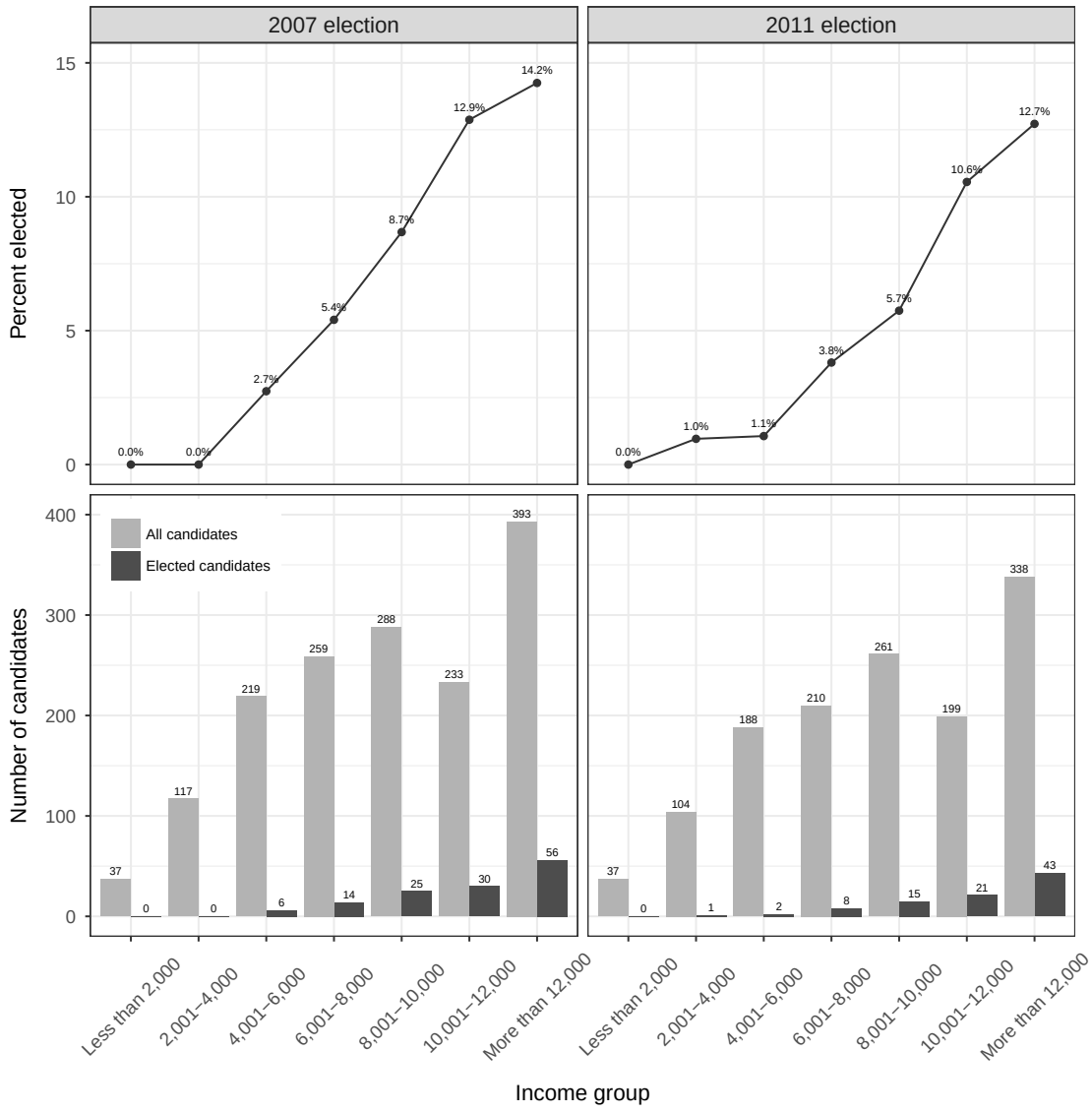
[7] 54.0% of the 3,181 candidates in the 2007 election and 47.3% of the 3,547 candidates in the 2011 election participated in the candidate survey. 10.1% of the 1,719 candidates participating in the 2007 survey and 20.2% of the 1,676 candidates participating in the 2011 survey did not report their household income. Survey or item nonresponse might be more likely among affluent candidates seeking to "hide" their affluence, which would mean that Figure 1 understates descriptive misrepresentation by income. There is no obvious reason why survey or item nonresponse bias would be greater for successful than for unsuccessful candidates.

[8] Source: Household Budget Survey of the Swiss Federal Statistical Office (`https://www.bfs.admin.ch/bfs/de/home/statistiken/wirtschaftliche-soziale-situation-bevoelkerung/einkommen-verbrauch-vermoegen/haushaltsbudget.assetdetail.3865767.html`, last accessed on January 5, 2018).

[9] Source: Current Population Survey of the Bureau of Labor Statistics and the Census Bureau (`https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-hinc/hinc-06.2015.html`, last accessed on January 5, 2018).

[10] Six of the 26 Swiss cantons are represented by a single representative in the National Council. In these cantons, candidates to the National Council are effectively elected by majority vote. Candidates to the upper chamber (Council of States) are elected by majority vote, with the exception of two cantons, where candidates are elected by PR.

Figure 1: Number of Candidates and Electoral Success by Household Income Group for the 2007 and 2011 Elections to the Swiss Parliament



Note: The figure shows the total number of candidates and the number of elected candidates by income group (based on gross monthly household income) for the 2007 and 2011 elections to the Swiss parliament. Income data are missing for 10.1% of the 1,719 candidates who participated in the 2007 survey (out of a total of 3,181 candidates) and for 20.2% of the 1,676 candidates who participated in the 2011 survey (out of a total of 3,547 candidates). Sources: 2007 and 2011 Selects candidate surveys (FORS 2009*a*, 2012*a*).

their list of candidates. They can also "pre-cumulate" candidates, i.e., putting them twice on a list, so that these candidates can receive two votes from the same voter. The higher success rate for affluent candidates shown in Figure 1 might be due to bias in the candidate selection process, i.e., a bias in favor of affluent candidates on the part of parties rather than voters. It should also be noted, however, that voters who vote for a particular list can express their preferences over candidates by removing candidates from that list, by adding candidates from other lists, and by cumulating candidates that are not yet twice on the list. According to Lutz (2011, 167), 54% of voters exercised some form of preferential voting in the 2007 election.[11] Furthermore, campaign financing is primarily party-based in Switzerland and, as a result, personal economic resources are unlikely to provide affluent candidates with a big advantage. If voters clearly prefer less affluent candidates, parties should have little incentive to rank more affluent candidates higher, or pre-cumulate them more often, under these conditions.

3 Experimental Design

Our online conjoint experiment presented respondents with hypothetical candidates to the Swiss National Council. In the experiment, we varied three candidate attributes related to social class—occupation, education, and income—along with several other attributes. The hypothetical candidates could have one of four occupations, namely "retail salesperson," "engineer," "lawyer," or "business executive," and one of four levels of educational achievement, namely "basic vocational education," "higher vocational education," "university education with a master's degree," or "university education with a doctoral degree."[12] Referring to gross monthly salary, the income attribute could take on one of three values: "CHF 5,000," "CHF 10,000," or "CHF 30,000." For reference, it might be noted that the median private-sector salary was CHF 6,189 in 2014 according to survey data compiled by Federal Statistical Office.[13] It seems likely, we think, that our

[11] Lutz (2010) shows that higher-ranked candidates are more likely to be cumulated and less likely to be removed from party lists.

[12] According to the Swiss Labor Force Survey of 2016 (see URL above), roughly 38% of the Swiss population have a basic vocational education, 14% have a higher vocational education, and 27% have a university degree. The remaining 21% have just finished mandatory school or done general education in secondary school.

[13] There is substantial variation in median gross salaries across economic sectors, ranging from CHF 4,761 in the retail industry to CHF 9,792 in the financial sec-

respondents considered CHF 10,000 to be an average salary.

The other candidate attributes included in our experiment were selected based on a review of recent literature, which identifies candidates' ideology or policy preferences, political experience, gender, and local roots as important for voters (Huddy and Terkildsen 1993; Herrnson, Lay and Stokes 2003; Shugart, Valdini and Suominen 2005; Johnson and Rosenblatt 2007; Górecki and Marsh 2012; Cowley 2013; Campbell and Cowley 2014*b*). Providing respondents with information about these attributes serves two basic purposes. First, it enables us to compare the effects of class-related attributes to the effects of other candidate characteristics. Second, several of the other attributes may confound the effects of social class. For example, respondents who are told that a candidate is a business executive might infer that this candidate is also a member of a right-leaning party. We control for such confounding by specifying additional information about candidates (Dafoe, Zhang and Caughey 2017).

In summary, each candidate profile in our experiment was composed of the following eight attributes: occupation, education, gross monthly salary before entering parliament, political party, political ideology, previous experience in the National Council, gender, and residence.[14] For each attribute, a value was randomly drawn from a set of possible values, but we imposed a number of randomization restrictions to exclude candidate profiles that would appear highly unrealistic or impossible. First, retail salespersons were only paired with basic vocational and higher vocational education while engineers, lawyers, and business executives were only paired with master's and doctoral degrees. Second, retail salespersons were only allowed to earn a monthly salary of either CHF 5,000 or CHF 10,000 while business executives were only allowed to earn either CHF 10,000 or CHF 30,000. Finally, candidates of the Social Democratic Party (SPS) were restricted to left-wing or center-left ideological positions, candidates of the

tor (`https://www.bfs.admin.ch/bfs/de/home/statistiken/arbeit-erwerb/loehne-erwerbseinkommen-arbeitskosten/lohnniveau-schweiz.assetdetail.193164.html`, last accessed on January 9, 2018). The 90th percentile of the salaries of the top and upper management in the financial sector was CHF 34,530 in 2014 (`https://www.bfs.admin.ch/bfs/de/home/statistiken/arbeit-erwerb/loehne-erwerbseinkommen-arbeitskosten/lohnniveau-schweiz/kaderloehne-tiefloehne.html`, last accessed on January 9, 2018).

[14]Table A.1 in the Appendix lists all possible values for each candidate attribute. The attributes were presented in a randomized order for each respondent, but we held the order of attributes constant for all profiles a respondent evaluated in order to reduce the cognitive burden on respondents (following Hainmueller, Hopkins and Yamamoto 2014, 4).

Christian Democratic People's Party (CVP) to center-left or centrist positions, candidates of the Liberal Democratic Party (FDP) to centrist or center-right positions, and candidates of the Swiss People's Party (SVP) to center-right or right-wing positions.

It is important to keep in mind that, in real-world elections, voters do not possess all the information about candidates that our experimental design provides them. Based on ballots and campaign materials, voters can be expected to know the age, gender, occupation, and party affiliation of candidates. With or without the cooperation of candidates, news media frequently provide additional information, but the extent to which voters seek and have access to such information obviously varies a great deal (by locality, election context, candidates, and voters). As in any experimental study of this kind, we are essentially asking, "how would voters respond if they possessed the information provided in the experiment?"

The experiment was fielded in May, 2017, to a sample of over 4,500 Swiss citizens between 18 and 79 years of age.[15] We presented each respondent with two pairs of hypothetical candidates.[16] Following each pair, we asked the respondent multiple questions about his or her voting intentions. First, we asked which candidate the respondent would choose if he or she had to vote for one of the two candidates ("forced choice"). Second, we asked for each candidate how likely the respondent would be to vote for the candidate in an election to the National Council ("vote propensity"). These questions were followed by questions designed to capture respondents' perceptions of candidates' competence and warmth. For each candidate, we asked respondents to evaluate how qualified the candidate would be to serve as a member of parliament and how likely the candidate would be to understand the problems facing people like themselves.[17]

[15]The sample was randomly drawn from an online panel maintained by the LINK Institute, a Swiss market research firm. The Supplementary Information provides further information about the online panel and our sample.

[16]The profiles of a pair of candidates were presented side-by-side and each pair was presented on a separate screen.

[17]In addition to "don't know," five answer categories were provided for the vote-propensity, competence, and warmth questions, ranging from "very likely" to "very unlikely" for vote-propensity and warmth and from "very qualified" to "not at all qualified" for competence.

4 Results

Before testing the hypotheses articulated above, we present the effects of individual candidate attributes on respondents' vote intentions. We confine ourselves to the presentation of results based on respondents' propensity to vote for candidates, leaving results based on forced vote choice for the Supplementary Information. Suffice it to note here that the latter results are quite similar to the ones that we present below.[18]

Following Hainmueller, Hopkins and Yamamoto (2014), we use the candidate profile as the unit of analysis and estimate an ordinary least-squares regression of vote propensity on dichotomous indicator variables for the attribute levels, with the exception of the baseline level for each attribute in the regression. This yields the average marginal component effect (AMCE) of each candidate attribute relative to the respective baseline. Standard errors are clustered by respondent because each respondent evaluated multiple candidate profiles. We rescale the dependent variable to range from 0 (very unlikely to vote for a candidate) to 1 (very likely to vote for a candidate), so that the AMCE of an attribute shows the average change in the likelihood that a respondent will vote for a candidate on a 0-1 scale. Respondents who answered "don't know" have been excluded from the analysis.

Figure 2 shows aggregate results for all respondents. On average, respondents favor candidates earning CHF 10,000 over candidates earning CHF 30,000 and they tend to be indifferent between candidates earning CHF 10,000 and those earning CHF 5,000. Relative to average-income candidates, there is a clear bias against high-income candidates, but not against low-income candidates. Turning to the candidates' occupation and education, we find that respondents favor salespersons with basic or higher-level vocational education over lawyers and business executives with master's or PhD degrees, but they are indifferent between salespersons with vocational training and engineers with university education. The effects of a candidate having an average rather than a high income and a

[18] In our view, the vote-propensity design resembles voter decision-making in an open-list PR system more closely than does the forced-choice design as it allows respondents to express their preference for more than one candidate. For all of our analyses, we have weighted the data according to the joint distribution of linguistic region (German, French, and Italian), gender, and age group (18-29, 30-44, 45-59, and 60-79) as well as the marginal distributions of work status (working, not working) and household size (1-2 and 3 or more) among Swiss citizens.

candidate being a salesperson with vocational training rather than a university-educated lawyer or executive manager are similar in magnitude to the effects of other attributes that have been shown to be important to voters in previous literature. Specifically, having an average income (relative to a high income) or being a salesperson with vocational training (relative to a lawyer or executive manager with university education) provides about the same advantage in terms of respondents' support as having four years' previous experience in the National Council (relative to having no such experience) and at least as great an advantage as having lived since birth in the respondent's canton (relative to having lived there for six years).

A noteworthy and at first sight surprising result is the large negative effect of running for the right-wing Swiss People's Party (SVP), which has been the largest party in the National Council since the late 1990s. Suggesting that the SVP has little appeal among left-leaning and centrist voters, our results are consistent with the fact that the SVP has not substantially increased its number of seats in the upper chamber (Council of States), which is elected by majority rule in all but two cantons (Kriesi and Trechsel 2008, 191f.).[19]

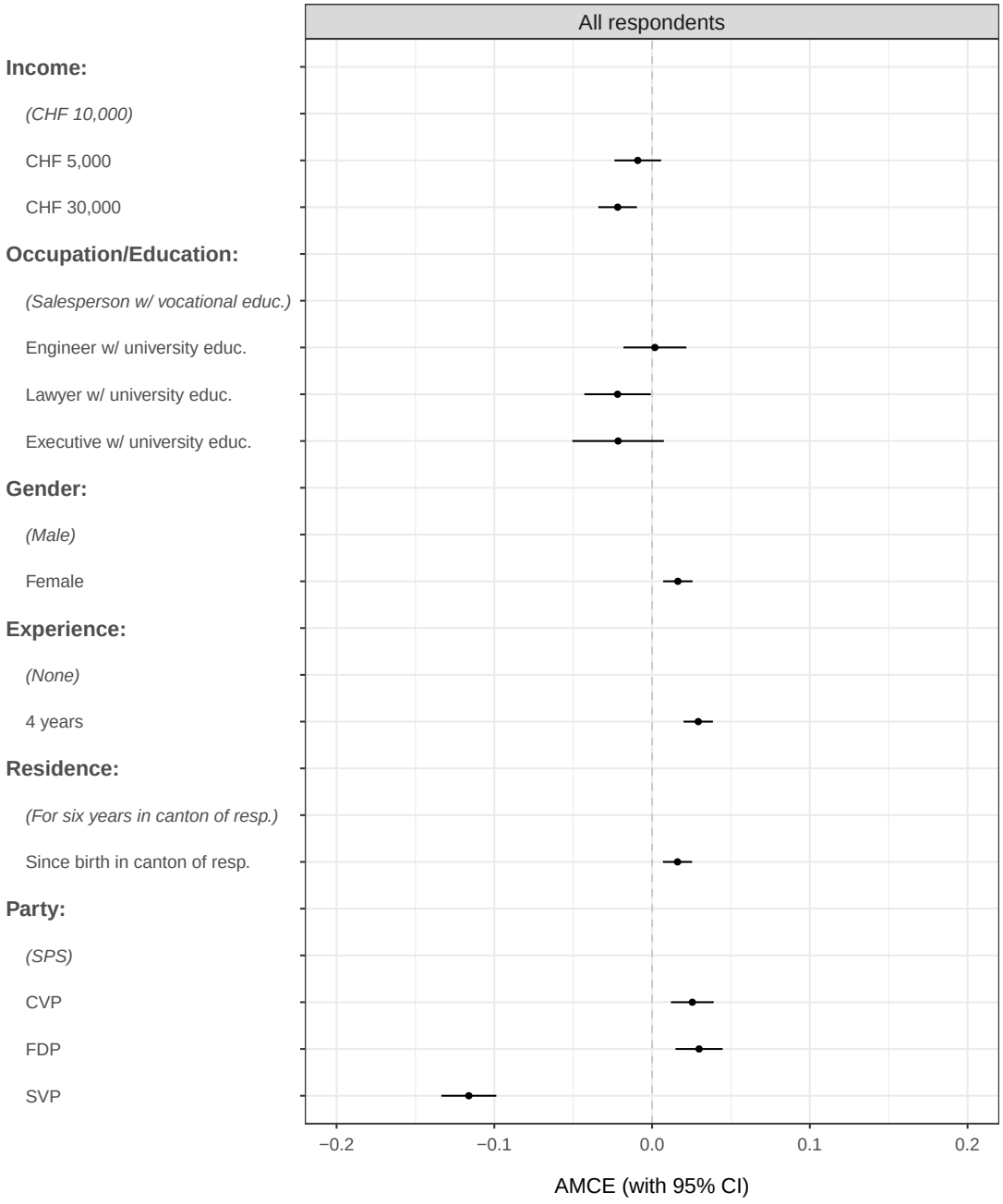
To test our hypotheses about the effects of social class, we identify four hypothetical candidates with distinct combinations of occupation, education, and income: (1) a retail salesperson with basic vocational training and a monthly salary of CHF 5,000 (a routine working-class candidate); (2) a retail salesperson with higher vocational training and a salary of CHF 10,000 (a skilled working-class candidate); (3) an engineer with a master's degree and an income of CHF 10,000 (a core middle-class candidate); and (4) a lawyer with a PhD and an income of CHF 30,000 (an upper middle-class candidate).[20]

The top panel of Figure 3 pits the skilled working-class candidate, the core middle-class candidate, and the upper middle-class candidate against the routine working-class candidate (the baseline). The bottom panel pits the skilled

[19]The fact that female candidates have an advantage over male candidates also comes as something of a surprise, given that women currently account for only 33.5% of the National Council (`https://www.parlament.ch/de/%C3%BCber-das-parlament/fakten-und-zahlen/zahlen-ratsmitglieder`, last accessed on March 2, 2018). It is important to note that Figure 2 shows the "isolated" effect of a female candidate for all respondents.

[20]The results are effectively the same if we make the upper middle-class candidate a business executive. We deliberately chose to make our working-class candidates employed in services rather than production as service workers are more numerous in contemporary Switzerland and arguably represent a more "generic" working-class type in "post-industrial" societies.

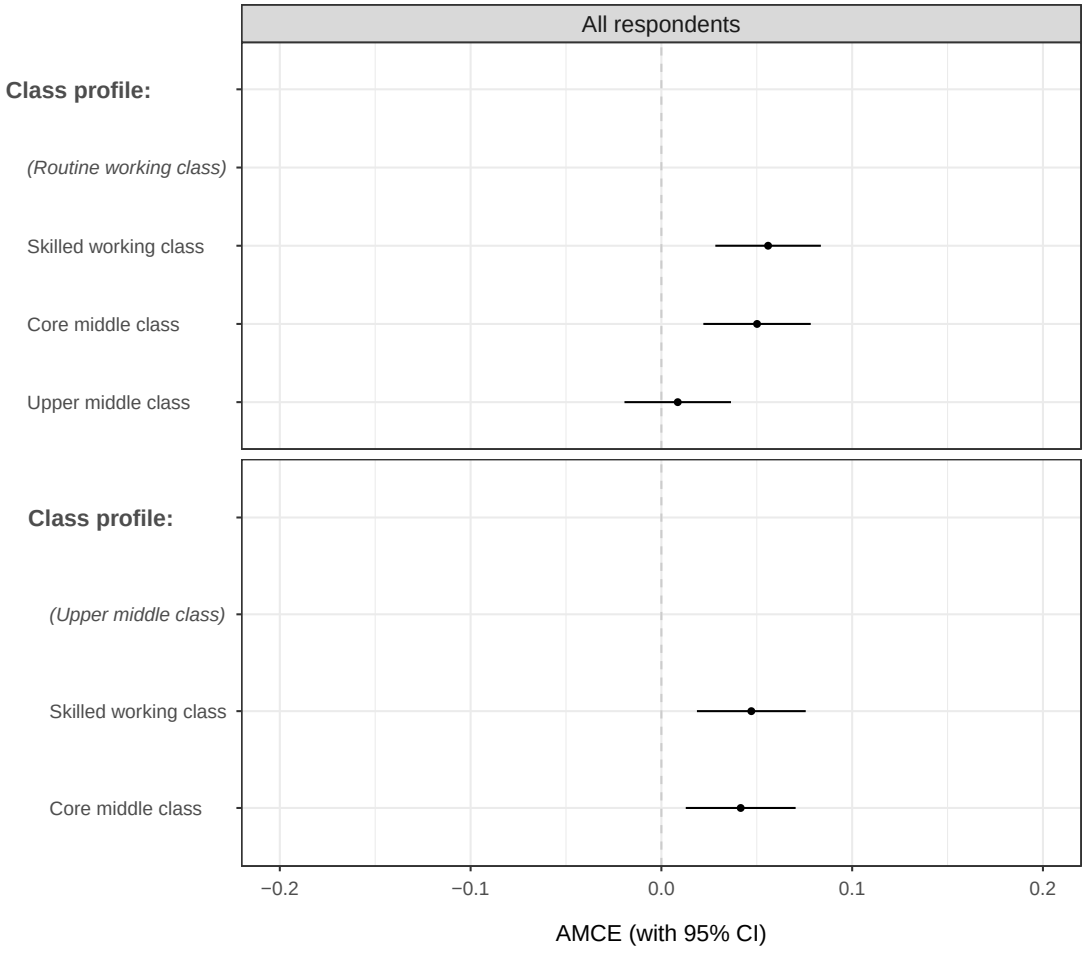
Figure 2: AMCEs of Candidate Attributes on Vote Propensity



Note: The figure shows the point estimates and 95% confidence intervals (CIs) for the average marginal component effects (AMCEs) of candidate attributes on respondents' vote propensity. Vote propensity is rescaled to range from 0 (very unlikely to vote for a candidate) to 1 (very likely to vote for a candidate), so that the AMCE shows the average change in the likelihood that a respondent will vote for a candidate on a 0-1 scale. Respondents who answered "don't know" have been excluded from the analysis. The reference category for each attribute is shown italicized in parentheses.

working-class candidate and the core middle-class candidate against the upper middle-class candidate (the baseline). The results support our first hypothesis. Respondents clearly prefer both the skilled working-class candidate and the core middle-class candidate to the routine working-class candidate. They also prefer the skilled working-class and core middle-class candidates to the upper middle-class candidate. Respondents seem to have a slight preference for the upper middle-class candidate over the routine working-class candidate, but this effect is not statistically significant.

Figure 3: AMCEs of Candidates' Social Class on Vote Propensity



Note: The figure shows the point estimates and 95% confidence intervals (CIs) for the average marginal component effects (AMCEs) of candidates' social class on respondents' vote propensity. Respondents who answered "don't know" have been excluded from the analysis. The reference category is the routine working-class candidate for the top panel and the upper middle-class candidate for the bottom panel.

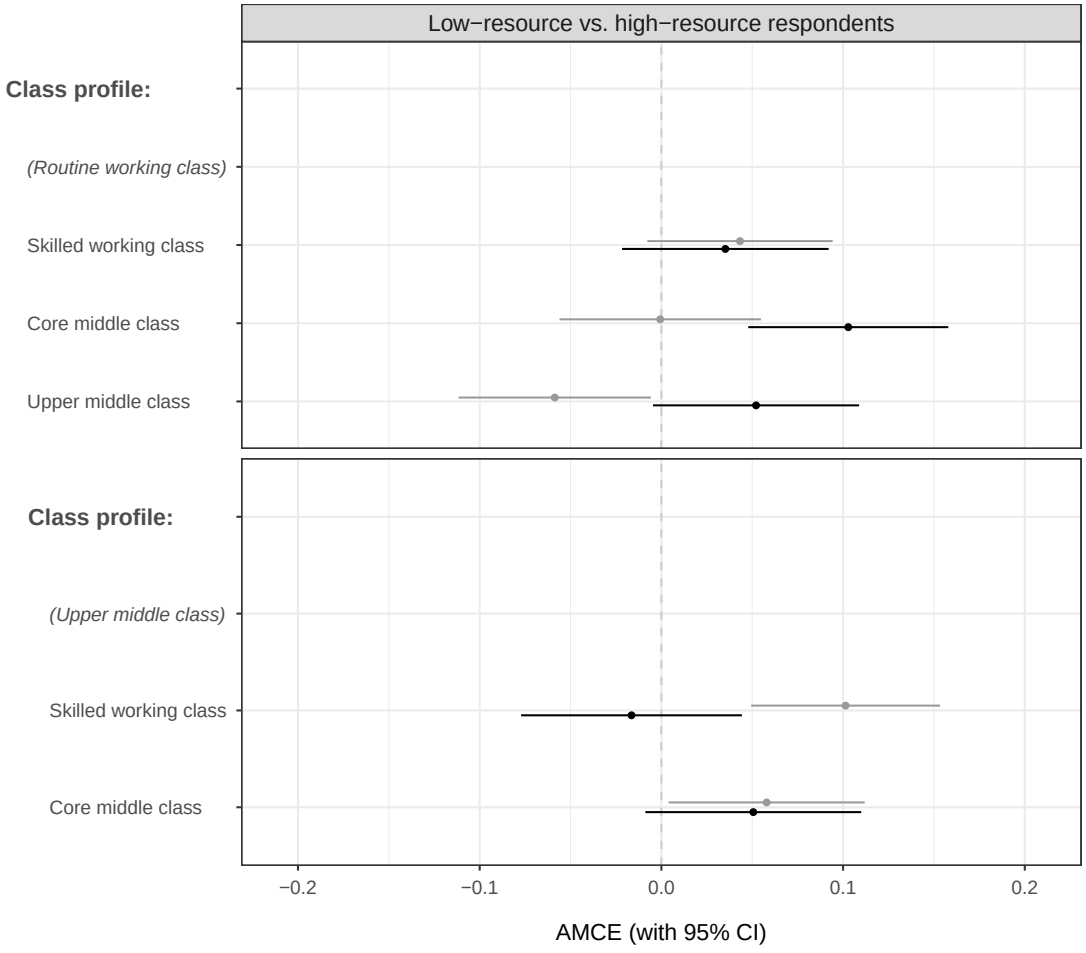
The results presented so far would lead us to expect that most, if not all, representatives in the Swiss parliament would be members of the skilled working class or the core middle class. There is undoubtedly a significant number of such individuals in the Swiss parliament, but, as we have seen, more affluent, upper middle-class candidates also fare quite well in Swiss elections. This may be because voters are not aware of their high socio-economic status. Another plausible explanation has to do with unequal electoral turnout. Citizens with high income and education are more likely to vote than citizens with low income and education. Our second hypothesis posits that these voters are not biased against upper middle-class candidates relative to skilled working-class and core middle-class candidates.

To test our second hypothesis, Figure 4 replicates Figure 3 with respondents split into two roughly equally-sized groups: respondents with low education and income ("low-resource respondents," shown in gray color) and respondents with high education and income ("high-resource respondents," shown in black color).[21] The results are straightforward and quite revealing. Though some of the effects fall short of the 95% significance threshold, low-resource respondents and high-resource respondents alike seem to prefer the skilled working-class candidate over the routine working-class candidate and the core middle-class candidate over the upper middle-class candidate. In all other races, however, the preferences of the two types of respondents diverge noticeably. Low-resource respondents prefer the routine working-class candidate as well as the skilled working-class candidate over the upper middle-class candidate, while they are indifferent between the routine working-class candidate and the core middle-class candidate. By contrast, high-resource respondents prefer the core middle-class candidate or the upper middle-class candidate over the routine working-class candidate and they are indifferent between the skilled working-class candidate and the upper middle-class candidate. These results partly support our second hypothesis in that affluent

[21] We refrain from applying class labels to the two types of respondents because we do not have information about their occupations. We classify respondents as having a low income if their monthly household income does not exceed CHF 8,000 and as having a high income otherwise, and we classify them as having low education if they have secondary education or less and as having high education if they have tertiary education (i.e., higher vocational or university education). As noted above, the median monthly household income was somewhat above CHF 8,000 in 2009-2011 (this is the most recent information available for the median). According to the Swiss Labor Force Survey of 2016 (see URL above), 58.8% of the Swiss population had secondary education or less and the remaining 41.2% had tertiary education.

and educated respondents are not biased against upper middle-class candidates relative to skilled working-class candidates but tend to prefer core middle-class candidates over upper middle-class candidates.

Figure 4: AMCEs of Candidates' Social Class on Vote Propensity by Respondents' Level of Resources



Note: The figure shows the point estimates and 95% confidence intervals (CIs) for the average marginal component effects (AMCEs) of candidates' social class on the vote propensity of low-resource respondents (in gray) and high-resource respondents (in black). Respondents who answered "don't know" have been excluded from the analysis. The reference category is the routine working-class candidate for the top panel and the upper middle-class candidate for the bottom panel.

Addressing the reasoning behind respondents' preferences for candidates with different class profiles, Figure 5 reports on the assessments of candidates' competence made by low- and high-resource respondents while Figure 6 reports on their assessments of candidates' warmth or, more precisely, candidates' ability to

understand the "problems facing people like me."[22] Assessments of competence differ by socio-economic status in that high-resource respondents rate the competence of core middle-class and upper middle-class candidates significantly higher than do low-resource respondents. While high-resource respondents consider both middle-class candidates to be more competent than the skilled working-class candidate, low-resource respondents consider only the upper middle-class but not the core middle-class candidate to be more competent than the skilled working-class candidate. At the same time, we find that low-resource respondents as well as high-resource respondents rate the routine working-class candidate as less competent than all other candidates.

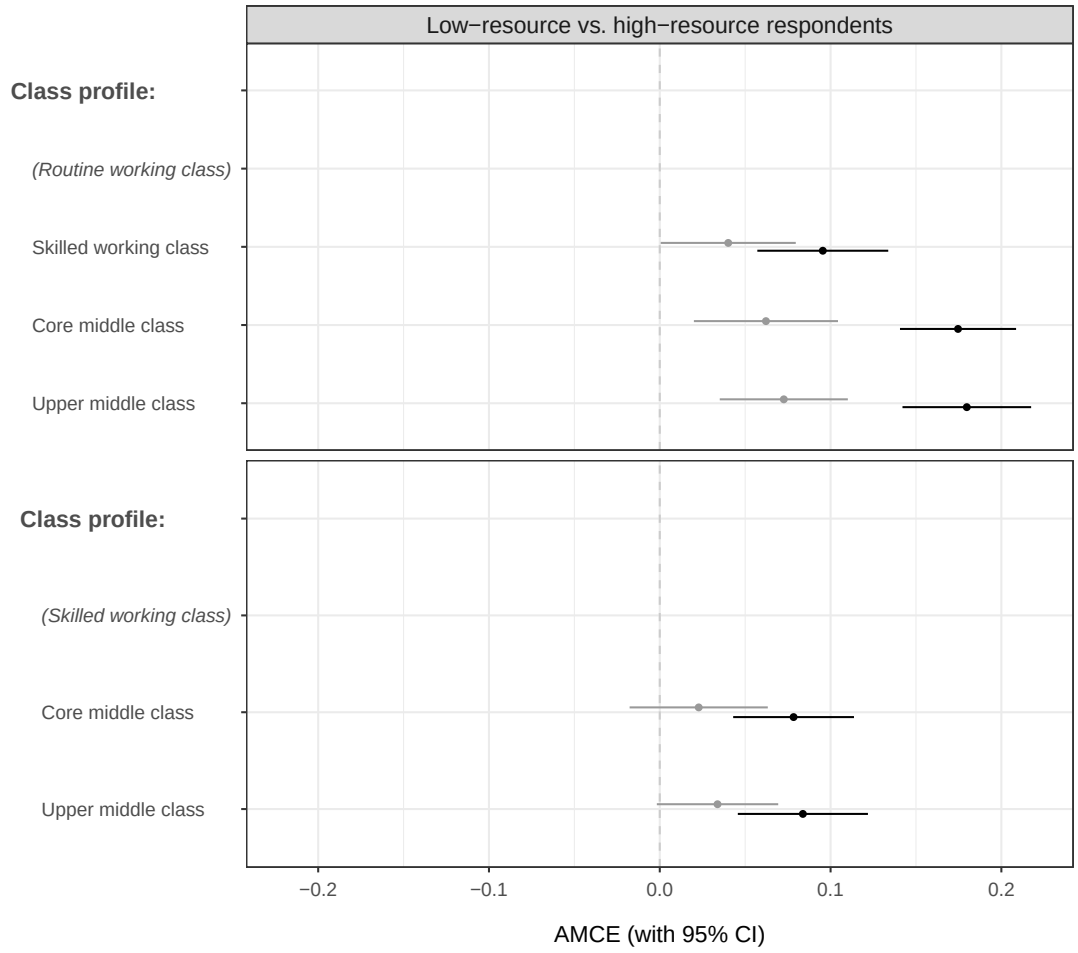
The framework developed by Fiske et al. (2002) treats perceptions of competence as a function of the socio-economic status of the target. The results reported here suggest perceptions of competence vary with the perceiver's own socio-economic status as well. Quite plausibly, citizens with high socio-economic status are more prone to correspondence bias than low socio-economic status citizens, as the conception of a meritocratic world where talent and hard work pay off at least implicitly justifies their own success.

As for assessments of warmth or empathy, upper middle-class candidates are deemed to be out-of-touch by low- and high-resource respondents alike. Among low-resource respondents, core middle-class candidates also suffer a "warmth penalty" relative to working-class candidates. However, high-resource respondents consider all candidates other than upper middle-class candidates to be more or less the same on this dimension.

Returning to the implications of electoral turnout, the results presented in Figure 4 suggest that if only citizens with high income and education voted, all working-class candidates would likely lose while core and upper middle-class candidates would compete in tight races (with the former having some advantage over the latter). Based on data from Swiss national election surveys (FORS 2009*b*, 2012*b*), Table 2 shows our estimates of turnout by socio-economic status in the 2007 and 2011 elections to the National Council, with socio-economic status again proxied by income and education. Voter turnout in Switzerland does indeed vary by income and education, but it seems unlikely that this variation is sufficiently

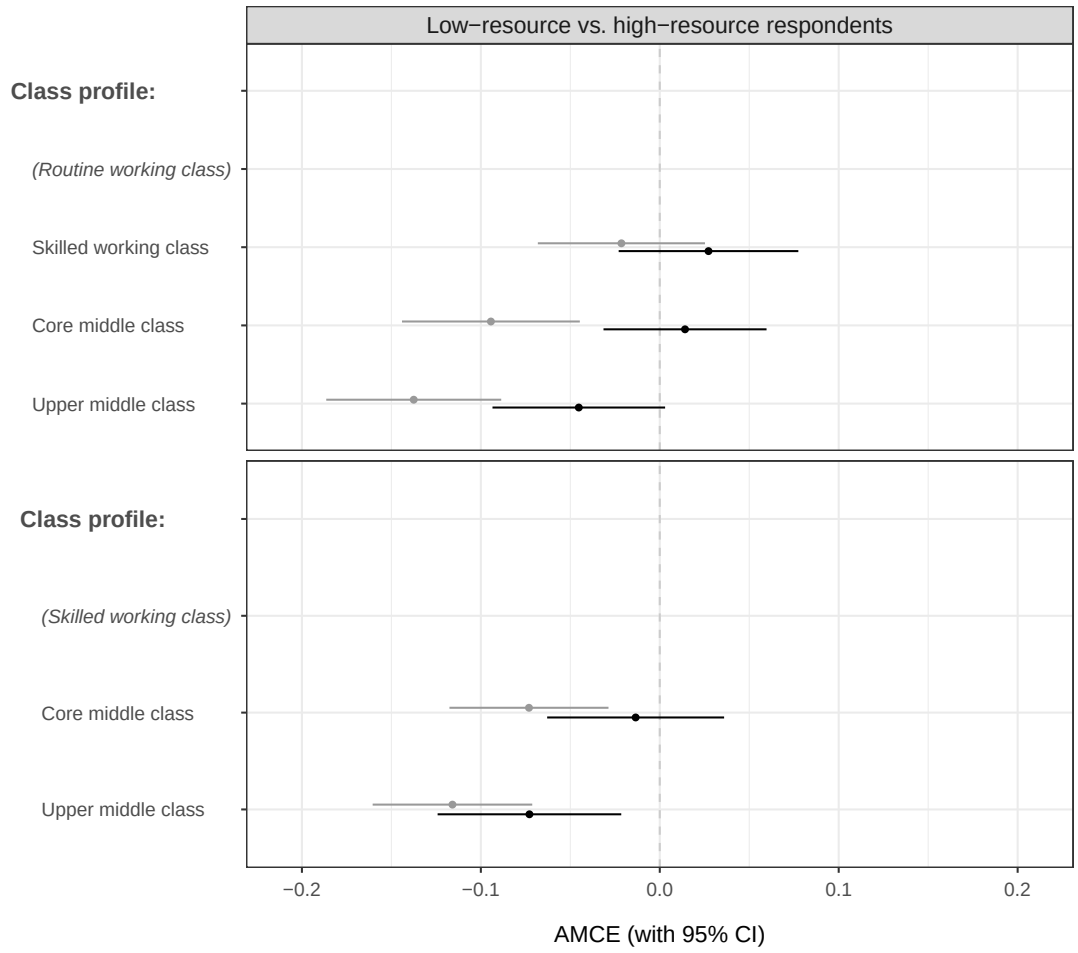
[22]See the Supplementary Information for AMCEs of individual candidate attributes on perceived competence and warmth and for AMCEs of candidates' class profile for the full sample of respondents.

Figure 5: AMCEs of Candidates' Social Class on Perceived Candidate Competence by Respondents' Level of Resources



Note: The figure shows the point estimates and 95% confidence intervals (CIs) for the average marginal component effects (AMCEs) of candidates' social class on the perception of candidate competence for low-resource respondents (in gray) and high-resource respondents (in black). Candidate competence is rescaled to range from 0 (candidate is not at all qualified for the office) to 1 (candidate is very qualified for the office), so that the AMCE shows the average change in the competence a respondent will assign to a candidate on a 0-1 scale. Respondents who answered "don't know" have been excluded from the analysis. The reference category is the routine working-class candidate for the top panel and the skilled working-class candidate for the bottom panel.

Figure 6: AMCEs of Candidates' Social Class on Perceived Candidate Warmth by Respondents' Level of Resources



Note: The figure shows the point estimates and 95% confidence intervals (CIs) for the average marginal component effects (AMCEs) of candidates' social class on the perception of candidate warmth for low-resource respondents (in gray) and high-resource respondents (in black). Candidate warmth is rescaled to range from 0 (candidate is very unlikely to understand respondents' problems) to 1 (candidate is very likely to understand respondents' problems), so that the AMCE shows the average change in the likelihood that a respondent will perceive a candidate as warm on a 0-1 scale. Respondents who answered "don't know" have been excluded from the analysis. The reference category is the routine working-class candidate for the top panel and the skilled working-class candidate for the bottom panel.

large to account for the unequal descriptive representation documented above (Figure 1). This is particularly so to the extent that more affluent and more educated citizens are more likely to over-report voting (see Silver, Anderson and Abramson 1986; Bernstein, Chadha and Montjoy 2001; Karp and Brockington 2005).

Table 2: Reported Turnout in the 2007 and 2011 Elections to the National Council Among High-Resource and Low-Resource Respondents

	2007 Election	2011 Election
Turnout among high-resource respondents	81.4%	89.5%
Turnout among low-resource respondents	63.2%	79.3%
Difference in turnout (in %-points)	18.2%	10.2%
	(0.00)	(0.00)

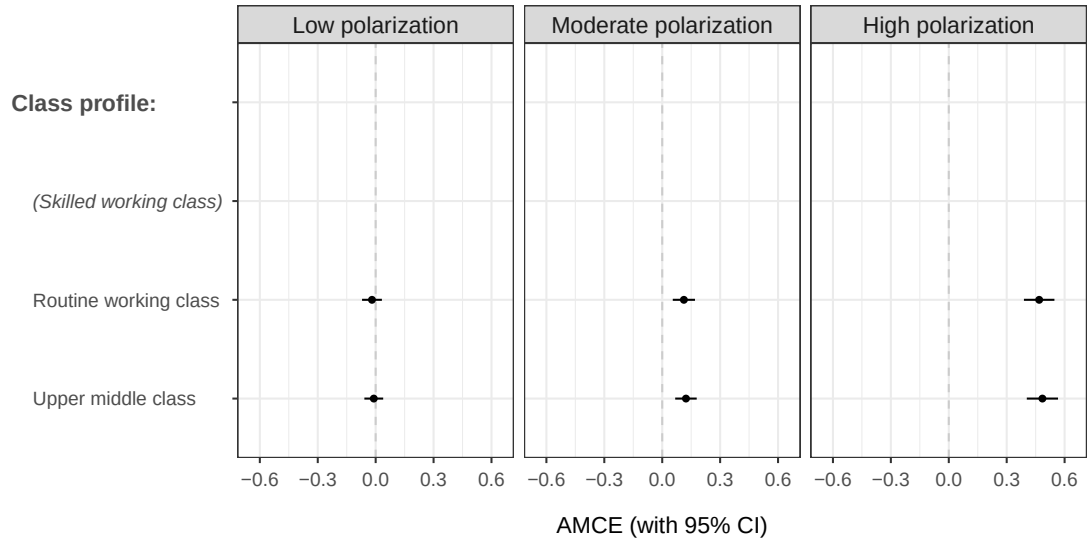
Note: The numbers in parentheses are the p-values from (two-tailed) tests for equality of proportions.

As suggested above, another potential explanation of descriptive misrepresentation is that candidates' class profiles matter less to voters than their ideological profiles (or policy positions). Simply put, it may be that upper middle-class candidates are able to win elections because voters are not willing to vote for candidates with more "favorable" class profiles if these candidates are ideologically farther away from the voters' own positions. Our third hypothesis posits that candidates' class profiles have an important effect on voters' choice between candidates (and parties) that are ideologically close to each other and that the importance of this effect decreases with the ideological distance between candidates (parties). To test this hypothesis within the confines of our survey experiment, we estimate the effect on vote propensity of a routine working-class profile and an upper middle-class profile relative to a skilled working-class profile under three different conditions: one in which the respondent and the skilled working-class candidate hold similar ideological positions (low polarization), one in which their positions differ moderately (moderate polarization), and one in which they differ substantially (high polarization).[23] In each of these simulations, the respondent and the routine working-class candidate or upper middle-class candidate have the

[23]We focus here on the profile comparisons for which Figure 3 shows the largest class-profile effects.

same ideological position.[24]

Figure 7: AMCEs of Candidates' Social Class on Vote Propensity in a Low-, Moderate-, and High-Polarization Context



Note: The figure shows the point estimates and 95% confidence intervals (CIs) for the average marginal component effects (AMCEs) of candidates' social class on respondents' vote propensity under three conditions: one in which the respondent and the skilled working-class candidate hold similar ideological positions (low polarization), one in which their positions differ moderately (moderate polarization), and one in which they differ substantially (high polarization). The respondent and the routine working-class candidate or upper middle-class candidate have the same ideological position in each of these simulations. Respondents who answered "don't know" to the vote propensity question or who did not indicate their ideological position have been excluded from the analysis. The reference category is the skilled working-class candidate for all panels.

Presented in Figure 7, the results of this exercise support our third hypothesis. When the ideological position of the skilled working-class candidate is only slightly different, her class advantage offsets her ideological disadvantage and respondents are indifferent between this candidate and the ideologically identical routine working-class or upper middle-class candidate. When respondents are

[24]In the experiment, the ideological position of candidates could take one of five values: left, center-left, center, center-right, and right. Respondents were asked to indicate their own ideological placement on a 11-point scale ranging from 0 (left) to 10 (right). Collapsing the 11-point scale into five ideological categories (left $\in \{0, 1, 2\}$, center-left $\in \{3, 4\}$, center $\in \{5\}$, center-right $\in \{6, 7\}$, and right $\in \{8, 9, 10\}$), we define a choice setting as low-polarization when the respondent and the skilled working-class candidate are one category apart, as moderate-polarization when they are two categories apart, and as high-polarization when they are four categories apart. A respondent and a routine working-class or upper middle-class candidate are defined as having the same ideological position when they are in the same ideological category. Note that 7.2% of our respondents did not indicate their ideology and we removed them from the analysis.

presented with more polarized choices, the effect of ideological proximity dominates the effect of candidates' class profiles: respondents are substantially more likely to vote for ideologically identical candidates with class profiles that they find less attractive.

5 Conclusion

Pooling all respondents, our Swiss survey experiment confirms the bias against high-income candidates identified, for the UK, by Campbell and Cowley (2014*a*) and, for the US, by Sadin (2015). However, our analysis shows that this bias is primarily, if not entirely, a bias held by citizens with low incomes and low education. In addition, our study uncovers a second bias that previous studies have missed: a bias against routine working-class candidates, shared by citizens with low and high incomes and education. Against the background of unequal turnout by income and education, the asymmetric nature of the bias against high-income, upper middle-class candidates renders descriptive misrepresentation less puzzling than it would be if this bias were shared by all citizens. The broadly-shared bias against routine working-class candidates also appears to be an important factor in explaining the descriptive misrepresentation by social class in the Swiss case. This result is corroborated by Portmann and Stojanović (2018), who analyzed actual voting behavior in the 2014 parliamentary elections of six municipalities in the canton of Zurich. Candidates in these elections, like candidates to the National Council, are elected in open-list PR systems that allow voters to cast preference votes for individual candidates. Portmann and Stojanović find that voters more often remove candidates with low-skill occupations than candidates with high-skill occupations from their party lists. Moreover, voters are less likely to cumulate, or add from other lists, candidates with low-skill occupations than candidates with high-skill occupations.

With the benefit of hindsight, we regret that our survey experiment did not include candidates with incomes between CHF 10,000 (more or less an average monthly Swiss income) and CHF 30,000. We simply cannot tell whether the income penalty that we have identified extends across this entire range or pertains only to very high-income candidates. A new survey experiment will be necessary to address this question. We also intend to explore the role of candidate selection and ranking by Swiss political parties in future research. As noted above, a

large share of Swiss voters (46% in the 2007 election) choose not to exercise the option to express their preferences for particular candidates and simply vote for their party's list of candidates in its original form. Voter biases might be invoked to explain some of the descriptive misrepresentation that we observe in the Swiss case, but it is perfectly possible that biases in internal party decision-making also play a role. Do the candidate lists of some or all parties consistently favor some class profiles over others? A reasonable hypothesis emerging from the preceding analysis is that parties with weak ideological profiles—in the first instance, "centrist" parties—will be more likely to feature skilled workers and core middle-class candidates in prominent positions.

We see no *a priori* reason to suppose that the biases revealed by our survey experiment are uniquely Swiss, but we are keen to explore this question by undertaking similar experiments in other countries. Assuming that voter preferences for candidates with different class profiles are more or less similar across countries, the relationship between class differences in electoral turnout and descriptive misrepresentation by social class becomes an important topic for comparative inquiry. We also want to leverage cross-national variation to test the hypothesis that partisan polarization is associated with descriptive misrepresentation by social class.

In closing, we wish to reiterate that descriptive misrepresentation by social class is much less pronounced in Switzerland than in the US. Conventional wisdom is that the exceptionally large social gap between citizens and representatives in the US is the result of the exceptionally high costs of election campaigns and the fact that candidates bear a large share of these costs (perhaps indirectly, through donors). US citizens may well prefer average candidates, much like Swiss citizens do, but this preference is likely trumped by the advantages that affluent candidates enjoy in terms of fund raising (Steen 2006).

Our analysis discussion suggests two additional reasons for US exceptionalism that deserve further theoretical consideration and empirical research. Assuming that skilled working-class and core middle-class candidates are preferred by American as well as Swiss citizens, it may be that the supply of such candidates is not as plentiful in the US, for lack of an extensive vocational training system, and perhaps also due to greater labor-market polarization triggered by technological changes over the last 20-30 years (Acemoglu 1999; Autor, Katz and Kearney

2006; Goldin and Katz 2007). Secondly, and more importantly for our purposes, our analysis suggests that partisan polarization (McCarty, Poole and Rosenthal 2006) may be an important factor behind descriptive misrepresentation by social class in the US. Arguably, ideological polarization opens up space for parties ("selectors") to field upper middle-class candidates without losing voters to their competitors.

A Appendix

A.1 Candidate Attributes and Attribute Levels

Table A.1 describes the attributes, attribute levels, and randomization restrictions we used to randomly generate the candidate profiles in our conjoint experiment.

Table A.1: Attributes and Possible Values in the Candidate Choice Experiment

Attribute	**Possible Values**	**Randomization Restriction**
Gender	• Male	–
	• Female	–
Political party	• SPS	Political ideology $\in$ {Left, Center-left}
	• CVP	Political ideology $\in$ {Center-left, Center}
	• FDP	Political ideology $\in$ {Center, Center-right}
	• SVP	Political ideology $\in$ {Center-right, Right}
Political ideology	• Left	Political party = SPS
	• Center-left	Political party $\in$ {SPS, CVP}
	• Center	Political party $\in$ {CVP, FDP}
	• Center-right	Political party $\in$ {FDP, SVP}
	• Right	Political party = SVP
Previous experience in the National Council	• None	–
	• 4 years	–
Education	• Vocational education (VET)	Occupation = Retail salesperson
	• Higher vocational education (Advanced Federal PET Diploma)	Occupation = Retail salesperson
	• University/ETH (master)	Occupation $\in$ {Engineer, Lawyer, Executive board of an international company}
	• University/ETH (doctorate)	Occupation $\in$ {Engineer, Lawyer, Executive board of an international company}

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Attribute	**Possible Values**	**Randomization Restriction**
Occupation	• Retail salesperson	Education ∈ {Vocational education (VET), Higher vocational education}
	• Engineer	Education ∈ {University/ETH (master) University/ETH (doctorate)}
	• Lawyer	Education ∈ {University/ETH (master) University/ETH (doctorate)}
	• Executive board of an international company	Education ∈ {University/ETH (master) University/ETH (doctorate)}
Gross monthly salary before entering the legislature	• CHF 5,000	Occupation ∈ {Retail salesperson, Engineer, Lawyer}
	• CHF 10,000	–
	• CHF 30,000	Occupation ∈ {Engineer, Lawyer, Executive board of an international company}
Residence	• Lives for 6 years in respondent's canton	–
	• Lives since birth in respondent's canton	–

Note: The shows the attributes, attribute levels, and randomization restrictions we used to randomly generate the candidate profiles in our conjoint experiment.

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